

Members of Air Hygiene Foundation, as of Nov. 30, 1937

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61

Proc. Special Meeting, Mar. 30, 1937

[illegible]

96



DEPOSITION
EXHIBIT
11f. No.38
1/29/86

**DEPOSITION
EXHIBIT**

117. No. 38
1/29/86

1940

REPORT OF MEMBERSHIP COMMITTEE

C. E. RALSTON,* Chairman

Eleven new members affiliated with Air Hygiene Foundation during past year. The new members are:

Allegheny Pittsburgh Coal Company
American Mutual Liability Insurance Company
Calco Chemical Company
Colorado Mining Association
Industrial Tape Corporation
Liberty Mutual Insurance Company
Maryland Self-Insurers' Association
Powers X-ray Products, Inc.
Pullman Company
Rustless Iron and Steel Corporation
Toledo Scale Company

Meanwhile, eleven companies failed to renew their membership in January. With the business upturn—increased production creating increased need for health protection—a number of these companies are expected to return to the fold.

While the resignations balanced the additions, maintaining the membership at 225 companies, there was an increase of about \$400 a year in income. This is accounted for by the fact that most of the companies that resigned were small firms. Six of them were in the \$50 a year bracket, whereas most of the new members are larger companies in the higher bracket.

As Dr. Meller has announced, there has been a pronounced increase in the Foundation's survey service to its members during the year. This is a significant development. It links the benefits of Foundation membership more firmly with every-day plant operations. An industrial concern that does not know its health hazards, or its lack of them, and have this information in a scientific, specific form, is like a company that does not know its costs. Industrial hygiene surveys are simply inventories. Like inventories they must be made periodically. The advantages of such a procedure are manifold.

In case of claims, you have a record showing what the health hazards actually were at the time of alleged injury. That is, you have this information if you have been making periodic checks over a period of time. The report you receive from the Foundation removes the "guess work" and speculation as to whether there was or wasn't a hazard at the time of the injury. Further, as Mr. Fletcher pointed out here a year ago, a survey report from an outside, independent agency carries more weight in Court or before a compensation commission than does a report prepared by your own company. In other words, an outside party can talk with greater weight about health than you can talk about yourself.

You all know man's capacity for spreading rumor, how tales grow and

* Safety Director, Pittsburgh Plate Glass Company.

Proc. 54th Ann. Meeting, Nov. 12-13, 1940

1941

REPORT OF THE MEMBERSHIP COMMITTEE

C. E. RALSTON, Chairman

Thirteen companies have affiliated with the Foundation thus far this year. They are:

Corhart Refractories Company
General Motors Corporation
Hazel-Atlas Glass Company
International Business Machines Company
Merck & Company
Miami Paper Company
Michigan Mutual Liability Company
Neville Company
Pittsburgh Clay Pot Company
Plaskon Company
Pyrene Manufacturing Company
Standard Lime and Stone Company
Toledo Edison Company

Two of the above are old members who dropped out during lean years but renewed their memberships during 1941. Meanwhile, four companies resigned during the year.

It will be impossible to make a full report on membership work until the end of the year. A campaign for new members is now in progress and we have reason to be optimistic about its results. Mr. Lewis H. Brown, President of Johns-Manville Corporation, which has held membership since the Foundation was started, has kindly agreed to assist us in the undertaking. The campaign has been necessarily held up by the fact that the Foundation has been in the process of changing its name. That change was advocated by the Membership Committee, as well as many other persons interested in the Foundation, at the meeting here one year ago. After circularizing the membership, and after the due processes of the law, the change from Air Hygiene Foundation to Industrial Hygiene Foundation became official only recently. In fact there are still some final legalities to be disposed of at a business session here today.

Increasing industrial activity tends to increase health hazards—and at a time when the nation sorely needs maximum manpower. Therefore, the work of the Foundation is more important now than ever before. It helps companies keep precautions apace with production, which is the only way we can offset the increases in sick absences and occupational disease which inevitably accompany an increase in the industrial tempo.

In endeavoring to fulfill this important function—keeping precautions a step with production—the Foundation is performing more and more field work for its member companies. During the past year our industrial hygienist, Mr. Mallette, covered approximately 25,000 miles in making plant surveys and "trouble shooting" where new processes were being installed. New materials introduced with questionable health effects. Survey work was performed in seven states.

In August, the staff hygienist flew 2,700 miles in three days covering

Safety Director, Pittsburgh Plate Glass Company

Proc. 6th Ann. Meeting
Nov. 12-13, 1941

1942

New Members

During 1942, 11 more companies and associations affiliated with Industrial Hygiene Foundation in the organization's efforts to promote healthful working conditions, namely:

General Motors Corporation	Koppers Company
Flintkote Company	General Refractories Company
Owens-Corning Fiberglass Corp.	Demers Chair Company
Employers Mutual Liability Insurance Co.	Strathmore Paper Company
Dresser Manufacturing Company	Davison Chemical Company
Pacific Coast Association Pulp and Paper Manufacturers	

There are now 246 company and association members in the Foundation. These organizations, practically all of them directly engaged in war production, employ between 2 and 3 million war workers.

Plant Hygiene Surveys

The introduction of unfamiliar and new chemicals in manufacturing processes, some with little known toxic effects, is demanding even greater attention to plant hygiene measures. Meanwhile the dermatoses continue to be the most common of all occupational diseases.

The Foundation has conducted more plant hygiene surveys than in any previous year. These investigations, supervised by Frank R. Holden, check on the possible existence of health hazards in the workplaces. If hazards are detected, effectual measures are devised for their correction. Besides fostering healthful working conditions, the Foundation's plant surveys are proving to be an increasing factor in advancing harmonious labor relations, helping to eliminate working conditions which are often sources of discontent, such as nuisance dusts and fumes.

The Foundation collaborates actively with governmental agencies, both state and federal, which are interested in industrial health. One evidence of this cooperation is the subscription classification started early in the year whereby governmental agencies can secure all Foundation publications at less than cost. Since this arrangement was initiated 12 months ago, 4 federal agencies including Army and Navy, 22 states, and 5 cities have subscribed for Foundation literature. Meanwhile, 3 universities and 4 private specialists have also availed themselves of this material.

Research

The Foundation has continued to support medical and engineering research in industrial health with grants to The Saranac Laboratory, University of Pennsylvania and Harvard School of Public Health. Findings from these studies have been published. Then, too, an important study in toxicology is under way for a member company at Mellon Institute.

Publications

Two medical and two engineering bulletins have been issued to members during the year. These publications, giving the results of research are as follows:

1. Comparison of Stereoscopic Miniature Chest Films, Single Roentgenograms on Paper, and Single Roentgenograms on Large Films.

Proc. 74th Ann. Meeting, Nov. 10-11-1942

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

Abingdon Sanitary Manufacturing Co.
Abrasive Company
Abrasive Division, U. S. Rubber Company
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Corp.
The Allison Company
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Cyanamid Company
American Emery Wheel Works
American Iron & Steel Institute
American Mining Congress
American Mutual Liability Insurance Co.
American Optical Company
American Radiator & Standard Sanitary Corporation
American Refractories Institute
American Smelting & Refining Company
American Zinc Institute
American Zinc Lead & Smelting Company
Asarco Copper Mining Company
Ass'n of Casualty & Surety Executives
Automobile Manufacturers Association
Ball Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bridgeport Safety Emery Wheel Company
Bunker Hill & Sullivan Mining & Concentrating Company
The Carborundum Company
Central Silica Company
Chicago Wheel & Manufacturing Company
Climax Molybdenum Company
Robert F. Coleman, Inc.
The Colorado Mining Association
Consolidated Mining & Smelting Company of Canada, Ltd.
Corhart Refractories Company
Corning Glass Works
Cortland Grinding Wheels Corporation
Davison Chemical Corporation
Deckers Creek Sand Company
Denver Fire Clay Company
A. P. deSanno & Son, Inc.
Detroit-Star Grinding Wheel Company
Diamond Alkali Company
Domore Chair Company, Inc.
Dow Chemical Company
B. F. Drakenfeld Company
Dravo Corporation
Eagle-Picher Lead Company
Ebasco Services, Inc.
Electro Refractories & Alloys Corporation
Employers Mutual Liability Insurance Co.
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exxon Company
The Falk Corporation
Firestone Tire & Rubber Company
Firth Sterling Steel Company
The Flintkote Company
Foote Mineral Company
Foundry Supply Manufacturers Ass'n
Fraser-Simpson, Inc.
Fuller Merriam Company
Galvin Manufacturing Company
Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Grinding Wheels Corporation
General Motors Corporation
General Refractories Company
Glass Container Association
Glenabaw Glass Company, Inc.
Grinding Wheel Manufacturers Ass'n
The Hall China Company
Hamilton Emery & Corundum Company
Hampton Grinding Wheel Company
Hawley Products Company
Hazel-Atlas Glass Company
Hercia Mining Company
Hercules Powder Company
John W. Higman Company
O. Hommel Company
Mauricio Hochschild S. A. M. I.
Industrial Silica Corporation
Industrial Tape Corporation
International Business Machines Corp.
International Nickel Company, Inc.
Jack & Heints, Inc.
Jackson Mills Emery Company
Jamison Coal & Coke Company
Johns-Manville Corporation
Jones & Laughlin Steel Corporation
Keystone Emery Mills
Kimble Glass Company
The Kirk & Blum Manufacturing Company
Koppers Company
Homer Laughlin China Company
Lava Crucible Company of Pittsburgh
E. J. Lavino & Company
Lead Industries Association
Liberty Mutual Insurance Company
Mackintosh-Hempbill Company
Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Merck & Company, Inc.
Mexico Refractories Company
The Miami-Burg Paper Company
Michigan Mutual Liability Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Monsanto Chemical Company
Mutual Chemical Company of America
J. S. McCormick Company
National Crushed Stone Association
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Flax Association
The Neville Company
New Jersey Zinc Company
North American Refractories Company
Norton Company
Norton Pike Company
Ontario Mining Association
Oriental Emery Company
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois Glass Company
Pacific Coast Association of Pulp & Paper Manufacturers
Peninsular Grinding Wheel Company
Penn-Rillon Company
Pennsylvania Glass Sand Corporation
Phelps Dodge Corporation
Pittsburgh Coal Company
Pittsburgh Plate Glass Company
Plaskon Division, Libbey-Owens-Ford
Portland Cement Association
Powers X-Ray Products, Inc.

MEMBERS OF IN

Precision Grinding Wheel Co.
The Pullman Company
Pullman-Standard Car Manuf.
Pyrene Manufacturing Company
Raybestos-Manhattan, Inc.
Reith Slitting Corporation
M. H. Robertson Company
Safety First Supply Company
Safety Grinding Wheel & Machine Co.
H. H. Schneible Company
Joseph E. Seagram & Sons, Inc.
Shenango Furnace Company
Sintered Worden White Comp.
Solway Process Company
South West Box Company
St. Joseph Lead Company
Standard Abrasive Wheel Co.
Standard Lime & Stone Company
Sterling Grinding Wheel Company
Sturtevant Fire Brick Company
The Sun Rubber Company
Texas Gulf Sulphur Company
Titan Abrasives Company
Tuldo Edison Company
Tuldo Scale Company
Trenton Potteries Company
Tri-Rite Zinc & Lead Ore Processing Association

FEDERAL GOVERNMENT

All Service Command, Fairchild
Bureau of Medicine & Surgery
Chief of Ordnance, Chicago, Ill.
Industrial Hygiene Service, Oklahoma City, Okla.
Industrial Safety Division, Naval Arsenal, Alabama
Industrial Hygiene Laboratory, Baltimore, Md.
Medical Supply Officer, Fort M. Navy Yard, Charleston, S. C.
Naval Establishments Div., Naval Facilities Engineering Command
Tennessee Valley Authority
U. S. Public Health Service

STATES

Department of Health, California
Department of Health, Connecticut
Department of Health, Georgia
Department of Health, Idaho
Department of Health, Illinois
Department of Health, Indiana
Department of Health, Iowa
Department of Health, Kansas
Department of Health, Kentucky
Department of Health, Louisiana
Department of Health, Maryland
Department of Health, Massachusetts
Department of Health, Missouri
Department of Health, Montana
Department of Labor, New York
Department of Health, Ohio
Department of Health, Oklahoma
Department of Labor & Industry, Pennsylvania
Department of Health, Tennessee
Department of Health, Texas
Department of Health, Utah
Department of Health, Vermont
Department of Health, Virginia
Department of Health, West Virginia
Department of Health, Wisconsin
Industrial Commission of Ohio

* Multiple Membership

INDUSTRIAL HYGIENE FOUNDATION

Waltham Grinding Wheel Company, Inc.
 J. H. Fullman Company
 L. H. Standard Car Manufacturing Co.
 Tyro Manufacturing Company
 Raytheon-Machinist, Inc.
 Sako Mining Corporation
 H. H. Robertson Company
 First Supply Company
 Grindstone Wheel & Machine Co.
 H. B. Schneible Company
 Joseph F. Seagram & Sons, Inc.
 Chicago Furnace Company
 Warden White Company
 W. H. Process Company
 West Box Company
 J. H. Lead Company
 Standard Abrasive Wheel Company
 Standard Lime & Stone Company
 Grindstone Wheel Company
 Fire Brick Company
 Fire Rubber Company
 Gulf Sulphur Company
 Iron Abrasives Company
 Edison Company
 Scale Company
 Pottery Company
 Zinc & Lead Ore Producers Association

Union Carbide & Carbon Corporation
 United Engineering & Foundry Company
 United States Pottery Association
 United States Smelting Refining & Mining Company
 United States Steel Corporation of Del.
 Universal Sanitary Manufacturing Co.
 Utah Copper Company
 Utilities Research Commission
 Valley Mould & Iron Corporation
 Vanadium Corporation of America
 Vesuvius Crucible Company
 Vitruvius Wheel Company
 Waltham Grinding Wheel Company
 Washington Mills Abrasive Company
 Wedron Silica Company
 The S. K. Wellman Company
 West Company
 Western Precipitation Corporation
 Westfield Grinding Wheel Company
 Westinghouse Air Brake Company
 Westinghouse Electric & Mfg. Company
 Whitehead Brothers Company
 Willson Products, Inc.
 Wisconsin Abrasive Company
 Wolf's New Process Abrasive Wheel, Inc.
 Youngstown Sheet & Tube Company

SUBSCRIBERS

FEDERAL GOVERNMENT

Service Command, Fairfield, Ohio.
 Bureau of Medicine & Surgery, Navy Dept.
 Dept. of Ordnance, Chicago, Ill.
 Industrial Hygiene Service, Oklahoma City, Okla.
 Federal Safety Division, Huntsville Arsenal, Alabama
 Industrial Hygiene Laboratory, Baltimore, Md.
 Federal Supply Office, Port Mason, Cal.
 Navy Yard, Charleston, S. C.
 Naval Establishments Div. Navy Dept.
 Tennessee Valley Authority
 Public Health Service

CITIES

Department of Health, Baltimore, Md.
 Department of Health, Detroit, Mich.
 Department of Health, St. Louis, Mo.

OTHERS

Dr. Elston L. Bellnap
 Dr. Charles Kemm Good
 Dr. J. W. G. Hannon
 Dr. E. R. Hayhurst
 Dr. N. P. Henderson
 Mr. J. H. Holden
 Dr. Hedwig S. Kuhn
 Dr. Geo. E. Morris
 Dr. E. D. McDonell
 Dr. C. O. Sandington
 Johns Hopkins University
 University of Colorado
 Medical Administration Service

STATES

Department of Health, California
 Department of Health, Connecticut
 Department of Health, Georgia
 Department of Health, Idaho
 Department of Health, Illinois
 Department of Health, Indiana
 Department of Health, Iowa
 Department of Health, Kansas
 Department of Health, Louisiana
 Department of Health, Maryland
 Department of Health, Missouri
 Department of Health, Montana
 Department of Labor, New York
 Department of Health, Ohio
 Department of Health, Oklahoma
 Department of Labor & Industry, Pennsylvania
 Department of Health, Tennessee
 Department of Health, Texas
 Department of Health, Utah
 Department of Health, Vermont
 Department of Health, Virginia
 Department of Health, West Virginia
 Department of Health, Wisconsin
 Federal Commission of Ohio

FOREIGN

Department of Pensions & Health, Ottawa, Canada
 Department of Health & Public Welfare, Winnipeg, Canada
 British Ministry of Supply Mission
 International Labor Office, Montreal
 Medical Research Council, London
 Ministère Santé & B. E. Social Hyg., Quebec, Canada
 Netherlands Government Commission for Scientific Documentation

* Multiple Membership

- A -
 Alameda Products, Inc.
 Abrasive Company
 Abrasive Division, U. S. Rubber Company
 Abrasive Grain Association
 Abrasive Products Company
 Allegheny Lathing Steel Corporation
 Allegheny Pittsburgh Steel Company
 Allison-Habers Manufacturing Corp.
 The Allison Company
 Aluminum Company of America
 American Abrasive Company
 American Air Filter Company, Inc.
 American Brake Shoe Company
 American Cyanamid Company
 American Emery Wheel Works
 American Iron & Steel Institute
 American Mining Congress
 American Optical Company
 American Radiator & Standard
 Sanitary Corporation
 American Refractories Institute
 American Smelting & Refining Company
 American Zinc Institute
 American Zinc, Lead & Smelting Company
 American Copper Mining Company
 Arrow Mutual Liability Insurance Co.
 Association of Casualty & Surety Executives
 Automobile Manufacturers Association

- B -
 Ball Brothers Company
 Bartlett Collins Company
 Bay State Abrasive Products Company
 Bethlehem Steel Company, Inc.
 Bird & Son, Inc.
 Bridgeport Safety Emery Wheel Company
 Brinker-Hill & Sullivan Mining &
 Concentrating Company

- C -
 Canadian General Rubber Company, Ltd.
 The Carborundum Company
 Central Silica Company
 Chicago Wheel & Manufacturing Company
 Clinax Molybdenum Company
 Robert F. Coleman, Inc.
 The Colorado Mining Association
 Consolidated Mining & Smelting Company
 of Canada, Ltd.
 Copper-Refractory Corporation
 Corhart Refractories Company
 Corning Glass Works
 Cortland Grinding Wheels Corporation

- D -
 Davison Chemical Corporation
 Deckers Creek Sand Company
 Denver Fire Clay Company
 A. P. DeSanto & Son, Inc.
 Detroit-Star Grinding Wheel Company
 Drake Corporation

- E -
 Diamond Alkali Company
 Dock Aircraft Company, Inc.
 Dorman Chair Company, Inc.
 Dow Chemical Company
 R. F. Drakenfeld Company
 Dravo Corporation

- F -
 Fager-Pickel Lead Company
 Fluoro Services, Inc.
 Electro Refractories & Alloys Corp.
 Elmer Company
 Ethyl Corporation
 Eureka Flint & Spar Company, Inc.
 Ercell Company

- G -
 The Falk Corporation
 Firestone Tire & Rubber Company
 Fifth Sterling Steel Company
 The Flintkote Company
 Fiske Mineral Company
 Foundry Supply Manufacturers
 & Fraxier-Simpson, Inc.
 Fuller-Merritt Company

- H -
 Calvin Manufacturing Corporation
 Haco Products, Inc.
 Gardner Machine Company
 General Abrasive Company, Inc.
 General Aniline & Film Corporation
 General Grinding Wheels Corporation
 General Motors Corporation
 General Refractories Company
 Glenhaw Glass Company, Inc.
 A. T. Green Fire Brick Company
 Grinding Wheel Manufacturers

- I -
 The Hall China Company
 Hamilton Emery & Corundum
 Hampden Grinding Wheel Co.
 Hawley Products Company
 Hazel-Atlas Glass Company
 Hecla Mining Company
 Hercules Powder Company
 John W. Heman Company
 Maurice-Hochschild S. A. M. I.
 O. Hummel Company

- J -
 Industrial Silica Corporation
 Industrial Tape Corporation
 International Business Machines
 International Nickel Company, Inc.

- K -
 Jackson Mills Emery Company
 Jamison Coal & Coke Company
 John-Manville Corporation
 Jones & Laughlin Steel Company

- L -
 Laminated Glass Company
 Laminated Glass Company
 Laminated Glass Company
 Laminated Glass Company

- M -
 Macmillan Chemical Company
 Macmillan Chemical Company
 Macmillan Chemical Company
 Macmillan Chemical Company

- N -
 National Association of Manufacturers
 National Association of Manufacturers
 National Association of Manufacturers
 National Association of Manufacturers

- O -
 Ohio State University
 Ohio State University
 Ohio State University
 Ohio State University

- P -
 Pennsylvania State University
 Pennsylvania State University
 Pennsylvania State University
 Pennsylvania State University

- Q -
 Quaker Oats Company
 Quaker Oats Company
 Quaker Oats Company
 Quaker Oats Company

- R -
 Republic Steel Corporation
 Republic Steel Corporation
 Republic Steel Corporation
 Republic Steel Corporation

- S -
 Sylvania Electric Products Company
 Sylvania Electric Products Company
 Sylvania Electric Products Company
 Sylvania Electric Products Company

- T -
 Talcott Industries
 Talcott Industries
 Talcott Industries
 Talcott Industries

- U -
 Union Carbide Corporation
 Union Carbide Corporation
 Union Carbide Corporation
 Union Carbide Corporation

- V -
 Vicksburg Chemical Company
 Vicksburg Chemical Company
 Vicksburg Chemical Company
 Vicksburg Chemical Company

- W -
 W. A. Rorer & Company
 W. A. Rorer & Company
 W. A. Rorer & Company
 W. A. Rorer & Company

* Multiple Membership

FOUNDATION

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— K —
 Kayser-Roth, Inc.
 Kayser-Roth Mills
 Kayser-Roth Glass Company
 Kay & Blum Manufacturing Company
 Kay Company

— L —
 Laughlin China Company
 Lehigh Company of Pittsburgh
 Lehigh & Company
 Lehigh Association

— M —
 Macdonald-Henryhill Company
 Macdonald Company
 Macdonald Company
 Macdonald Self-Insurance Association
 Macdonald Life Insurance Company
 Macdonald Refractories Company
 Macdonald Abrasive Company
 Macdonald Appliances Company
 Macdonald Chemical Company
 Macdonald Chemical Company of America

— Mc —
 Macdonald Company

— N —
 National Association of Mutual Casualty Companies
 National Crushed Stone Association, Inc.
 National Grinding Wheel Company
 National Industrial Sand Association
 National Lead Company
 National Sand & Gravel Association
 National Slag Association
 National Sulfur Company
 National Zinc Company
 National American Refractories Company
 National Company
 National Lime Company

— O —
 Ohio Mining Association
 Ohio Knives Company
 Ohio Silica Company
 Ohio Fiberglass Corporation
 Ohio Glass Company

— P —
 Pacific Grinding Wheel Company
 Pacific Glass Company
 Pacific Glass Sand Corporation
 Pacific Corporation
 Pacific Coal Company
 Pacific Plate Glass Company
 Pacific Division, Libby-Owens-Ford Co.
 Pacific Corporation
 Pacific Cement Association
 Pacific Products, Inc.
 Pacific Grinding Wheel Company, Inc.
 Pacific Company
 Pacific Manufacturing Company

Raybestos-Manhattan, Inc.
 Republic Steel Corporation
 Rialto Mining Corporation
 R. H. Robertson Company

— S —
 Safety First Supply Company
 Safety Grinding Wheel & Machine Co.
 Claude H. Schenck Company
 Scott Aviation Corporation
 Joseph E. Seagram & Sons, Inc.
 Shenango Furnace Company
 Simonds Warden White Company
 South West Box Company
 St. Joseph Lead Company
 Standard Abrasive Wheel Company
 Standard Lime & Stone Company
 Sterling Grinding Wheel Company
 The Sun Rubber Company

— T —
 Texas Gulf Sulphur Company
 Titan Abrasives Company
 Toledo Edison Company
 Toledo Scale Company
 Trenton Batteries Company
 Tri-State Zinc & Lead Ore Producers Association

— U —
 Union Asbestos & Rubber Company
 Union Carbide & Carbon Corporation
 United States Pottery Association
 United States Smelting Refining & Mining Company
 United States Steel Corporation of Del.
 Universal Sanitary Manufacturing Co.
 Utah Copper Company
 Utilities Research Commission

— V —
 Valley Mould & Iron Corporation
 Van Cleef Bros.
 Vanadium Corporation of America
 Vauxhall Grindstone Company
 Vortice Wheel Company

— W —
 Waltham Grinding Wheel Company
 Washington Mills Abrasive Company
 Western Silica Company
 West Company
 West Virginia Manufacturers' Association
 Western Precipitation Corporation
 Westfield Grinding Wheel Company
 Westinghouse Air Brake Company
 Westinghouse Electric Corporation
 Whitehead Brothers Company
 Willson Products, Inc.
 Winthrop Chemical Company, Inc.
 Wisconsin Abrasive Company
 Wolf's New Process Abrasive Wheel, Inc.

— Y —
 Youngstown Sheet & Tube Company

* Multiple Membership

Ingdon Pottery, Inc.
Abrasive Division, U. S. Rubber Company
Abrasive Grain Association
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Corp.
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Cyanamid Company
American Emery Wheel Works
American Iron & Steel Institute
American Mining Congress
American Optical Company
American Radiation & Standard
Sanitary Corporation
American Refractories Institute
American Smelting & Refining Company
American Zinc Institute
American Zinc, Lead & Smelting Company
Anasconda Copper Mining Company
Arrow Mutual Liability Insurance Co.
Association of Casualty & Surety Executives
Automobile Manufacturers Association

— B —

Baird Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bridgport Safety Linery Wheel Company
Bunker Hill & Sullivan Mining & Concentrating Company

— C —

Canadian General Rubber Company, Ltd.
The Carborundum Company
Central Silica Company
Chicago Wheel & Manufacturing Company
Climax Molybdenum Company
Robert F. Coleman, Inc.
The Colorado Mining Association
Consolidated Mining & Smelting Company of Canada, Ltd.
Cooper-Bessemer Corporation
Corhart Refractories Company
Corning Glass Works
Cortland Grinding Wheel Corporation

— D —

Davison Chemical Corporation
Deckers Creek Sand Company
A. P. DeSenne & Son, Inc.
Detroit-Star Grinding Wheel Company
Duckel Corporation

— U —

Diamond Alkali Company
Duck Aircraft Company, Inc.
Eow Chemical Company
B. F. Drakenfeld Company
Dravo Corporation

— E —

Eagle-Picher Company
Eaton Services, Inc.
Electro Refractories & Alloya Corporation
Eller Company
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exxon Company

— F —

The Falk Corporation
Firth Sterling Steel Company
Foote Mineral Company
Foundry Supply Manufacturers Ass'n
Fraser-Simples, Inc.
Fuller Merriam Company

— G —

Galvin Manufacturing Corporation
Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Aniline & Film Corporation
General Grinding Wheel Corporation
General Motors Corporation
General Refractories Company
Glenahaw Glass Company, Inc.
A. P. Green Fire Brick Company
Grinding Wheel Manufacturers Ass'n

— H —

The Hail China Company
Hamilton Emery & Corundum Company
Hampton Grinding Wheel Company
Hawley Products Company
Hazel-Atlas Glass Company
Hercules Powder Company
John W. Ilgman Company
Isauro Hochschild S. A. M. I.
O. Hommel Company

— I —

Industrial Silica Corporation
International Business Machines Corp.
International Nickel Company, Inc.

— J —

Jackson Mills Emery Company
Jamison Coal & Coke Company
Johns-Manville Corporation
Jones & Laughlin Steel Corporation

— K —

Kearney and Matthews Company
Kendall, Inc.
Krytox Liner Company
Krytox Glass Company
The Kirk & Blum Manufacturing Company
Koppers Company

— L —

Lehigh-Lancaster China Company
Lea Crucible Company of Pittsburgh
L. J. Loring & Company
Lead Industries Association

— M —

Machinex-Hempill Company
Macklin Company
Magnus Copper Company
Maryland Self-Insurers' Association
Metropolitan Life Insurance Company
Mexico Refractories Company
Mid-West Abrasive Company
Mint Safety Appliances Company
Monsanto Chemical Company
Mutual Chemical Company of America

— Mc —

J. F. McCormick Company

— N —

National Association of Mutual Casualty Companies
National Crushed Stone Association, Inc.
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Sand & Gravel Association
National Slag Association
The Neville Company
New Jersey Zinc Company
North American Refractories Company
Norton Company
Norton Pike Company

— O —

Olin's Mining Association
Oriental Abrasive Company
Ottawa Silica Company
Owen-Corning Fiberglass Corporation
Owen-Illinois Glass Company

— P —

Pamular Grinding Wheel Company
Pamulthill Company
Pennsylvania Glass Sand Corporation
Pittsburgh Coal Company
Pittsburgh Plate Glass Company
Pittsburgh Division, Libby-Owens-Ford Co.
Portland Cement Association
Potter Research Corporation
Powers X-Ray Products, Inc.
Precision Grinding Wheel Company, Inc.
The Pullman Company
Pyrote Manufacturing Company

— R —

Rafinesse-Manhattan, Inc.
Republic Steel Corporation
Riole Mining Corporation
R. H. Robertson Company
Robertson Manufacturing Company

— S —

Safety First Supply Company
Safety Grinding Wheel & Machine Co.
Claude H. Schuchle Company
Scott Aviation Corporation
Shenando Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
South West Box Company
St. Joseph Lead Company
Standard Lime & Stone Company
Sterling Grinding Wheel Company

— T —

Tennessee Copper Company
Texas Gulf Sulphur Company
Titan Abrasive Company
Tolco Edison Company
Trenton Pottery Company
Tri-State Zinc & Lead (Producers) Association

— U —

Union Asbestos & Rubber Company
Union Carbide & Carbon Corporation
United States Pottery Association
United States Smelting, Refining & Mining Company
United States Steel Corporation of Del.
Universal Sanitary Manufacturing Co.
Ulab Copper Company
Utilities Research Commission

— V —

Valley Mould & Iron Corporation
Van Cleef Bros.
Vanadium Corporation of America
Vauxville Crucible Company
Vitrified Wheel Company

— W —

Walham Grinding Wheel Company
Washington Mill Abrasive Company
Wedron Silica Company
West Virginia Manufacturers' Association
Western Precipitation Corporation
Westfield Grinding Wheel Company
Westhouse Air Brake Company
Westhouse Thermo Corporation
Whitehead Brothers Company
Wilcox Products, Inc.
Winthrop Chemical Company, Inc.
Wisconsin Abrasive Company
Wolf's New Process Abrasive Wheel, Inc.

— Y —

Youngstown Sheet & Tube Company

*Transactions, Bull # 8,
11th Ann. Meeting, Nov. 7, 1946.*

1946

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— A —

Abingdon Potteries, Inc.
Abrasive Division, U. S. Rubber Company
Abrasive Grain Association
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Company
Aluminum Company of America
Amalgamated Anthracite Collieries, Ltd.
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Can Company
American Cyanamid Company
American Emery Wheel Works
American Foundry Equipment Company
American Iron & Steel Institute
American Mining Congress
American Optical Company
American Radiator & Standard
Sanitary Corporation
American Refractories Institute
American Smelting & Refining Company
American Zinc Institute
American Zinc, Lead & Smelting Company
Anaconda Copper Mining Company
Anthracite Institute
Arrow Mutual Liability Insurance Company
Assoc. of Casualty & Surety Executives*
Austin Motor Co., Ltd.
Automobile Manufacturers Association

— B —

Ball Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bituminous Casualty Corporation
Bridgeport Safety Emery Wheel Company
Brush Beryllium Company
Bunker Hill & Sullivan Mining &
Concentrating Company

* Multiple Membership

— C —

Canadian General Rubber Company, Ltd.
The Carborundum Company
Caterpillar Tractor Company
Central Silica Company
Chicago Wheel & Manufacturing Company
Robert F. Coleman, Inc.
The Colorado Mining Association
Consolidated Mining & Smelting Company
of Canada, Ltd.
Cooper-Bessemer Corporation
Corhart Refractories Company
Corning Glass Works
Cortland Grinding Wheels Corporation

— D —

Davison Chemical Corporation
Deckers Creek Sand Company
A. P. DeSanno & Son, Inc.
Detroit-Star Grinding Wheel Company
Diakel Corporation
Diamond Alkali Company
Dow Chemical Company
B. F. Drakenfeld Company
Dravo Corporation

— E —

Eagle-Picher Company
Eastern Gas and Fuel Associates
Ebasco Services, Inc.
Electro Refractories & Alloys Corporation
Eijer Company
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exolon Company

— F —

The Falk Corporation
Firth Sterling Steel Company
H. E. Fletcher Company
Foote Mineral Company
Ford Motor Company
Foundry Supply Manufacturers Assoc.
Frazier-Simplex, Inc.
Fuller Merriam Company
The Funkhouser Company

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— G —

Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Aniline & Film Corporation
General Grinding Wheels Corporation
General Motors Corporation
General Refractories Company
Glenshaw Glass Company, Inc.
A. P. Green Fire Brick Company
Grinding Wheel Manufacturers Assoc.

— H —

The Hall China Company
Hamilton Emery & Corundum Company
Hampden Grinding Wheel Company
Hawley Products Company
Hazel-Atlas Glass Company
Hercules Powder Company
John W. Higman Company
Mauricio Hochschild S. A. M. L.
O. Hommel Company

— I —

Imperial Chemical Industries, Ltd.
Industrial Silica Corporation
Inland Steel Company
Interchemical Corporation
International Business Machines Corp.
International Nickel Company, Inc.

— J —

Jackson Mills Emery Company
Jamison Coal & Coke Company
Johns-Manville Corporation
Jones & Laughlin Steel Corporation

— K —

Keasbey and Mattison Company
Kennecott Copper Corporation
Keystone Emery Mills
Kimble Glass Company
The Kirk & Blum Manufacturing Company
The Edwin M. Knowles China Company
Koppers Company

— L —

Homer Laughlin China Company
Lava Crucible Company of Pittsburgh
E. J. Lavino & Company
Lead Industries Association

— M —

Mackintosh-Hempill Company
Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Mayer China Company
J. S. McCormick Company
Metropolitan Life Insurance Company
Mexico Refractories Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Monsanto Chemical Company
Mutual Chemical Company of America

— N —

National Association Fan Manufacturers
National Association of Mutual Casualty Companies
National Crushed Stone Association, Inc.
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Sand & Gravel Association
National Slag Association
National Steel Company
National Supply Company
The Neville Company
New Jersey Zinc Company
North American Refractories Company
Norton Company
Norton Pike Company

— O —

Ontario Mining Association
Oriental Abrasive Company
Ottawa Silica Company
Owens-Corning Fiberglas Corporation
Owens-Illinois Glass Company

* Multiple Membership

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— P —

Peninsular Grinding Wheel Company
Penn-Rillion Company
Pennsylvania Glass Sand Corporation
Phelps Dodge Corporation
Pittsburgh Coal Company
Pittsburgh Plate Glass Company
Polaroid Corporation
Portland Cement Association
Posture Research Corporation
Powers X-Ray Products, Inc.
Precision Grinding Wheel Company, Inc.
The Pullman Company
Pyrene Manufacturing Company

— R —

Raybestos-Manhattan, Inc.
Republic Steel Corporation
Rialto Mining Corporation
H. H. Robertson Company
Robertson Manufacturing Company

— S —

Safety First Supply Company
Safety Grinding Wheel & Machine Co.
Sand Products Corporation
Claude B. Schneible Company
Shenango Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
South West Box Company
St. Joseph Lead Company
Standard Lime & Stone Company
The Standard Ultramarine Company
Sterling China Company
Sterling Grinding Wheel Company
Sun Sand Company

— T —

Tata Sons, Ltd.
Taylor, Smith & Taylor Company
Tennessee Copper Company
Texas Gulf Sulphur Company

— T —

Titan Abrasives Company
Toledo Edison Company
Trenton Potteries Company
Tri-State Zinc & Lead Ore Producers Association

— U —

Union Asbestos & Rubber Company
Union Carbide & Carbon Corporation
United States Pottery Association
United States Smelting Refining & Mining Company
United States Steel Corporation of Del.
Universal Sanitary Manufacturing Co.
Utilities Research Commission*

— V —

Valley Mould & Iron Corporation
Van Cleef Bros.
Vanadium Corporation of America
Vesuvius Crucible Company
Vitreous China Plumbing Fixtures Association
Vitrified Wheel Company

— W —

Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
West Virginia Manufacturers' Association
Western Precipitation Corporation
Westfield Grinding Wheel Company
Westinghouse Air Brake Company
Westinghouse Electric Corporation
Whitehead Brothers Company
Willson Products, Inc.
Winthrop Chemical Company, Inc.
Wisconsin Abrasive Company
Wolf's New Process Abrasive Wheel, Inc.

— Y —

Youngstown Sheet & Tube Company

* Multiple Membership

I-H-F IN 1947

JOHN F. McMAHON

Managing Director, Industrial Hygiene Foundation

What has Industrial Hygiene Foundation done during the past year?

The following are some partial answers to that question:

At the first meeting of the Foundation's Board of Trustees, on December 16, 1935, this organization was launched with 23 member companies and associations. As of today, there are 349 members.

Twenty-two companies and associations have affiliated thus far this year. They are:

American Can Company	Inland Steel Company
Anthraco Institute	National Ass'n Fan Manufacturers
Atlas Powder Company	National Pulverizing Company
Austin Motor Company (England)	National Steel Corporation
Crucible Steel Company	National Supply Company
Federal-Mogul Corporation	New Jersey Pulverizing Company
Firestone Tire & Rubber Co.	Pittsburgh Coke & Chemical Co.
Ford Motor Company	Sharon Steel Corporation
General Ceramics & Steatite Co.	Sun Oil Company
General Electric Company	Sun Sand Company
Godrej and Boyce Mfg. Co.	Sylvania Electric Products Co.

Actually, the number of new members is 54 inasmuch as one of the organizations is the Anthracite Institute, which has taken out a multiple membership covering its 32 member companies. There are now 103 special subscribers—governmental agencies, private institutions, etc.

Field Work

Field work continued to increase in a satisfactory manner and involved studies in approximately 70 different plants. This work will be described by Mr. Hatch, the Foundation's Research Director. In an engineering survey for the pottery industry, directed by Mr. Hemeon, Head Engineer, the Foundation collaborated with the U.S. Potters Association to hold a Pottery Dust Control Clinic here in Mellon Institute on October 13. Sixteen companies sent 31 representatives to this all-day conference.

*Trans. Bull. No 9, 12th Ann. Meet
Nov. 20. 1947*

I-H-F IN 1948

JOHN F. McMAHON

Managing Director, Industrial Hygiene Foundation

Membership

The membership of Industrial Hygiene Foundation now numbers 353 companies and associations, plus 105 special subscribers.

New members during the year to date are:

Canadian Institute of Stove and Furnace Manufacturers	Homestake Mining Company
Ferro Enamel Corporation	Pangborn Corporation
The Glidden Company	Revere Copper & Brass, Inc.
The B. F. Goodrich Company	Swife Company
	Standard Oil Company (N.J.)

Meanwhile, applications for membership have just been received from Lever Brothers Company and Southern Mica Company. These will be acted upon by the Foundation's Board of Trustees at their annual meeting today.

Research

Early this year, the Foundation announced the establishment of a new laboratory for industrial toxicology and physiology. This step was taken in response to demands from member companies. The new laboratory marks a highly important advance in the development of this research association of industries—a development that strengthens the Foundation and that promises important benefits not only to the members and their employees but ultimately to all members of America's industrial society.

Two projects, both of one-year duration, have already been initiated and several short-time investigations have been completed.

Plant studies and field researches conducted by the Foundation's staff this year have exceeded, both in scope and importance, anything previously undertaken. The work has included a trip by two men to South America and a number of trips to Canada.

Foundation research will be dealt with fully this morning in a report by Mr. Hatch, our Research Director.

[4]

Trans. Bull. No. 10, 134th Ann. Meeting

Nov. 18, 1948

1949

FOUNDATION FACTS

JOHN F. McMAHON

Managing Director, Industrial Hygiene Foundation

Membership

The following companies and organizations affiliated or re-affiliated with Industrial Hygiene Foundation during 1949:

Peere & Company	Jeffrey Manufacturing Company
Socony-Vacuum Oil Company	Rome Cable Company
Texas Company	Metal & Thermit Corporation
Sylvania Electric Products, Inc.	Southern Mica Company
Doehler-Jarvis Corporation	West Virginia Manufacturers Association
Lever Brothers Company	East Indian Railway

Field Studies

The volume of field studies carried on during the year was greater than ever before. Highlights of this work included half a dozen surveys dealing with community air pollution; these were made for Foundation Members in the steel and glass industry, and for the Atomic Energy Commission. Likewise a number of studies were made or are in progress, to determine the health and medical needs of certain member companies. The Foundation welcomes projects of this kind, showing a company what it should have to provide adequately for the health of its employees, the cost, administrative procedures, the medical facilities needed for a given type of firm—these constitute lasting contributions to labor, industry, to human relations, to developing human resources.

Personnel

We announced to the Foundation's membership the appointment of Dr. H. H. Schrenk as Research Director of Industrial Hygiene Foundation. This pleasing development became effective October 1. Dr. Schrenk comes to the Foundation after establishing an international reputation in industrial hygiene at the U.S. Bureau of Mines and more recently with the U.S. Public Health Service. Dr. Theodore F. Hatch is now dividing his time between the Foundation and the new School of Public Health at the University of Pittsburgh—

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*Trans Bull. No. 11, 14th Ann. Meeting,
Nov. 17, 1949*

1950
FOUNDATION FACTS

ANDREW FLETCHER, Eng.D.

President, St. Joseph Lead Company
Chairman, Board of Trustees, Industrial Hygiene Foundation

It has been John McMahon's custom to present to you at this time "Foundation Facts." That responsibility today falls on me. Most of you know what the facts are, but we have probably a few new members and a few new friends, so I will just briefly outline them. Our Foundation started in 1935, when a group of companies banded together on account of the silicosis problem. That organization was known as the Air Hygiene Foundation. We had only some 20 companies, but the early work of the Foundation so impressed other companies that year after year our membership has increased, until today we have approximately 350 of the outstanding companies in the United States who are really interested in improving the working and living conditions of their employees.

National recognition to the Foundation as a competent, impartial research organization was not long in coming, and today, gentlemen, we deserve that recognition. I hope that we will always hold it. The eight companies who joined us this year are representative of our membership list—anyone who would like to have a complete list of our membership can obtain it through our offices here. The eight new companies which joined in 1950 were:

Bradley Mining Company
A. M. Byers Company
Commercial Solvents Corporation
Gulf Oil Corporation
Joy Manufacturing Company
Wyckoff Steel Company
General Ceramics and Steatite Corporation
Pullman-Standard Car Manufacturing Company

I would be amiss if I didn't tell you that your Foundation is in excellent financial condition. We started the year with roughly \$101,000 in cash and short term Government bonds, and we estimate that we will end 1950 with \$115,000.

Major Research Problems

Research results in facts. Constructive policies affecting better working conditions can only be based on facts. And facts are certainly the product of your Foundation. The goal of our Foundation is somewhat visionary, and its labors will only be completed when

[4]

Trans. Bull. No. 15, 15th Ann. Meeting
Nov. 16 1950

1956

FOUNDATION FACTS

C. RICHARD WALMER, M.D.
Managing Director, Industrial Hygiene Foundation

It is indeed a pleasure to have so many of the Foundation's member companies represented here today. The charter members of Industrial Hygiene Foundation visualized it as a unifying event, aiding in the advancement of occupational health on an industry-wide front, and I think your presence here today justifies their belief that industry needed and wanted such an organization. The joint effort of companies to foster health of workmen has been an effective method of dealing with socio-economic problems relating to industrial health.

Of equal importance in advancing industrial health are the individual efforts of companies to achieve optimum health maintenance in their respective plants. I think the member companies of Industrial Hygiene Foundation are leaders in this respect.

We want at this time to welcome seventeen new members to this year's meeting. They are:

Allied Chemical & Dye Corporation
AMP Incorporated
Association of American Railroads
Association of American Soap and
Glycerine Producers, Inc.
Boeing Airplane Company
The Cleveland Graphite Bronze Company
Dow Corning Corporation
Equitable Life Assurance Society
of the United States
Farrell-Cheek Steel Company
Jesse S. Morie & Son, Inc.
Minneapolis-Honeywell Regulator Company
Pennsylvania Manufacturers' Association
Casualty Insurance Company
Sauereisen Cements Company
Sperry Gyroscope Company
Standard Oil Company of Indiana
Wald Industries Inc.
Western Maryland Railway

We hope that all of you will consider the Foundation as part of your own technical staff, and we look forward to being of assistance to you.

During the past year the Foundation's staff completed a number of important field and research projects. Environmental surveys were

[4]

Nov-14-15, 1956
Trans. Bull. No. 30, 21st Ann. Meeting

1951

Reprints of addresses continue to be in demand. Requests are still coming in for the talk on "The Human Side of Business," which was made at the 1950 meeting by Dr. Donald K. David, Dean, Graduate School of Business Administration at Harvard. There have been numerous requests for copies of Don G. Mitchell's 1951 keynote address on "Human Dignity."

The following companies have affiliated with the Foundation since January 1:

American Foundrymen's Society	Pennsylvania Railroad Company
Cleveland-Cliffs Iron Company	Prismo Safety Corporation
General Mills, Inc.	Sandia Corporation
General Steel Castings Company	Trion, Inc.
Lakey Foundry and Machine Company	U.S. Pipe and Foundry
	West Michigan Steel Foundry Company
	Wheeling Steel Corporation
	Company

The Foundation is now serving more than 360 member companies.

The American Iron and Steel Institute training program is one of three established at the Foundation. A new—and important one to us—is that of the Foundation's sponsoring the further education of a medical graduate who is at present studying in the University of Pittsburgh Graduate School of Public Health. The University grants a scholarship, and the Foundation gives financial assistance to the student. This trainee program is the beginning of the Foundation's plan to train future staff members.

In addition to this student in the Graduate School, the Foundation employs part time an undergraduate student of chemical engineering, who is a prospective future staff member.

Listed among the managing director's activities for the past year were numerous talks, one of which took place at the Tenth International Congress on Industrial Medicine held in Lisbon, Portugal, in September. While abroad, the managing director also discussed the role of industrial hygiene in the 79-nation World Health Organization when he conferred at its headquarters in Geneva, Switzerland, with the director, Dr. Brock Chisholm.

Dr. H. H. Schrenk, research director, and W. C. L. Hemeon, engineering director, spoke on "Smoke Abatement" at a recent monthly meeting of the City Council of Weirton, West Virginia. Thomas E. Millsop, President of the City Council, also is president of Weirton Steel Company which, at present, has a trainee in the American Iron and Steel Institute program at the Industrial Hygiene Foundation Laboratory in Mellon Institute.

[83]

Trans. Bull. No. 19, 16th Ann. Meeting,
Nov 15, 1951

Transactions of 18th Annual Meeting, Industrial Hygiene
Foundation of America, Thursday, November 19, 1953. p. 4

Trans. Bull. No. 26. 1953

istic, but because the relationship of industrial health with all the other health fields is becoming increasingly evident. It is directly allied with public health in that a workman must be kept healthy 24 hours a day if he is to do an efficient job for 8 of those hours. Therefore, progressive managements concern themselves with the physical and mental well-being of the worker, his family, his whole community. Physical examinations of employees catch nonoccupational diseases in their incipient stages while there is still time to effect a cure. Physical defects are also uncovered and make it possible to place the man on a job commensurate with his physical condition, thereby prolonging his economically productive years. Health education in the plant is reflected in improved living standards outside its walls. Everybody benefits, including the employer.

Essential Part of Management Program

In certain companies, in-plant health programs have reduced absenteeism by more than 29%, labor turnover by almost the same, and have cut occupational diseases in half. Considered in this light it is obvious that a good industrial health program is an essential part of any management program in industry. I don't need to spell out to you the disrupting and costly effect that absenteeism alone has on production. The savings through reduction in absenteeism can easily offset the cost of a health program.

To achieve the best possible working and living conditions for their employees, many industries have turned to Industrial Hygiene Foundation for guidance. Although we have shown a continuing growth over the last 18 years, I am happy to say that 1953 has been one of our most satisfactory, as evidenced by:

Twelve new members 1953

Can Manufacturers Institute, Inc.
Continental Can Company
Sugar Beet Products Company
McLean Manufacturing Company
Kennecott Copper Corporation
Doehler-Jarvis Division, National Lead Company
Rem-Cru Titanium, Inc.
Owens-Corning Fiberglas Corporation
McLain Fire Brick Company
Johnson and Johnson
→ Ruberoid Company
St. Regis Paper Company

1954

FOUNDATION FACTS

C. RICHARD WALMER, M.D.

Managing Director, Industrial Hygiene Foundation

The most illuminating measure of Industrial Hygiene Foundation's progress and growth is to be found right here in this auditorium. The increasing attendance at each Annual Meeting is evidence of the enthusiastic support you and the companies you represent are giving to the Foundation. With such interest, it was inevitable that the Foundation would achieve much in its first 20 years toward making better environmental health a reality. With a continuation of this interest, we look forward confidently to a still greater degree of success.

Membership

We are pleased to welcome twelve new member companies to this year's meeting. They are:

Asbestos Corporation Limited
Commonwealth Sanitation Company
G. H. Packwood Manufacturing Company
Georgia Kaolin Company
Mechanical Industries, Inc.
Phillips Petroleum Company
Pilot Chemical Company
Radio Corporation of America
L. L. Stiles and Sons Brick Company
U. S. Asbestos Division of Raybestos-Manhattan, Inc.
Western Electrochemical Company
Wyandotte Chemicals Corporation

This brings the Foundation's membership to 365 companies having a total of more than three million employees. Special subscribers to the monthly *Digest* and other publications now include 128 governmental health agencies and other health and education institutions. Among them are 30 such organizations in 14 foreign countries.

Almost every industrial category is represented on the Foundation's membership roster. The staff of the Foundation is proud to be the medium through which all of these diversified industries can unite their efforts in protecting the health of their workers and their consumers.

Helping immeasurably to make this possible through the years has been the interest and support of Mellon Institute. We owe a

[5]

*Trans. Bull. No. 28, 1944, Ann.
Meeting, Nov. 17-18, 1954*

1955

We like to feel that through the years these meetings, too, have proved valuable to you in affording an opportunity to get together with representatives of fields other than your own so that lines of communication can be strengthened and problems ironed out.

We hope that all of you, and particularly the new members, will take every opportunity to call on the Foundation's staff for assistance. I would like to welcome, at this time, eleven new members to this year's meeting. They are:

Baugh Chemical Company
The Beryllium Corporation
Cora Products Refining Company
Crouse-Hinds Company
Crown Zellerbach Corporation
Detroit Steel Products Company
Industrial Indemnity Company
Mechanical Industries, Inc.
Olin Mathieson Chemical Corporation
Pittsburgh Steel Company
Standard Oil Company of California

This twentieth year of the Foundation's existence saw the completion of a number of important field and research projects and the initiation of new ones. Environmental surveys included studies of dust exposures and other atmospheric contaminants, for which control procedures were recommended and parallel medical controls set up. Several surveys involved determination of the outdoor air pollution as well as that at specific manufacturing operations.

Two complete medical surveys were made which resulted in the modernization of existing medical programs to encompass health maintenance activities.

Several new products have been investigated in our toxicological laboratory to ascertain whether any harmful properties were present. Other studies were carried out to determine the effects on the lungs of dust from various substances used in manufacturing. One of these investigations extends over a three-year period, another over two years.

Extensive air pollution investigations continued throughout the year.

The work carried on by the Foundation this year involved a budget expenditure of a quarter of a million dollars. Figures were cut close, but we expect to end the year with a balanced budget. Our total cash and securities amount to \$175,000.

Elected to the Board of Trustees this year were Mr. John Bugas.

[6]

Trans. Bull. No. 29, 20th Ann. Meeting,
Nov. 16-17-1955

1940

REPORT OF MEMBERSHIP COMMITTEE

C. E. RALSTON,* Chairman

Eleven new members affiliated with Air Hygiene Foundation during past year. The new members are:

Allegheny Pittsburgh Coal Company
American Mutual Liability Insurance Company
Calco Chemical Company
Colorado Mining Association
Industrial Tape Corporation
Liberty Mutual Insurance Company
Maryland Self-Insurers' Association
Powers X-ray Products, Inc.
Pullman Company
Rustless Iron and Steel Corporation
Toledo Scale Company

Meanwhile, eleven companies failed to renew their membership in January. With the business upturn—increased production creating increased need for health protection—a number of these companies are expected to return to the fold.

While the resignations balanced the additions, maintaining the membership at 225 companies, there was an increase of about \$400,000 in income. This is accounted for by the fact that most of the companies that resigned were small firms. Six of them were in the \$30 a year bracket, whereas most of the new members are larger companies in the higher bracket.

As Dr. Meller has announced, there has been a pronounced increase in the Foundation's survey service to its members during the year. This is a significant development. It links the benefits of Foundation membership more firmly with every-day plant operations. An industrial concern that does not know its health hazards, or its lack of them, and have this information in a scientific, specific form, is like a company that does not know its costs. Industrial hygiene surveys are simply inventories. Like inventories they must be made periodically. The advantages of such a procedure are manifold.

In case of claims, you have a record showing what the health conditions actually were at the time of alleged injury. That is, you have this information if you have been making periodic checks over a period of time. The report you receive from the Foundation removes the "guess work" and speculation as to whether there was or wasn't a hazard at the time of the injury. Further, as Mr. Fletcher pointed out here a year ago, a survey report from an outside, independent agency carries more weight in Court or before a compensation commission than does a report prepared by your own company. In other words, an outside party can talk with greater weight about the hazard than you can talk about yourself.

You all know man's capacity for spreading rumor, how tales grow.

* Safety Director, Pittsburgh Plate Glass Company.

Proc. 54th Ann. Meeting, Nov. 12-13, 1940

1941

REPORT OF THE MEMBERSHIP COMMITTEE

C. E. RALSTON, Chairman

Thirteen companies have affiliated with the Foundation, thus far this year. They are:

Corhart Refractories Company
General Motors Corporation
Hazel-Atlas Glass Company
International Business Machines Company
Merck & Company
Miamisburg Paper Company
Michigan Mutual Liability Company
Neville Company
Pittsburgh Clay Pot Company
Plaskon Company
Pyrene Manufacturing Company
Standard Lime and Stone Company
Toledo Edison Company

Two of the above are old members who dropped out during lean years but renewed their memberships during 1941. Meanwhile, four companies joined during the year.

It will be impossible to make a full report on membership work until the end of the year. A campaign for new members is now in progress and we have reason to be optimistic about its results. Mr. Lewis H. Brown, President of Johns-Manville Corporation, which has held membership since the Foundation was started, has kindly agreed to assist us in the undertaking. The campaign has been necessarily held up by the fact that the Foundation has been in the process of changing its name. That change was advocated by the Membership Committee, as well as many other persons interested in the Foundation, at the meeting here one year ago. After circularizing the membership, and after the due processes of the law, the change from Air Hygiene Foundation to Industrial Hygiene Foundation became official only recently. In fact there are still some final legalities to be disposed of at a business session here today.

Increasing industrial activity tends to increase health hazards—and at a time when the nation sorely needs maximum manpower. Therefore, the work of the Foundation is more important now than ever before. It helps companies keep precautions abreast with production, which is the only way we can offset the increases in sick absences and occupational disease which inevitably accompany an increase in the industrial tempo.

In endeavoring to fulfill this important function—keeping precautions abreast with production—the Foundation is performing more and more field work for its member companies. During the past year our industrial hygienist, Mr. Mallette, covered approximately 25,000 miles in making plant surveys and "trouble shooting" where new processes were being installed, new materials introduced with questionable health effects. Survey work was performed in seven states.

In August, the staff hygienist flew 2,700 miles in three days covering

Safety Director, Pittsburgh Plate Glass Company

Proc. 6th Ann. Meeting
Nov. 12-13, 1941

1942

New Members

During 1942, 11 more companies and associations affiliated with Industrial Hygiene Foundation in the organization's efforts to promote healthful working conditions, namely:

General Motors Corporation	Koppers Company
Flintkote Company	General Refractories Company
Owens-Corning Fiberglas Corp.	Demers Chair Company
Employers Mutual Liability Insurance Co.	Strathmore Paper Company
Dresser Manufacturing Company	Davison Chemical Company
Pacific Coast Association Pulp and Paper Manufacturers	

There are now 246 company and association members in the Foundation. These organizations, practically all of them directly engaged in war production, employ between 2 and 3 million war workers.

Plant Hygiene Surveys

The introduction of unfamiliar and new chemicals in manufacturing processes, some with little known toxic effects, is demanding even greater attention to plant hygiene measures. Meanwhile the dermatoses continue to be the most common of all occupational diseases.

The Foundation has conducted more plant hygiene surveys than in any previous year. These investigations, supervised by Frank R. Holden, check on the possible existence of health hazards in the workplaces. If hazards are detected, effectual measures are devised for their correction. Besides fostering healthful working conditions, the Foundation's plant surveys are proving to be an increasing factor in advancing harmonious labor relations, helping to eliminate working conditions which are often source of discontent, such as nuisance dusts and fumes.

The Foundation collaborates actively with governmental agencies, both state and federal, which are interested in industrial health. One evidence of this cooperation is the subscription classification started early in the year whereby governmental agencies can secure all Foundation publications at less than cost. Since this arrangement was initiated 12 months ago, 4 federal agencies including Army and Navy, 22 states, and 5 cities have subscribed for Foundation literature. Meanwhile, 3 universities and 4 private specialists have also availed themselves of this material.

Research

The Foundation has continued to support medical and engineering research in industrial health with grants to The Saranac Laboratory, University of Pennsylvania and Harvard School of Public Health. Findings from these studies have been published. Then, too, an important study in toxicology is under way for a member company at Mellon Institute.

Publications

Two medical and two engineering bulletins have been issued to members during the year. These publications, giving the results of research are as follows:

1. Comparison of Stereoscopic Miniature Chest Films, Single Roentgenograms on Paper, and Single Roentgenograms on Large Films.

Proc. 74th Ann. Meeting, Nov. 10-11-1942

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

Abington Sanitary Manufacturing Co.
Abrasive Company
Abrasive Division, U. S. Rubber Company
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Corp.
The Allison Company
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Cyanamid Company
American Emery Wheel Works
American Iron & Steel Institute
American Mining Congress
American Mutual Liability Insurance Co.
American Optical Company
American Radiator & Standard Sanitary Corporation
American Refractories Institute
American Smelting & Refining Company
American Zinc Institute
American Zinc, Lead & Smelting Company
Anaconda Copper Mining Company
Ass'n of Casualty & Surety Executives
Automobile Manufacturers Association
Ball Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Sun, Inc.
Bridgeport Safety Emery Wheel Company
Bunker Hill & Sullivan Mining & Concentrating Company
The Carborundum Company
Central Silica Company
Chicago Wheel & Manufacturing Company
Climax Molybdenum Company
Robert F. Coleman, Inc.
The Colorado Mining Association
Consolidated Mining & Smelting Company of Canada, Ltd.
Corhart Refractories Company
Corning Glass Works
Cortland Grinding Wheel Corporation
Davison Chemical Corporation
Deckers Creek Sand Company
Denver Fire Clay Company
A. P. deSanno & Son, Inc.
Detroit-Star Grinding Wheel Company
Diamond Alkali Company
Domore Chair Company, Inc.
Dow Chemical Company
B. F. Drakenfeld Company
Dravo Corporation
Earle-Picher Lead Company
Ebasco Services, Inc.
Electro Refractories & Alloys Corporation
Employers Mutual Liability Insurance Co.
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exxon Company
The Falk Corporation
Firestone Tire & Rubber Company
Firth Sterling Steel Company
The Flintkote Company
Foote Mineral Company
Foundry Supply Manufacturers Ass'n
Fraser-Simpson, Inc.
Fuller Merriam Company
Galvin Manufacturing Company
Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Grinding Wheel Corporation
General Motors Corporation
General Refractories Company
Glass Container Association
Glenshaw Glass Company, Inc.
Grinding Wheel Manufacturers Ass'n
The Hall China Company
Hamilton Emery & Corundum Company
Hampton Grinding Wheel Company
Hawley Products Company
Hazel-Atlas Glass Company
Hecia Mining Company
Hercules Powder Company
John W. Higman Company
U. Hommel Company
Mauricio Hochschild & A. M. I.
Industrial Silica Corporation
Industrial Tape Corporation
International Business Machines Corp.
International Nickel Company, Inc.
Jack & Heintz, Inc.
Jackson Mills Emery Company
Jaminson Coal & Coke Company
John-Manville Corporation
Jones & Laughlin Steel Corporation
Keystone Emery Mills
Kimble Glass Company
The Kirk & Blum Manufacturing Company
Koppers Company
Homer Laughlin China Company
Lava Crucible Company of Pittsburgh
E. J. Laving & Company
Lead Industries Association
Liberty Mutual Insurance Company
Mackintosh-Hempill Company
Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Merck & Company, Inc.
Mexican Refractories Company
The Miamiburg Paper Company
Michigan Mutual Liability Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Monanto Chemical Company
Mutual Chemical Company of America
J. S. McCormick Company
National Crushed Stone Association
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Slag Association
The Neville Company
New Jersey Zinc Company
North American Refractories Company
Norton Company
Norton Pike Company
Ontario Mining Association
Oriental Emery Company
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois Glass Company
Pacific Coast Association of Pulp & Paper Manufacturers
Peninsular Grinding Wheel Company
Penn-Rillon Company
Pennsylvania Glass Sand Corporation
Phelps Dodge Corporation
Pittsburgh Coal Company
Pittsburgh Plate Glass Company
Plaskan Division, Libbey-Owens-Franklin
Portland Cement Association
Powers X-Ray Products, Inc.

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

Precision Grinding Wheel Company
The Pullman Company
Pullman-Standard Car Manufacturing Company
Pyrene Manufacturing Company
Rayburn-Manhattan, Inc.
Biallo Mining Corporation
M. H. Robertson Company
Safety First Supply Company
Safety Grinding Wheel & Silica
Charles B. Schneible Company
Joseph E. Seagram & Sons, Inc.
Shenando Furnace Company
Simonds Worden White Company
Sulway Process Company
South West Box Company
St. Joseph Lead Company
Standard Abrasive Wheel Company
Standard Lime & Stone Company
Sterling Grinding Wheel Company
Sturtevant Fire Brick Company
The Sun Rubber Company
Texas Gulf Sulphur Company
Titan Abrasives Company
Toledo Edison Company
Toleno Scale Company
Trenton Pottery Company
Tri-Mine Zinc & Lead Ore Processing Association

FEDERAL GOVERNMENT

Air Service Command, Fairfield
Bureau of Medicine & Surgery
Chief of Ordnance, Chicago, Ill.
Industrial Hygiene Service, Oklahoma City, Okla.
Industrial Safety Division, Naval Arsenal, Alabama
Industrial Hygiene Laboratory, Baltimore, Md.
Medical Supply Officer, Fort M. Navy Yard, Charleston, S. C.
Public Establishments Div., Nationalities Valley Authority
U. S. Public Health Service

STATES

Department of Health, California
Department of Health, Connecticut
Department of Health, Georgia
Department of Health, Idaho
Department of Health, Illinois
Department of Health, Indiana
Department of Health, Iowa
Department of Health, Kansas
Department of Health, Louisiana
Department of Health, Maryland
Department of Health, Missouri
Department of Health, Montana
Department of Labor, New York
Department of Health, Ohio
Department of Health, Oklahoma
Department of Labor & Industries, Pennsylvania
Department of Health, Tennessee
Department of Health, Texas
Department of Health, Utah
Department of Health, Vermont
Department of Health, Virginia
Department of Health, West Virginia
Department of Health, Wisconsin
Industrial Commission of Ohio

INDUSTRIAL HYGIENE FOUNDATION

American Grinding Wheel Company, Inc.
 American Standard Car Manufacturing Co.
 American Manufacturing Company
 American Machine, Inc.
 American Mining Corporation
 A. H. Robertson Company
 American First Supply Company
 American Grinding Wheel & Machine Co.
 American B. Schneible Company
 American T. Seagrave & Sons, Inc.
 American Furnace Company
 American Worden White Company
 American Process Company
 American West Box Company
 American Lead Company
 American Abrasive Wheel Company
 American Lime & Stone Company
 American Grinding Wheel Company
 American Fire Brick Company
 American Rubber Company
 American Gulf Sulphur Company
 American Abrasives Company
 American Edison Company
 American Scale Company
 American Pottery Company
 American Zinc & Lead Ore Producers Association

Union Carbide & Carbon Corporation
 United Engineering & Foundry Company
 United States Pottery Association
 United States Smelting Refining & Mining Company
 United States Steel Corporation of Del.
 Universal Sanitary Manufacturing Co.
 Utah Copper Company
 Utilitase Research Commission
 Valley Mould & Iron Corporation
 Vanadium Corporation of America
 Vesuvius Crucible Company
 Vitribed Wheel Company
 Walther Grinding Wheel Company
 Washington Mills Abrasive Company
 Wedron Silica Company
 The S. K. Wellman Company
 West Company
 Western Precipitation Corporation
 Westfield Grinding Wheel Company
 Westinghouse Air Brake Company
 Westinghouse Electric & Mfg. Company
 Whitehead Brothers Company
 Willson Products, Inc.
 Wisconsin Abrasive Company
 Wolf's New Process Abrasive Wheel, Inc.
 Youngstown Sheet & Tube Company

SUBSCRIBERS

FEDERAL GOVERNMENT

U. S. Service Command, Fairfield, Ohio.
 Bureau of Medicine & Surgery, Navy Dept.
 Chief of Ordnance, Chicago, Ill.
 Federal Hygiene Service, Oklahoma City, Okla.
 Industrial Safety Division, Huntsville Arsenal, Alabama
 Industrial Hygiene Laboratory, Baltimore, Md.
 Federal Supply Officer, Fort Mason, Cal.
 Chief of Ordnance, S. C.
 Federal Establishments Div. Navy Dept.
 Federal Valley Authority
 Federal Public Health Service

STATES

Department of Health, California
 Department of Health, Connecticut
 Department of Health, Georgia
 Department of Health, Idaho
 Department of Health, Illinois
 Department of Health, Indiana
 Department of Health, Iowa
 Department of Health, Kansas
 Department of Health, Louisiana
 Department of Health, Maryland
 Department of Health, Missouri
 Department of Health, Montana
 Department of Labor, New York
 Department of Health, Ohio
 Department of Health, Oklahoma
 Department of Labor & Industry, Pennsylvania
 Department of Health, Tennessee
 Department of Health, Texas
 Department of Health, Utah
 Department of Health, Vermont
 Department of Health, Virginia
 Department of Health, West Virginia
 Department of Health, Wisconsin
 Federal Commission of Ohio

CITIES

Department of Health, Baltimore, Md.
 Department of Health, Detroit, Mich.
 Department of Health, St. Louis, Mo.

OTHERS

Dr. Elston L. Bellman
 Dr. Charles Kemm Good
 Dr. J. W. G. Hannon
 Dr. E. R. Hayhurst
 Dr. N. P. Henderson
 Mr. J. H. Holden
 Dr. Hedwig S. Kuhn
 Dr. Geo. E. Morris
 Dr. E. D. McDonnell
 Dr. C. O. Sandington
 Johns Hopkins University
 University of Colorado
 Medical Administration Service

FOREIGN

Department of Pensions & Health, Ottawa, Canada
 Department of Health & Public Welfare, Winnipeg, Canada
 British Ministry of Supply Mission
 International Labor Office, Montreal
 Medical Research Council, London
 Ministère Santé & B. E. Social Hyg. Quebec, Canada
 Netherland Government Commission for Scientific Documentation

* Multiple Memberships

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• Multiple Membership

*Transactions, Bull # 8,
11th Ann. Meeting, Nov. 7, 1946.*

1946

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— A —

Abingdon Potteries, Inc.
Abrasive Division, U. S. Rubber Company
Abrasive Grain Association
Abrasive Products Company
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allis-Chalmers Manufacturing Company
Aluminum Company of America
Amalgamated Anthracite Collieries, Ltd.
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Can Company
American Cyanamid Company
American Emery Wheel Works
American Foundry Equipment Company
American Iron & Steel Institute
American Mining Congress
American Optical Company
American Radiator & Standard
Sanitary Corporation
American Refractories Institute
American Smelting & Refining Company
American Zinc Institute
American Zinc, Lead & Smelting Company
Anaconda Copper Mining Company
Anthracite Institute
Arrow Mutual Liability Insurance Company
Assoc. of Casualty & Surety Executives*
Austin Motor Co., Ltd.
Automobile Manufacturers Association

— B —

Ball Brothers Company
Bartlett-Collins Company
Bay State Abrasive Products Company
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bituminous Casualty Corporation
Bridgeport Safety Emery Wheel Company
Brush Beryllium Company
Bunker Hill & Sullivan Mining &
Concentrating Company

— C —

Canadian General Rubber Company, Ltd.
The Carborundum Company
Caterpillar Tractor Company
Central Silica Company
Chicago Wheel & Manufacturing Company
Robert F. Coleman, Inc.
The Colorado Mining Association
Consolidated Mining & Smelting Company
of Canada, Ltd.
Cooper-Bessemer Corporation
Corhart Refractories Company
Corning Glass Works
Cortland Grinding Wheels Corporation

— D —

Davison Chemical Corporation
Deckers Creek Sand Company
A. P. DeSanno & Son, Inc.
Detroit-Star Grinding Wheel Company
Diakel Corporation
Diamond Alkali Company
Dow Chemical Company
B. F. Drakenfeld Company
Dravo Corporation

— E —

Eagle-Picher Company
Eastern Gas and Fuel Associates
Ebasco Services, Inc.
Electro Refractories & Alloys Corporation
Eijer Company
Ethyl Corporation
Eureka Flint & Spar Company, Inc.
Exolon Company

— F —

The Falk Corporation
Firth Sterling Steel Company
H. E. Fletcher Company
Foote Mineral Company
Ford Motor Company
Foundry Supply Manufacturers Assoc.
Frazier-Simplex, Inc.
Fuller Merriam Company
The Funkhouser Company

* Multiple Memberships

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— G —

Garco Products, Inc.
Gardner Machine Company
General Abrasive Company, Inc.
General Aniline & Film Corporation
General Grinding Wheels Corporation
General Motors Corporation
General Refractories Company
Glenshaw Glass Company, Inc.
A. P. Green Fire Brick Company
Grinding Wheel Manufacturers Assoc.

— H —

The Hall China Company
Hamilton Emery & Corundum Company
Hampden Grinding Wheel Company
Hawley Products Company
Hazel-Atlas Glass Company
Hercules Powder Company
John W. Higman Company
Mauricio Hochschild S. A. M. L.
O. Hommel Company

— I —

Imperial Chemical Industries, Ltd.
Industrial Silica Corporation
Inland Steel Company
Interchemical Corporation
International Business Machines Corp.
International Nickel Company, Inc.

— J —

Jackson Mills Emery Company
Jamison Coal & Coke Company
Johns-Manville Corporation
Jones & Laughlin Steel Corporation

— K —

Keasbey and Mattison Company
Kennecott Copper Corporation
Keystone Emery Mills
Kimble Glass Company
The Kirk & Blum Manufacturing Company
The Edwin M. Knowles China Company
Koppers Company

* Multiple Membership

— L —

Homer Laughlin China Company
Lava Crucible Company of Pittsburgh
E. J. Lavino & Company
Lead Industries Association

— M —

Macintosh-Hempill Company
Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Mayer China Company
J. S. McCormick Company
Metropolitan Life Insurance Company
Mexico Refractories Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Monsanto Chemical Company
Mutual Chemical Company of America

— N —

National Association Fan Manufacturers
National Association of Mutual Casualty Companies
National Crushed Stone Association, Inc.
National Grinding Wheel Company
National Industrial Sand Association
National Lead Company
National Sand & Gravel Association
National Slag Association
National Steel Company
National Supply Company
The Neville Company
New Jersey Zinc Company
North American Refractories Company
Norton Company
Norton Pike Company

— O —

Ontario Mining Association
Oriental Abrasive Company
Ottawa Silica Company
Owens-Corning Fiberglas Corporation
Owens-Illinois Glass Company

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

— P —

Peninsular Grinding Wheel Company
Penn-Rillton Company
Pennsylvania Glass Sand Corporation
Pheips Dodge Corporation
Pittsburgh Coal Company
Pittsburgh Plate Glass Company
Polaroid Corporation
Portland Cement Association
Posture Research Corporation
Powers X-Ray Products, Inc.
Precision Grinding Wheel Company, Inc.
The Pullman Company
Pyrene Manufacturing Company

— R —

Raybestos-Manhattan, Inc.
Republic Steel Corporation
Rialto Mining Corporation
H. H. Robertson Company
Robertson Manufacturing Company

— S —

Safety First Supply Company
Safety Grinding Wheel & Machine Co.
Sand Products Corporation
Claude B. Schneible Company
Shenango Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
South West Box Company
St. Joseph Lead Company
Standard Lime & Stone Company
The Standard Ultramarine Company
Sterling China Company
Sterling Grinding Wheel Company
Sun Sand Company

— T —

Tara Sons, Ltd.
Taylor, Smith & Taylor Company
Tennessee Copper Company
Texas Gulf Sulphur Company

— T —

Titan Abrasives Company
Toledo Edison Company
Trenton Potteries Company
Tri-State Zinc & Lead Ore Producers Association

— U —

Union Asbestos & Rubber Company
Union Carbide & Carbon Corporation
United States Pottery Association
United States Smelting Refining & Mining Company
United States Steel Corporation of Del.
Universal Sanitary Manufacturing Co.
Utilities Research Commission*

— V —

Valley Mould & Iron Corporation
Van Cleaf Bros.
Vanadium Corporation of America
Vesuvius Crucible Company
Vitreous China Plumbing Fixtures Association
Vitrified Wheel Company

— W —

Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
West Virginia Manufacturers' Association
Western Precipitation Corporation
Westfield Grinding Wheel Company
Westinghouse Air Brake Company
Westinghouse Electric Corporation
Whitehead Brothers Company
Willson Products, Inc.
Winthrop Chemical Company, Inc.
Wisconsin Abrasive Company
Wolf's New Process Abrasive Wheel, Inc.

— Y —

Youngstown Sheet & Tube Company

* Multiple Membership

I-H-F IN 1947

JOHN F. McMAHON

Managing Director, Industrial Hygiene Foundation

What has Industrial Hygiene Foundation done during the past year?

The following are some partial answers to that question:

At the first meeting of the Foundation's Board of Trustees, on December 16, 1935, this organization was launched with 23 member companies and associations. As of today, there are 349 members.

Twenty-two companies and associations have affiliated thus far this year. They are:

American Can Company	Inland Steel Company
Anthraco Institute	National Ass'n Fan Manufacturers
Atlas Powder Company	National Pulverizing Company
Austin Motor Company (England)	National Steel Corporation
Crucible Steel Company	National Supply Company
Federal-Mogul Corporation	New Jersey Pulverizing Company
Firestone Tire & Rubber Co.	Pittsburgh Coke & Chemical Co.
Ford Motor Company	Sharon Steel Corporation
General Ceramics & Steatite Co.	Sun Oil Company
General Electric Company	Sun Sand Company
Godrej and Boyce Mfg. Co.	Sylvania Electric Products Co.

Actually, the number of new members is 54 inasmuch as one of the organizations is the Anthracite Institute, which has taken out a multiple membership covering its 32 member companies. There are now 103 special subscribers—governmental agencies, private institutions, etc.

Field Work

Field work continued to increase in a satisfactory manner and involved studies in approximately 70 different plants. This work will be described by Mr. Hatch, the Foundation's Research Director. In an engineering survey for the pottery industry, directed by Mr. Hemeon, Head Engineer, the Foundation collaborated with the U. S. Potters Association to hold a Pottery Dust Control Clinic here in Mellon Institute on October 13. Sixteen companies sent 31 representatives to this all-day conference.

*Trans. Bull. No 4, 12th Ann. Meet
Nov. 20, 1947*

I-H-F IN 1948

JOHN F. McMAHON

Managing Director, Industrial Hygiene Foundation

Membership

The membership of Industrial Hygiene Foundation now number 353 companies and associations, plus 105 special subscribers.

New members during the year to date are:

Canadian Institute of Stove and Furnace Manufacturers	Homestake Mining Company
Ferro Enamel Corporation	Pangborn Corporation
The Glidden Company	Revere Copper & Brass, Inc.
The B. F. Goodrich Company	Swife Company
	Standard Oil Company (N.J.)

Meanwhile, applications for membership have just been received from Lever Brothers Company and Southern Mica Company. These will be acted upon by the Foundation's Board of Trustees at their annual meeting today.

Research

Early this year, the Foundation announced the establishment of a new laboratory for industrial toxicology and physiology. This step was taken in response to demands from member companies. The new laboratory marks a highly important advance in the development of this research association of industries—a development that strengthens the Foundation and that promises important benefits not only to the members and their employees but ultimately to all members of America's industrial society.

Two projects, both of one-year duration, have already been initiated and several short-time investigations have been completed.

Plant studies and field researches conducted by the Foundation's staff this year have exceeded, both in scope and importance, anything previously undertaken. The work has included a trip by two men to South America and a number of trips to Canada.

Foundation research will be dealt with fully this morning in report by Mr. Hatch, our Research Director.

[4]

*Trans. Bull. No. 10, 134th Ann. Meeting
Nov. 12, 1948*

1949

FOUNDATION FACTS

JOHN F. McMAHON

Managing Director, Industrial Hygiene Foundation

Membership

The following companies and organizations affiliated or re-affiliated with Industrial Hygiene Foundation during 1949:

Peere & Company	Jeffrey Manufacturing Company
Socony-Vacuum Oil Company	Rome Cable Company
Texas Company	Metal & Thermit Corporation
Sylvania Electric Products, Inc.	Southern Mica Company
Doehler-Jarvis Corporation	West Virginia Manufacturers Association
Lever Brothers Company	East Indian Railway

Field Studies

The volume of field studies carried on during the year was greater than ever before. Highlights of this work included half a dozen surveys dealing with community air pollution; these were made for Foundation Members in the steel and glass industry, and for the Atomic Energy Commission. Likewise a number of studies were made or are in progress, to determine the health and medical needs of certain member companies. The Foundation welcomes projects of this kind, showing a company what it should have to provide adequately for the health of its employees, the cost, administrative procedures, the medical facilities needed for a given type of firm—these constitute lasting contributions to labor, industry, to human relations, to developing human resources.

Personnel

We announced to the Foundation's membership the appointment of Dr. H. H. Schrenk as Research Director of Industrial Hygiene Foundation. This pleasing development became effective October 1. Dr. Schrenk comes to the Foundation after establishing an international reputation in industrial hygiene at the U.S. Bureau of Mines and more recently with the U.S. Public Health Service. Mr. Theodore F. Hatch is now dividing his time between the Foundation and the new School of Public Health at the University of Pittsburgh—

[5]

*Trans Bull. No. 11, 14th Ann. Meeting,
Nov. 17, 1949*

1950

FOUNDATION FACTS

ANDREW FLETCHER, Eng.D.

President, St. Joseph Lead Company
Chairman, Board of Trustees, Industrial Hygiene Foundation

It has been John McMahon's custom to present to you at this time "Foundation Facts." That responsibility today falls on me. Most of you know what the facts are, but we have probably a few new members and a few new friends, so I will just briefly outline them. Our Foundation started in 1935, when a group of companies banded together on account of the silicosis problem. That organization was known as the Air Hygiene Foundation. We had only some 20 companies, but the early work of the Foundation so impressed other companies that year after year our membership has increased, until today we have approximately 350 of the outstanding companies in the United States who are really interested in improving the working and living conditions of their employees.

National recognition to the Foundation as a competent, impartial research organization was not long in coming, and today, gentlemen, we deserve that recognition. I hope that we will always hold it. The eight companies who joined us this year are representative of our membership list—anyone who would like to have a complete list of our membership can obtain it through our offices here. The eight new companies which joined in 1950 were:

Bradley Mining Company
A. M. Byers Company
Commercial Solvents Corporation
Gulf Oil Corporation
Joy Manufacturing Company
Wyckoff Steel Company
General Ceramics and Steatite Corporation
Pullman-Standard Car Manufacturing Company

I would be amiss if I didn't tell you that your Foundation is in excellent financial condition. We started the year with roughly \$101,000 in cash and short term Government bonds, and we estimate that we will end 1950 with \$115,000.

Major Research Problems

Research results in facts. Constructive policies affecting better working conditions can only be based on facts. And facts are certainly the product of your Foundation. The goal of our Foundation is somewhat visionary, and its labors will only be completed when

[4]

Trans. Bull. No. 15, 15th Ann. Meeting
Nov. 16 1950

1951

Reprints of addresses continue to be in demand. Requests are still coming in for the talk on "The Human Side of Business," which was made at the 1950 meeting by Dr. Donald K. David, Dean, Graduate School of Business Administration at Harvard. There have been numerous requests for copies of Don G. Mitchell's 1951 keynote address on "Human Dignity."

The following companies have affiliated with the Foundation since January 1:

American Foundrymen's Society	Pennsylvania Railroad Company
Cleveland-Cliffs Iron Company	Prismo Safety Corporation
General Mills, Inc.	Sandia Corporation
General Steel Castings Company	Tricon, Inc.
Lakey Foundry and Machine Company	U.S. Pipe and Foundry Company
	West Michigan Steel Foundry Company
	Wheeling Steel Corporation Company

The Foundation is now serving more than 360 member companies.

The American Iron and Steel Institute training program is one of three established at the Foundation. A new—and important one to us—is that of the Foundation's sponsoring the further education of a medical graduate who is at present studying in the University of Pittsburgh Graduate School of Public Health. The University grants a scholarship, and the Foundation gives financial assistance to the student. This trainee program is the beginning of the Foundation's plan to train future staff members.

In addition to this student in the Graduate School, the Foundation employs part time an undergraduate student of chemical engineering, who is a prospective future staff member.

Listed among the managing director's activities for the past year were numerous talks, one of which took place at the Tenth International Congress on Industrial Medicine held in Lisbon, Portugal, in September. While abroad, the managing director also discussed the role of industrial hygiene in the 79-nation World Health Organization when he conferred at its headquarters in Geneva, Switzerland, with the director, Dr. Brock Chisholm.

Dr. H. H. Schrenk, research director, and W. C. L. Hemeon, engineering director, spoke on "Smoke Abatement" at a recent monthly meeting of the City Council of Weirton, West Virginia. Thomas E. Mill-op, President of the City Council, also is president of Weirton Steel Company which, at present, has a trainee in the American Iron and Steel Institute program at the Industrial Hygiene Foundation Laboratory in Mellon Institute.

[83]

Trans. Bull. No. 19, 16th Ann. Meeting,
Nov 15, 1951

istic, but because the relationship of industrial health with all the other health fields is becoming increasingly evident. It is directly allied with public health in that a workman must be kept healthy 24 hours a day if he is to do an efficient job for 8 of those hours. Therefore, progressive managements concern themselves with the physical and mental well-being of the worker, his family, his whole community. Physical examinations of employees catch nonoccupational diseases in their incipient stages while there is still time to effect a cure. Physical defects are also uncovered and make it possible to place the man on a job commensurate with his physical condition, thereby prolonging his economically productive years. Health education in the plant is reflected in improved living standards outside its walls. Everybody benefits, including the employer.

Essential Part of Management Program

In certain companies, in-plant health programs have reduced absenteeism by more than 29%, labor turnover by almost the same, and have cut occupational diseases in half. Considered in this light it is obvious that a good industrial health program is an essential part of any management program in industry. I don't need to spell out to you the disrupting and costly effect that absenteeism alone has on production. The savings through reduction in absenteeism can easily offset the cost of a health program.

To achieve the best possible working and living conditions for their employees, many industries have turned to Industrial Hygiene Foundation for guidance. Although we have shown a continuing growth over the last 18 years, I am happy to say that 1953 has been one of our most satisfactory, as evidenced by:

Twelve new members 1953

Can Manufacturers Institute, Inc.
Continental Can Company
Sugar Beet Products Company
McLean Manufacturing Company
Kennecott Copper Corporation
Doehler-Jarvis Division, National Lead Company
Rem-Cru Titanium, Inc.
Owens-Corning Fiberglass Corporation
McLain Fire Brick Company
Johnson and Johnson
→ Raberoid Company
St. Regis Paper Company

1954

FOUNDATION FACTS

C. RICHARD WALMER, M.D.

Managing Director, Industrial Hygiene Foundation

The most illuminating measure of Industrial Hygiene Foundation's progress and growth is to be found right here in this auditorium. The increasing attendance at each Annual Meeting is evidence of the enthusiastic support you and the companies you represent are giving to the Foundation. With such interest, it was inevitable that the Foundation would achieve much in its first 20 years toward making better environmental health a reality. With a continuation of this interest, we look forward confidently to a still greater degree of success.

Membership

We are pleased to welcome twelve new member companies to this year's meeting. They are:

Asbestos Corporation Limited
Commonwealth Sanitation Company
G. H. Packwood Manufacturing Company
Georgia Kaolin Company
Mechanical Industries, Inc.
Phillips Petroleum Company
Pilot Chemical Company
Radio Corporation of America
L. L. Stiles and Sons Brick Company
U. S. Asbestos Division of Raybestos-Manhattan, Inc.
Western Electrochemical Company
Wyandotte Chemicals Corporation

This brings the Foundation's membership to 365 companies having a total of more than three million employees. Special subscribers to the monthly Digest and other publications now include 128 governmental health agencies and other health and education institutions. Among them are 30 such organizations in 14 foreign countries.

Almost every industrial category is represented on the Foundation's membership roster. The staff of the Foundation is proud to be the medium through which all of these diversified industries can unite their efforts in protecting the health of their workers and their consumers.

Helping immeasurably to make this possible through the years has been the interest and support of Mellon Institute. We owe a

[5]

Trans. Bull. No. 28, 1941, Ann
Meeting, Nov. 17-18, 1952

1955

We like to feel that through the years these meetings, too, have proved valuable to you in affording an opportunity to get together with representatives of fields other than your own so that lines of communication can be strengthened and problems ironed out.

We hope that all of you, and particularly the new members, will take every opportunity to call on the Foundation's staff for assistance. I would like to welcome, at this time, eleven new members to this year's meeting. They are:

Baugh Chemical Company
The Beryllium Corporation
Corn Products Refining Company
Crouse-Hinds Company
Crown Zellerbach Corporation
Detroit Steel Products Company
Industrial Indemnity Company
Mechanical Industries, Inc.
Olin Mathieson Chemical Corporation
Pittsburgh Steel Company
Standard Oil Company of California

This twentieth year of the Foundation's existence saw the completion of a number of important field and research projects and the initiation of new ones. Environmental surveys included studies of dust exposures and other atmospheric contaminants, for which control procedures were recommended and parallel medical controls set up. Several surveys involved determination of the outdoor air pollution as well as that at specific manufacturing operations.

Two complete medical surveys were made which resulted in the modernization of existing medical programs to encompass health maintenance activities.

Several new products have been investigated in our toxicological laboratory to ascertain whether any harmful properties were present. Other studies were carried out to determine the effects on the lungs of dust from various substances used in manufacturing. One of these investigations extends over a three-year period, another over two years.

Extensive air pollution investigations continued throughout the year.

The work carried on by the Foundation this year involved a budget expenditure of a quarter of a million dollars. Figures were cut close, but we expect to end the year with a balanced budget. Our total cash and securities amount to \$175,000.

Elected to the Board of Trustees this year were Mr. John Bugas.

[6]

Trans. Bull. No. 29, 20th Ann. Meeting,
Nov. 16-17-1955

1956

FOUNDATION FACTS

C. RICHARD WALMER, M.D.

Managing Director, Industrial Hygiene Foundation

It is indeed a pleasure to have so many of the Foundation's member companies represented here today. The charter members of Industrial Hygiene Foundation visualized it as a unifying agent, aiding in the advancement of occupational health on an industry-wide front, and I think your presence here today justifies their belief that industry needed and wanted such an organization. The joint effort of companies to foster health of workmen has been an effective method of dealing with socio-economic problems relating to industrial health.

Of equal importance in advancing industrial health are the individual efforts of companies to achieve optimum health maintenance in their respective plants. I think the member companies of Industrial Hygiene Foundation are leaders in this respect.

We want at this time to welcome seventeen new members to this year's meeting. They are:

Allied Chemical & Dye Corporation
AMP Incorporated
Association of American Railroads
Association of American Soap and
Glycerine Producers, Inc.
Boeing Airplane Company
The Cleveland Graphite Bronze Company
Dow Corning Corporation
Equitable Life Assurance Society
of the United States
Farrell-Cheek Steel Company
Jesse S. Morie & Son, Inc.
Minneapolis-Honeywell Regulator Company
Pennsylvania Manufacturers' Association
Casualty Insurance Company
Sauereisen Cements Company
Sperry Gyroscope Company
Standard Oil Company of Indiana
Wald Industries Inc.
Western Maryland Railway

We hope that all of you will consider the Foundation as part of your own technical staff, and we look forward to being of assistance to you.

During the past year the Foundation's staff completed a number of important field and research projects. Environmental surveys were

[4]

Nov - 14-15, 1956
Trans. Bull. No. 30, 21st Ann. Meeting

Trans. Bull. No. 31, 22nd Ann. Meeting,
Oct 30-31, 1957

Foundation Facts

C. RICHARD WALMER, M.D., Pittsburgh

It is indeed a pleasure to welcome all of you to this 22d Annual Meeting of Industrial Hygiene Foundation, not only because I am always happy to see so many members of the Foundation here, but because I believe this audience represents the formula for hurdling obstacles that present themselves in just about every major human endeavor. And that formula is communication—not just communication within the boundaries of our own specialties, but communication across lines, across barriers of misunderstanding that lack of information and insight can create.

We hope that the program which has been arranged for you will help to bring about a clearer understanding of the interrelationship of management, technical, and medical aspects of health maintenance.

We want at this time to welcome 11 new members to this year's meeting. They are the following:

The American Metal Co., Ltd.
The Atchison, Topeka and Santa Fe Railway System
Brazilian National Steel Company
Dick Corporation
General Foods Corporation
Ingersoll-Humphreys Division of Borg-Warner Corporation
Laclede Steel Company
Minnesota Mining & Manufacturing Co.
Reaction Motors, Inc.
Research-Cottrell, Inc.
Spartan Steel Division of Armco Steel Corporation

We hope that you will consider the Foundation as part of your own technical staff, and we look forward to being of assistance to you.

During the past year the Foundation's staff completed a number of important field

and research projects. Environmental surveys were made for member companies to evaluate the degree of hazardous exposures to dust, fumes, and other atmospheric contaminants. Control measures were based upon this evaluation of the working environment. Investigations were also made of community air pollution, and stack discharges at industrial plants were measured to determine whether these were a contributing factor.

Two major epidemiological studies were carried on during the year, one to determine the health status of workers in a specific industry and whether there is a relationship between environmental exposures and certain biologic effects, and the other to investigate the biologic effects of certain chemical compounds.

Another major medical study was the survey of the medical program of one member company, a redesigning of it, and the preparation of a manual of procedures.

A number of research investigations in the Foundation's toxicological laboratory were concerned with the development of fundamental information appraising and controlling occupational disease hazards. Among long-range projects of this type is one being conducted for an association of industries to study biological factors in air pollution. Another is a research project to study potential hazards of a new product, and includes pulmonary, gastrointestinal, and eye-irritation studies. Findings serve as a basis for evolving proper control measures to protect the health of workers and consumers.

These are just the highlights of the work carried on this year. There were many other projects of a lesser magnitude but equally

given specific information on their dust problem wrote and thanked us for this assistance and stated "Your advice and references have 'cleared the air' enabling us to face our atmospheric pollution with something more than doubt and suspicion."

A second training course for industrial hygiene engineers and chemists was conducted in cooperation with the Occupational Health Research Training Facility of the U. S. Public Health Service. An intensive two weeks was devoted to work in the laboratory and lectures. The response of those taking the course is evidence of the benefits to be derived from this activity and it is planned to repeat the course in 1962. A two-day seminar on the current aspects of the dust problem was conducted under the sponsorship of the National Industrial Sand Association and the Foundry Facing Manufacturers Association. This provided an opportunity for the members of these associations to obtain up-to-date information on the medical, engineering and legal aspects of problems associated with their operations.

The Foundation provides an opportunity for representatives of industry to come together as working groups to explore and better define what they are doing and to take leadership in planning and developing policies to anticipate and prepare for new problems which we must face in the future. The real strength of the Foundation is in the unified action of its mem-

On behalf of the staff, I wish to express our deep appreciation for the helpful and encouraging support and the valuable contributions of the Board of Trustees and its Executive Committee, the Technical Committees, and the executive staff of Mellon Institute.

NEW MEMBERS - 1961

American Viscose Corporation
Armco Steel Corporation
Butler County Mushroom Farm, Inc.
The Cooper-Brasmer Corporation
Davison Chemical Division
W. K. Grace & Company
Ferro-Glo Corporation
Hanley Company
Hughson Chemical Company
Powdered Products Company
Westinghouse Brake & Signal, Ltd.
West Virginia Pulp and Paper Company

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A third training course for industrial hygiene engineers and chemists was conducted in cooperation with the Occupational Health Research and Training Facility of the United States Public Health Service. A concentrated two weeks was devoted to work in the laboratory, lectures and homework assignments. The response was again most satisfying and the course will be repeated in 1963.

On behalf of the staff, I wish to express our deep appreciation for the helpful and encouraging support and the valuable contributions of the Board of Trustees and its Executive Committee, the Technical Committees, and the executive staff of Mellon Institute.

NEW MEMBERS - 1962

E. I. du Pont de Nemours & Company

International Research and Development Corporation

Louisiana Ordnance Plant of Remington Rand
Division, Sperry Rand Corporation

Netherlands du Pont (foreign)

Semiconductor Products Division of Motorola, Inc.

Stauffer Chemical Company

Tamms Industries Company

Western Electric Company

Member companies represented by proxies:

Abrasive Grain Association
Allegheny Pittsburgh Coal Company
Aluminum Company of America
American Air Filter Company, Inc.
American Iron and Steel Institute
American Zinc Institute
Anaconda Company
American Can Company
American Metal Climax, Inc.
American Smelting & Refining Company
American Viscose Div., FMC Corporation
American Zinc, Lead & Smelting Company
Armco Steel Corporation
Atlas Chemical Industries
Ball Brothers Company, Inc.
Boeing Company
Brush Beryllium Company
Butler County Mushroom Farm
Central Silica Company
Robert F. Coleman, Inc.
Cooper-Bessemer Corporation
Davison Chemical Div., W. R. Grace & Company
Deckers Creek Sand Company
Deere & Company
Dow Chemical Company
B. F. Drakenfeld & Co., Inc.
E. I. du Pont de Nemours & Company
Ebasco Services Incorporated
Electric Storage Battery Company
Equitable Life Assurance Society of the U. S.
Ethyl Corporation
Ferro Corporation
Foundry Facings Manufacturers Association
General Electric Company
General Motors Corporation
Glenshaw Glass Company
Grinding Wheel Institute
Hall China Company
Hanley Company
Hazleton Laboratories, Inc.
Hercules Powder Company
Inland Steel Company
International Business Machines Corp.
Johns-Manville Corporation
Jones & Laughlin Steel Corporation

Kaiser Refractories
Kennecott Copper Corporation
Lava Crucible-Refractories Company
Louisiana Ordnance Plant, Remington Office Equipment Div.,
Sperry Rand Corporation
Marbon Chemical Div., Borg-Warner Corporation
J. S. McCormick Company
Minneapolis-Honeywell Regulator Company
Minnesota Mining and Manufacturing Company
Jesse S. Morie & Son, Inc.
National Assoc. of Mutual Casualty Companies
National Crushed Stone Association
National Industrial Sand Association
National Slag Association
Owens-Corning Fiberglas Corporation
Owens-Illinois Glass Company
G. H. Packwood Manufacturing Company
Penn Rillton Company
Pennsylvania Manufacturers' Assoc. Casualty Insurance Co.
Phelps Dodge Corporation
Philadelphia Quartz Company
Pipe Fabrication Institute
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
Portland Cement Association
Powdered Products Company
Pullman-Standard
Reaction Motors Div., Thiokol Chemical Corporation
Republic Steel Corporation
Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauereisen Cements Company
Claude B. Schneible Company
Scott Aviation Corporation
Socony Mobil Oil Company, Inc.
Stauffer Chemical Company
Sugar Beet Products Company
Tennessee Copper Company Division of Tennessee Corporation
Union Carbide Corporation
U. S. Steel Corporation
Wedron Silica Company
Westinghouse Electric Corporation
Whitehead Brothers Company

NEW MEMBERS AND MEMBERS RESIGNED
January 1 - September 30, 1963

New Members

Comalco Aluminium, Ltd.	\$	75.00	
Freeport Division, Nalco Chemical Co.		75.00	
Marbon Chemical Div., Borg Warner Corp.		175.00	
Pipe Fabrication Institute		75.00	
Stiffler Industrial Lubricants Co.		<u>75.00</u>	\$ 475.00

Members Increasing Dues

Ethyl Corporation (from \$100 to \$350)			<u>250.00</u>
			725.00

Members Resigned

Association of American Railroads	\$	50.00	
Autometric, Inc.		100.00	
Bethlehem Steel Co.		1,000.00	
Gustin-Bacon Manufacturing Co.		200.00	
Keasbey & Mattison Co.		150.00	
New Jersey Pulverizing Co.		50.00	
Shenango Furnace Co.		150.00	
Standard Ultramarine & Color Co.		150.00	
Universal Rundle Corp.		<u>100.00</u>	- <u>\$1,950.00</u>

Loss to September 30, 1963 - \$1,225.00

Company		Date Joined	Company
1927	Abrasive Grain Association	1961	Davison Chemical Division
1937	Abrasive Products Company		W. R. Grace & Company
1956	Acme Abrasive Company	1937	Deckers Creek Sand Company
54	Acme Quality Paints, Inc.	1937	A. P. de Sanno & Son, Inc.
56	Allegheny Ludlum Steel Corp.	1952	Diamond Alkali Company
1940	Allegheny Pittsburgh Coal Co.	1939	Dow Chemical Company
1956	Allied Chemical Corporation	1937	B. F. Drakenfeld & Co., Inc.
1936	Aluminum Company of America	1937	Dravo Corporation
1937	American Abrasive Company	1962	E. I. duPont de Nemours & Co.
1947	American Can Company, Inc.		
1937	American Emery Wheel Works	1963	Edmar Abrasive Company
1944	American Iron and Steel Institute	1943	Electra Refractories & Abrasives Co.
1937	American Metal Climax, Inc.	1945	Eller Plumbingware Division
1937	American Mining Congress		The Murray Corp. of America
1944	American Optical Company	1956	Equitable Life Assurance Society of the United States
1966	American Potash & Chemical Corp.		
1936	American Smelting & Refining Co.	1937	Ethyl Corporation
1936	American Zinc Institute, Inc.	1937	Exolon Company
1937	American Zinc, Lead & Smelting Co.		
1936	Anaconda Company		
1961	Armco Steel Corporation	1949	Ferro Corporation
1938	Association of Casualty & Surety Companies*	1964	FMC Corporation
1968	Atlas Chemical Industries, Inc.	1937	Foots Mineral Company
1936	Automobile Manufacturers Assn.	1947	Ford Motor Company
		1936	Foundry Facing Manufacturers Assn.
		1963	Freeport Division
44	Bell Brothers Company, Inc.		Nalco Chemical Company
37	Bartlett-Collins Company	1943	Fuller Merriam Company
37	Bay State Abrasive Products Co.		
59	Beryllium Corporation	1943	Gardner Machine Company
91	Bleached Board Division West Virginia Pulp and Paper Co.	1958	Geigy-Werke Schweizerhalle A. G.
	Boeing Company	1937	General Abrasive Company, Inc.
10	Brush Beryllium Company	1947	General Electric Company
12	George H. Bullard Company, Inc.	1937	General Grinding Wheel Corp.
16	Bunker Hill Company	1951	General Mills, Inc.
16	Butler County Mushroom Farm, Inc.	1942	General Motors Corporation
		1954	Georgia Kaolin Company
		1937	Glenshaw Glass Company, Inc.
3	Gas Manufacturers Institute, Inc.	1937	Grinding Wheel Institute
7	Carborundum Company	1950	Gulf Oil Corporation
2	Celanese Corp. of America	1964	Gypsum Association
9	Central Silica Company		
7	Chicago Wheel & Manufacturing Co.	1937	Hall China Company
4	Cincinnati Milling Products Division Cincinnati Milling Machine Co.	1937	Hamilton Emery & Corundum Co.
6	Robert F. Coleman, Inc.	1937	Hampden Grinding Wheel Company
1	Colonial Abrasive Products Co.	1961	Hanley Company
3	Comalco Aluminum (Bell Bay) Ltd.	1959	Hazleton Laboratories
1	Commonwealth Sanitation Company	1956	Honeywell Inc.
1	Companhia Siderurgica Nacional	1961	Hugobon Chemical Company
1	Consolidation Coal Company, Inc.	1937	Huntington Alloy Products Division
1	Continental Can Company, Inc.		International Nickel Company
1	Cooper-Bessemer Corporation	1957	Ingersoll-Humphrey Division
1	Corn Products Company		Burg-Warner Corporation
1	Cortland Grinding Wheels Corporation	1947	Inland Steel Company
1	Cleve Petroleum Corporation	1947	International Business Machines

*Multiple Membership (126 member companies)

1940	James & Laughlin Steel Corp.	1964	Pittsburgh Activated Coal Company
1953	Jowett & Rodgers Company	1937	Pittsburgh Plate Glass Company
		1955	Pittsburgh Steel Company
1960	Kaiser Refractories Division	1938	Portland Cement Association
	Kaiser Aluminum & Chemical Corp.	1961	Powdered Products Company
1953	Kennecott Copper Corporation	1937	Process Air Division
1942	Koppers Company, Inc.		American Air Filter Company
		1950	Pullman-Standard
1937	Lava Crucible-Refractories Co.	1957	Reaction Motors Division
1964	Laverack & Haines, Inc.		Thiokol Chemical Corporation
1936	Lead Industries Association	1942	Red Hill Grinding Wheel Corp.
1958	London Transport Board	1945	Republic Steel Corporation
1962	Louisiana Ordnance Plant	1937	H. H. Robertson Company
	Remington Rand Division	1956	Robertson Manufacturing Company
	Sperry Rand Corporation		
1937	Macklin Company	1939	Safety First Supply Company
1950	Manhattan Rubber Division	1937	St. Joseph Lead Company
	Raybestos-Manhattan, Inc.	1950	Sandia Corporation
1940	Maryland Self-Insurers' and	1956	Sauereisen Cements Company
	Employers' Compensation Assn.	1937	Claude B. Schneible Company
1937	J. S. McCormick Company	1946	Scott Aviation Corporation
1964	Merck & Co., Inc.	1937	Simonds Abrasive Company
1937	Mid-West Abrasive Company	1937	Simonds Worden White Company
1936	Mine Safety Appliances Company	1956	Soap and Detergent Association
1957	Minnesota Mining & Manufacturing Co.	1949	Socony Mobil Oil Company, Inc.
1956	Jesse S. Moris & Son, Inc.	1941	Standard Lime and Cement Company
		1964	Standard Oil Company (New Jersey)
1945	National Association of Mutual	1962	Stauffer Chemical Company
	Casualty Companies	1937	Sterling Grinding Wheel Company
1937	National Crushed Stone Assn., Inc.	1963	Stiffler Industrial Lubricants Co.
1947	National Glass Sand Corporation	1953	Sugar Beet Products Company
1937	National Grinding Wheel Co., Inc.		
1937	National Industrial Sand Assn.	1952	Tata Industries Limited
1937	National Lead Company	1946	Taylor, Smith & Taylor Company
1964	National Ready-Mixed Concrete Assn.	1946	Tennessee Copper Company
1945	National Sand and Gravel Assn., Inc.		Division of Tennessee Corp.
1938	National Slag Association	1938	Texas Gulf Sulphur Company
1947	National Steel Corporation	1937	Titan Abrasives Company
1962	Nederland duPont de Nemours, N. Y.	1960	Toma River-Cincinnati Chemical
1964	Newport Division		Corporation
	Hayden Newport Chemical Corp.	1936	Union Carbide Corporation
1963	Osborn Manufacturing Company	1936	United States Pottery Association
1937	Ottawa Silica Company	1936	United States Steel Corporation
1953	Owens-Corning Fiberglass Corp.		
1936	Owens-Illinois Glass Company	1937	Valley Mould and Iron Corporation
		1960	Van Straaten Chemical Company
1954	Pacific Grinding Wheel Manufacturing	1938	Vesuvius Crucible Company
1954	G. H. Packwood Manufacturing Co.		
1937	Penitular Grinding Wheel Division	1937	Waltham Grinding Wheel Company
	Wakefield Corporation	1937	Washington Mills Abrasive Company
1937	Pennsylvania Glass Sand Corp.	1937	Wedron Silica Company
1956	Pennsylvania Manufacturers' Assn.	1962	Western Electric Company, Inc.
	Casualty Insurance Company	1937	Westfield Grinding Wheel Company
1964	Perkin-Elmer Corporation	1961	Westinghouse Brake and Signal
1960	Petroleo Brasileiro S. A.		Company, Limited
1936	Phelps Dodge Corporation	1937	Westinghouse Electric Corporation
1951	Philadelphia Quartz Company	1937	Whitehead Brothers Company
		1937	Willson Products Division
			Ray-O-Vac Company
		1937	Youngstown Sheet and Tube Company

* Multiple Membership (27 member companies)

Company	Year	Company
Refractory-Refractories Company	1952	Red Hill Grinding Wheel Corporation
Clark & Haines, Inc.	1945	Republic Steel Corporation
Steel Association	1937	H. H. Robertson Company
Export Board	1956	Robertson Manufacturing Company
Ordnance Plant		
ington Road Division	1939	Safety First Supply Company
Y Rand Corporation	1937	St. Joseph Lead Company
	1950	Sandia Corporation
Company	1956	Sauerstein Cements Company
an Rubber Division	1937	Claude B. Schneible Company
Stone-Manhattan, Inc.	1946	Scott Aviation Corporation
Manufacturing Chemists' Association	1937	Simonds Abrasive Company
Mining Company	1937	Simonds Worden White Company
Self-Insurers' and	1956	Soap and Detergent Association
Workers' Compensation Assn.	1949	Socony Mobil Oil Company, Inc.
Cornick Company	1941	Standard Lime and Cement Company
Company, Inc.	1964	Standard Oil Company (New Jersey)
St Abrasive Company	1962	Stauffer Chemical Company
Laboratories, Inc.	1937	Sterling Grinding Wheel Company
City Appliances Company	1963	Stiffler Industrial Lubricants Company
Mining & Manufacturing Co.	1965	Sturm, Ruger & Company, Inc.
Moria & Son, Inc.	1953	Sugar Beet Products Company
Coal Association	1952	Tata Services Limited
Crushed Stone Assn., Inc.	1946	Taylor, Smith & Taylor Company
Glass Sand Corporation	1946	Tennessee Copper Company
Grinding Wheel Company, Inc.		Division of Tennessee Corporation
Industrial Sand Assn.	1938	Texas Gulf Sulphur Company
Lead Company	1937	Titan Abrasives Company
Ready Mixed Concrete Assn.	1960	Toms River Chemical Corporation
Portland Gravel Assn., Inc.		
Association	1936	Union Carbide Corporation
Steel Corporation	1936	United States Pottery Association
duPont de Nemours N. V.	1936	United States Steel Corporation
Division		
Chemicals, Inc.	1937	Valley Mould and Iron Corporation
	1960	Van Straaten Chemical Company
Manufacturing Company	1938	Vesuvius Crucible Company
Silica Company		
Spinning Fiberglass Corp.	1937	Waltham Grinding Wheel Company
Illinois Glass Company	1937	Washington Mills Abrasive Company
	1937	Wedron Silica Company
Grinding Wheel Manufacturing	1962	Western Electric Company, Inc.
Arkwood Manufacturing Co.	1937	Westfield Grinding Wheel Company
Grinding Wheel Division	1961	Westinghouse Brake and Signal Co., Ltd.
Id Corporation	1937	Westinghouse Electric Corporation
Glass Sand Corporation	1937	Willson Products Division
Glass Manufacturers' Assn.		Ray-O-Vac Company
Insurance Company		
mer Corporation	1937	Youngstown Sheet and Tube Company
Paraleiro S. A.		
ige Corporation		
Quartz Company		
Activated Carbon Company		
Plate Glass Company		
Steel Company		
ement Association		
Products Company		
Division		
Filter Company		
Id		
otors Division		
Chemical Corporation		
ember		

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

-A-

Abingdon Potteries, Inc.
Abrasive Grain Association
Abrasive Products Company
Acme Abrasive Company
Aervent Fan Company, Inc.
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allied Chemical Corporation
Allis-Chalmers Manufacturing Company
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Can Company
American Emery Wheel Works
American Iron and Steel Institute
American Metal Climax, Inc.
American Mining Congress
American Optical Company
American Smelting & Refining Company
American Zinc Institute, Inc.
American Zinc, Lead & Smelting Company
Anaconda Company
Asbestos Corporation Limited
Asn. of American Railroads
Asn. of American Soap & Glycerine
Producers, Inc.
Asn. Argentina de Empresarios Mineros
Asn. of Casualty & Surety Companies
Atchafalaya, Topeka and Santa Fe
Railway System
Automobile Manufacturers Association

-B-

Ball Brothers Company
Bartlett-Collins Company
Baugh and Sons Company
Bay State Abrasive Products Company
Beryllium Corporation
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bituminous Casualty Corporation
Boeing Airplane Company
Brush Beryllium Company
George H. Bullard Company
Bunker Hill Company

-C-

Can Manufacturers Institute, Inc.
Carborundum Company
Catalytic Combustion Corporation
Celanese Corporation of America
Central Silica Company
Chicago Wheel & Manufacturing Company
Cincinnati Milling Products
Cleveland Graphite Bronze Company
Robert F. Coleman, Inc.
Colonial Abrasive Products Company
Commonwealth Sanitation Company
Companhia Siderurgica Nacional
Consolidation Coal Company, Inc.
Continental Can Company, Inc.
Copperweld Steel Company
Corn Products Company
Cortland Grinding Wheels Corporation

-D-

Deckers Creek Sand Company
Deere & Company
A. P. de Sanno & Son, Inc.
Diamond Alkali Company
Dow Chemical Company
B. F. Drakenfeld & Company, Inc.
Dravo Corporation

-E-

Eagle-Picher Company
Ebasco Services, Inc.
Electric Storage Battery Company
Electro Refractories & Abrasives Corporation
Eljer Company
Equitable Life Assurance Society of the U. S.
Esso Research and Engineering Company
Ethyl Corporation
Exolon Company

-F-

Falk Corporation
Farrell-Cheek Steel Company
Ferro Corporation
Foote Mineral Company
Ford Motor Company
Fostoria Glass Company
Foundry Facings Manufacturers Association
Fuller Merriam Company

* Multiple Membership (147 member companies)

MEMBERS (continued)

—G—

Gardner Machine Company
Gelgy-Werke Schweizerhalle A. G.
General Abrasive Company, Inc.
General Ceramics Corporation
General Electric Company
General Grinding Wheel Corporation
General Mills, Inc.
General Motors Corporation
General Refractories Company
Georgia Kaolin Company
Glenshaw Glass Company, Inc.
W. R. Grace & Company
Grinding Wheel Institute
Gulf Oil Corporation

—H—

Hall China Company
Hamilton Emery & Corundum Company
Hampden Grinding Wheel Company
Hazleton Laboratories
Hercules Powder Company
Homestake Mining Company

—I—

Ingersoll-Humphries
Inland Steel Company
International Business Machines Corp.
International Nickel Company

—J—

Johr's-Manville Corporation

—K—

Keasbey & Mattison Company
Kennecott Copper Corporation
Keystone Abrasive Wheel Company
Kirk & Blum Manufacturing Company
Koppers Company, Inc.

—L—

Homer Laughlin China Company
Lava Crucible-Refractories Company
E. J. Lavino and Company
Lead Industries Association
London Transport Executive

—M—

Mercklin Company
Manhattan Rubber
Maryland Self-Insurers' Association
J. S. McCormick Company
Mexico Refractories
Mid-West Abrasive Company
Mine Safety Appliances Company
Minneapolis-Honeywell Regulator Company
Minnesota Mining & Manufacturing Company
Jesse S. Morie & Son, Inc.

—N—

National Assn. of Mutual Casualty Cos.
National Crushed Stone Association, Inc.
National Glass Sand Corporation
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Lead Company
National Sand & Gravel Association, Inc.
National Slag Association
National Steel Corporation
Neville Chemical Company
New Jersey Pulverizing Company

—O—

Ottawa Silica Company
Owens-Corning Fiberglas Corporation
Owens-Illinois Glass Company

—P—

Pacific Grinding Wheel Manufacturing Co.
G. H. Packwood Manufacturing Company
Pangborn Corporation
Peninsular Grinding Wheel
Penn-Rilton Company
Pennsylvania Glass Sand Corporation
Pennsylvania Manufacturers' Association
Casualty Insurance Company
Phelps Dodge Corporation
Philadelphia Quartz Company
Phillips Petroleum Company
Pittsburgh Coke & Chemical Company
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
Portland Cement Association
Pullman Incorporated Foundation

* Multiple Membership (24 member companies)

MEMBERS (continued)

—R—

Reaction Motors
Red Hill Grinding Wheel Corporation
Republic Steel Corporation
Research-Cottrell, Inc.
H. H. Robertson Company
Robertson Manufacturing Company
Rome Cable Corporation

—S—

Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauerstein Cements Company
Claude B. Schneible Company
Scott Aviation Corporation
Sharon Steel Corporation
Sheffield Steel
Shenango Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
Socony Mobil Oil Company, Inc.
Standard Lime and Cement Company
Standard Oil Company of California
Standard Ultramarine and Color Company
Singer Grinding Wheel Company
Singer Beet Products Company

—T—

Tata Industries Limited
Taylor, Smith & Taylor Company
Tennessee Copper Company
Texas Gulf Sulphur Company
Titan Abrasives Company
Trenton Potteries Company
Trion, Inc.
Tusco Corporation

—U—

Union Carbide Corporation
United States Pottery Association
United States Rubber Company
United States Steel Corporation
Universal-Rundle Corporation

—V—

Valley Mould & Iron Corporation
Vesuvius Crucible Company
Vitrified Wheel Company

—W—

Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
Western Maryland Railway Company
Westfield Grinding Wheel Company
Westinghouse Air Brake Company
Westinghouse Electric Corporation
Wheelabrator Corporation
Whitehead Brothers Company
Willson Products
Wyckoff Steel Company

—Y—

Youngstown Sheet and Tube Company

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Abrasive Grain Association
 Abrasive Products Company
 Acme Abrasive Company
 Air Preheater Company
 Alcolac Chemical Corporation
 Allegheny Ludlum Steel Corporation
 Allegheny Pittsburgh Coal Company
 Allied Chemical Corporation
 Aluminum Company of America
 American Abrasive Company
 American Can Company
 American Engr. Wheel Works
 American Insurance Association
 American Iron and Steel Institute
 American Metal Climax, Inc.
 American Mining Congress
 American Mutual Insurance Alliance
 American Optical Company
 American Potash & Chemical Corp.
 American Smelting & Refining Co.
 American Zinc Company
 American Zinc Institute, Inc.
 Andonite Company
 Arden Steel Corporation
 Armstrong Paint & Varnish Works, Inc.
 Asbestos Textile Institute
 Atlas Chemical Industries, Inc.
 Automobile Manufacturers Association, Inc.
 Frank B. Rowlett Company, Inc.
 Bartlett-Corliss Company
 Bay State Abrasive Products Company
 Berolium Corporation
 Blackstone Machine Company
 Blount Company
 Bluebonnet Abrasive, Inc.
 George B. Bullard Company, Inc.
 Bonney Hill Company
 Brierley's Aluminum Farm, Inc.
 California Manufacturers Institute, Inc.
 Eagle-Corliss Company
 Eclon Corporation
 Central States Company
 Chicago Wheel & Manufacturing Co.
 Chrysler Corporation
 Cincinnati Milling Machine Company
 Cincinnati Milling Products Division
 Columbia Colson, Inc.
 Columbia Products Company
 Columbia (Red Bay) Limited
 Columbia Refractories Division
 Columbia Refractories, Inc.
 Contam Corporation
 Corn Products Company
 Cortland Refractories Corporation
 Creative Industries Corporation
 A. P. deSanto & Son, Inc.
 Diamond Alkali Company
 Dow Chemical Company
 Dravo Corporation
 E. I. du Pont de Nemours & Company
 Eastman Kodak Company
 Edmar Abrasive Company
 Electric Storage Battery Company
 Willson Products Division
 Electro Refractories & Abrasives Corp.
 Equitable Life Assurance Society of the U.S.
 Ethyl Corporation
 Exolon Company
 Ferro Corporation
 FMC Corporation
 Foote Mineral Company
 Ford Motor Company
 Foundry Facing Manufacturers Assn.
 Fuller Merriam Company
 Gardner Machine Company
 Geigy-Werke Schweizerhalle A.G.
 General Abrasive Company, Inc.
 General Electric Company
 General Grinding Wheel Corporation
 General Mills, Inc.
 General Motors Corporation
 Georgia Kaolin Company
 Glenshaw Glass Company, Inc.
 M. J. Gordon Company
 Grinding Wheel Institute
 Gulf Oil Corporation
 Gypsum Association
 Hall China Company
 Hamilton Emery & Corundum Company
 Hampden Grinding Wheel Company
 Hanford Occupational Health Foundation
 Hanson Company
 Hazleton Laboratories
 Hercules, Inc.
 Drakensfeld Division
 Hughson Chemical Company
 Inland Steel Company
 International Business Machines Corp.
 International Nickel Company
 Huntington Alloy Products Division
 Johns-Manville Corporation
 Jones & Laughlin Steel Corporation
 Jewett & Rodgers Company
 Kaiser Aluminum & Chemical Corp.
 Kaiser Refractories Division

* Multiple Membership

Kennecott Copper Corporation
Keystone Brass Works, Inc.
Koppers Company, Inc.

Laundry & Cleaners Allied Trades Assn.
Laverack & Haines, Inc.
Lead Industries Association
London Transport Board

Macklin Company
Manufacturing Chemists Assn., Inc.
Marccona Mining Company
Maryland Self-Ins. & Empl. Comp. Assn.
J. S. McCormick Company
Merck and Company, Inc.
Metropolitan Life Insurance Company
Mid-West Abrasive Company
Miles Laboratories, Inc.
Mine Safety Appliances Company
Minnesota Mining & Manufacturing Co.
Mobil Oil Corporation
Jesse S. Morie & Son, Inc.

Nalco Chemical Company
Freeport Division
National Coal Association
National Crushed Stone Association, Inc.
National Glass Sand Corporation
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Insulation Manufacturers Assn.
National Lead Company
National Sand & Gravel Association, Inc.
National Slag Association
Nederland du Pont de Nemours N. Y.

Osborn Manufacturing Company
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois Glass Company

Pacific Grinding Wheel Manufacturing Co.
G. H. Packwood Manufacturing Company
Pennsylvania Glass Sand Corporation
Pennsylvania Mfrs' Assn. Inc. Co.
Perkin-Elmer Corporation
Petroleo Brasileiro S.A.
Philadelphia Quartz Company
Pittsburgh Activated Carbon Company
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
H. K. Porter Company, Inc.
Simonds Worden White Works
Portland Cement Association

Raybestos-Manhattan, Inc.
Manhattan Rubber Division
Red Hill Grinding Wheel Corporation
Republic Steel Corporation
H. H. Robertson Company
Robertson Manufacturing Company

Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauereisen Cements Company
Simonds Abrasive Company
Slackair-Koppers Company
Soap and Detergent Association
Sperry Rand Corporation
Louisiana Army Ammunition Plant
Standard Oil Company (New Jersey)
Stauffer Chemical Company
Sterling Grinding Wheel Company
Sturm, Ruger & Company, Inc.
Sugar Beet Products Company

Tata Services Limited
Tennessee Copper Company
Texas Gulf Sulphur Company
Thiokol Chemical Corporation
Reaction Motors Division
Titan Abrasives Company
Toms River Chemical Corporation

Union Carbide Corporation
United States Potters Association
United States Steel Corporation

Valley Mould and Iron Corporation
Van Stratten Chemical Company
Vasovius Crucible Company

Wakefield Corporation
Peninsular Grinding Wheel Division
Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
Western Electric Company, Inc.
Westfield Grinding Wheel Company
Westinghouse Brake and Signal Company, Ltd.
Westinghouse Electric Corporation
West Virginia Pulp and Paper Company
Bleached Board Division

I H F MEMBERS

- | | |
|--|---|
| Abrasive Grain Association | Consolidation Coal Company, Inc. |
| Abrasive Products Company | Continental Can Company, Inc. |
| Acme Abrasive Company | Corn Products Company |
| • Air Preheater Company | Cortland Grinding Wheels Corporation |
| Alcolac Chemical Corporation | Creole Petroleum Corporation |
| Allegheny Ludlum Steel Corporation | |
| Allegheny Pittsburgh Coal Company | A. P. deSanno & Son, Inc. |
| Allied Chemical Corporation | Diamond Alkali Company |
| Aluminum Company of America | Dow Chemical Company |
| American Abrasive Company | Dravo Corporation |
| American Can Company | E. I. du Pont de Nemours & Company |
| American Emery Wheel Works | |
| • American Insurance Association | Eastman Kodak Company |
| American Iron and Steel Institute | Edmar Abrasive Company |
| American Metal Climax, Inc. | Electric Storage Battery Company |
| American Mining Congress | Willson Products Division |
| • American Mutual Insurance Alliance | Electro Refractories & Abrasives Corp. |
| American Optical Company | Equitable Life Assurance Society of the U. S. |
| American Petroleum Institute | Ethyl Corporation |
| American Potash & Chemical Corp. | Exelon Company |
| American Smelting & Refining Co. | |
| American Welding & Manufacturing Co. | Ferro Corporation |
| American Zinc Company | FMC Corporation |
| American Zinc Institute, Inc. | FMR Corporation |
| Anaxonda Company | Foot Mineral Company |
| Armco Steel Corporation | Ford Motor Company |
| Armstrong Paints & Varnish Works, Inc. | Foundry Facing Manufacturers Group |
| Asbestos Textile Institute | |
| Atlas Chemical Industries, Inc. | Gardner Machine Company |
| Automobile Manufacturers Association, Inc. | Geigy-Werke Schwestern A. G. |
| Aveo Bay State Abrasives Division | General Abrasive Company, Inc. |
| | General Electric Company |
| Frank Bancroft Company, Inc. | General Grinding Wheel Corporation |
| Beryllium Corporation | General Mills, Inc. |
| Blanchard Machine Company | General Motors Corporation |
| Boeing Company | Georgia Kaolin Company |
| Brush Beryllium Company | Glenshaw Glass Company, Inc. |
| Buckeye Abrasive, Inc. | Goodyear Tire & Rubber Company |
| George H. Bullard Company | Grinding Wheel Institute |
| Bunker Hill Company | Gulf Oil Corporation |
| Butler County Mushroom Farm, Inc. | Gypsum Association |
| | |
| Calgon Corporation | Hall China Company |
| Packwood Manufacturing Co. | Hamilton Emery & Corundum Company |
| Pittsburgh Activated Carbon Co. | Hampden Grinding Wheel Company |
| Can Manufacturers Institute, Inc. | Hanford Occupational Health Foundation |
| Carborundum Company | Hanson Company |
| Celanese Corporation | Hazleton Laboratories |
| Central Silica Company | Hercules, Inc. |
| Chayer Dental Instrument Corp. | Drakenfeld Division |
| Chicago Wheel & Manufacturing Co. | Hughson Chemical Company |
| Chrysler Corporation | |
| Cincinnati Milling Machine Co. | |
| Cincinnati Milling Products Division | Inland Steel Company |
| Robert F. Coleman, Inc. | International Business Machines Corp. |
| Colonial Abrasive Products Co. | International Nickel Company, Inc. |
| Cumaco Aluminum (Bell Bay) Limited | Huntington Alloy Products Division |
| Companhia Siderurgica Nacional | ITT Abrasive Products Company |

• Multiple Membership

Johns-Manville Corporation
Jones & Laughlin Steel Corporation
Jowitt & Rodgers Company

Kasco Abrasives, Inc.
Kennebec Copper Corporation
Keystone Brass Works, Inc.
Koppers Company, Inc.

Laundry & Cleaners Allied Trades Assn.
Leverack & Haines, Inc.
Lead Industries Association
London Transport Board

Macklin Abrasives Company
Manufacturing Chemists Assn., Inc.
Marcona Mining Company
Maryland Self-Ins. & Empl. Comp. Assn.
J. S. McCormick Company
Merck and Company, Inc.
Metropolitan Life Insurance Company
Mid-West Abrasive Company
Miles Laboratories, Inc.
Mine Safety Appliances Company
Mobil Oil Corporation
Jesse S. Morie & Son, Inc.

Naico Chemical Company
Freeport Division
National Coal Association
National Crushed Stone Association, Inc.
National Glass Sand Corporation
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Insulation Manufacturers Assn.
National Lead Company
National Sand & Gravel Association, Inc.
National Slag Association
Nederland du Pont de Nemours N.V.
Norton Company

Osborn Manufacturing Company
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois, Inc.

Pacific Grinding Wheel Manufacturing Co.
Pennsylvania Glass Sand Corporation
Pennsylvania Mfrs. Assn. Inc. Co.
Perkin-Elmer Corporation
Petrobras/RPBC
Portland Cement Association
PPG Industries
Precision Grinding Wheel Co., Inc.

Raybestos-Manhattan, Inc.
Manhattan Rubber Division
Red Hill Grinding Wheel Corporation
Republic Steel Corporation
H. H. Robertson Company

Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauereisen Cements Company
Sinclair-Koppers Company
Soap and Detergent Association
Sperry Rand Corporation
Louisiana Army Ammunition Plant
Standard Oil Company (Indiana)
Standard Oil Company (New Jersey)
Stauffer Chemical Company
Sturm, Ruger & Company, Inc.
Sugar Beet Products Company

Tata Services Limited
Tennessee Copper Company
Texas Gulf Sulphur Company
Thiokol Chemical Corporation
Reaction Motors Division
Toma River Chemical Corporation

Union Carbide Corporation
United States Potters Association
United States Steel Corporation

Valley Mould and Iron Corporation
Van Straaten Chemical Company
Vesuvius Crucible Company

Wallace-Murray Corporation
Simonds Abrasive Division
Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
Western Electric Company, Inc.
Westfield Grinding Wheel Company
Westinghouse Air Brake Division
Westinghouse Air Brake Company
Westinghouse Brake and Signal Company, Ltd
Westinghouse Electric Corporation
West Virginia Pulp and Paper Company
Bleached Board Division

MEMBERS — 1968

Date Joined	Company	Date Joined	Company
1937	Abrasive Grain Association	1953	Continental Can Company, Inc.
1937	Abrasive Products Company	1968	Continental Insurance Company
1956	Acme Abrasive Company	1955	Corn Products Company
1965	The Air Preheater Company	1937	Cortland Grinding Wheels Corp.
1936	Allegheny Ludlum Steel Corp.	1962	Creole Petroleum Corporation
1940	Allegheny Pittsburgh Coal Co.		
1936	Aluminum Company of America	1937	A. P. deSanno & Son, Inc.
1969	*Aluminum Co. of Canada (Alcan)	1952	Diamond Shamrock Corporation
1937	American Abrasive Company	1968	DL Skin Care Products, Inc.
1947	American Can Company, Inc.	1939	Dow Chemical Company
1937	American Emery Wheel Works	1937	Dravo Corporation
1938	*American Insurance Association	1962	E. I. du Pont de Nemours & Co.
1944	American Iron and Steel Institute		
1957	American Metal Climax, Inc.	1966	Eastman Kodak Company
1937	American Mining Congress	1963	Edmar Abrasive Company
1945	*American Mutual Insurance Alliance	1943	Electro Refractories & Abrasives Corp.
1944	American Optical Company	1956	Equitable Life Assurance Society of the United States
1967	American Petroleum Institute		
1964	American Polish & Chemical Corp.	1937	Ethyl Corporation
1936	American Smelting & Refining Co.	1937	Exolon Company
1967	American Welding & Manufacturing Co.		
1937	American Zinc Company	1949	Ferro Corporation
1936	Anaconda Company	1964	FMC Corporation
1961	Armco Steel Corporation	1967	FMR Corporation
1965	Armstrong Paint & Varnish Works, Inc.	1937	Foots Mineral Company
1966	Asbestos Textile Institute	1947	Ford Motor Company
1947	Atlas Chemical Industries, Inc.	1936	Foundry Facing Manufacturers Assn.
1968	Auto-Flo Company	1969	**Frantz, McConnell & Seymour
1936	Automobile Manufacturers Assn.		
1937	Avco Bay State Abrasives Division	1943	Gardner Machine Company
		1958	Geigy-Werke Schweizerhalle A. G.
1965	Frank Bancroft Company, Inc.	1937	General Abrasive Company, Inc.
1955	Beryllium Corporation	1947	General Electric Company
1968	Bituminous Coal Operators' Assn.	1937	General Grinding Wheel Corp.
1967	Blanchard Machine Company	1951	General Mills, Inc.
1956	The Boeing Company	1942	General Motors Corporation
1944	Brush Beryllium Company	1954	Georgia Kaolin Company
1967	Buckeye Abrasive, Inc.	1968	Glass Container Manufacturers Institute, Inc.
1952	George H. Bullard Company, Inc.		
1936	Bunker Hill Company	1937	Glenshaw Glass Company, Inc.
1961	Butler County Mushroom Farm, Inc.	1967	Goodyear Tire & Rubber Company
		1937	Grinding Wheel Institute
1953	Can Manufacturers Institute, Inc.	1950	Gulf Oil Corporation
1937	Carborundum Company		
1952	Celanese Corporation	1936	Hall China Company
1937	Central Silica Company	1937	Hamilton Emery & Corundum Company
1968	Certain-teed Products Corporation Gustin-Bacon Division	1937	Hampden Grinding Wheel Company
1967	Chayes Dental Instrument Company	1966	Hanford Occupational Health Foundation
1937	Chicago Wheel & Manufacturing Co.	1967	Hanson Company
1966	Chrysler Corporation	1959	Hazleton Laboratories
1954	Cincinnati Milling Machine Co. Cincinnati Milling Products Div.	1937	Hercules, Inc. Drakenfield Division
1944	Robert F. Coleman, Inc.	1947	Inland Steel Company
1951	Colonial Abrasive Products Co.	1947	International Business Machines Corp.
1963	Cornalco Aluminum (Bell Bay) Ltd.	1966	International Nickel Company, Inc.
1958	Companhia Siderurgica Nacional		Huntington Alloy Products Division
1936	Consolidation Coal Company, Inc.		

*Multiple membership

**January 1, 1969 member

Date Joined	Company	Date Joined	Company
1967	ITT Abrasive Products Co.	1967	Precision Grinding Wheel Company, Inc.
1936	Johns-Manville Corporation	1968	Raybestos-Manhattan, Inc.
1936	Jones & Laughlin Steel Corp.		Manhattan Rubber Division
1963	Jowitt & Rodgers Company	1952	Red Hill Grinding Wheel Corporation
		1937	H. H. Robertson Company
1967	Kasco Abrasives, Inc.		
1953	Kennecott Copper Corporation	1937	St. Joseph Lead Company
1965	Keystone Brass Works, Inc.	1956	Sauerisen Cements Company
1962	Koppers Company, Inc.	1966	Sinclair-Koppers Company
		1956	Soap and Detergent Association
1968	Homer Laughlin China Company	1962	Sperry Rand Corporation
1966	Laundry and Cleaners Allied Trades Association		Louisiana Army Ammunition Plant
1964	Leverack & Haines, Inc.	1968	Sprayed Mineral Fiber Manufacturers Association, Inc.
1936	Lead Industries Association	1967	Standard Oil Company (Indiana)
1958	London Transport Board	1964	Standard Oil Company (New Jersey)
1961	Lord Corporation	1965	Sturm, Ruger & Company, Inc.
	Hughes Chemical Co. Div.	1953	Sugar Beet Products Company
		1968	Systemad Corporation
1937	J. S. McCormick Company		
1937	Macklin Company	1945	Tata Services Limited
1966	Manufacturing Chemists' Assn.	1946	Tennessee Copper Company
1966	Marcona Mining Company		Div. of Tennessee Corporation
1949	Metropolitan Life Insurance Co.	1938	Texas Gulf Sulphur Company
1937	Mid-West Abrasive Company	1960	Toms River Chemical Corporation
1968	Midwestern Coating Corporation		
1936	Mine Safety Appliances Company	1936	Union Carbide Corporation
1968	Mobay Chemical Company	1936	United States Potters Association
1966	Mobil Oil Corporation	1936	United States Steel Corporation
1956	Jesse S. Morie & Son, Inc.		
		1937	Valley Mould and Iron Corporation
1963	Nalco Chemical Company	1960	Van Straaten Chemical Company
	Freeport Division	1938	Vesuvius Crucible Company
1966	National Coal Association		
1937	National Crushed Stone Assn., Inc.	1967	Wallace-Murray Corporation
1947	National Glass Sand Corporation		Simonds Abrasive Division
1937	National Grinding Wheel Co., Inc.	1937	Waltham Grinding Wheel Company
1937	National Industrial Sand Assn.	1937	Washington Mills Abrasive Company
1966	National Insulation Manufacturers Association	1937	Wearon Silica Company
		1962	Western Electric Company, Inc.
1937	National Lead Company	1937	Westfield Grinding Wheel Company
1945	National Sand and Gravel Assn., Inc.	1967	Westinghouse Air Brake Company
1938	National Slag Association		Westinghouse Air Brake Division
1962	Nederland duPont de Nemours N. V.	1961	Westinghouse Brake and Signal Co., Ltd.
1967	Norton Company	1937	Westinghouse Electric Corporation
	Grinding Wheel Division	1968	Arthur C. Withrow Company
1963	Oeborn Manufacturing Company	1936	Zinc Institute, Inc.
1953	Owens-Corning Fiberglass Corp.		
1936	Owens-Illinois, Inc.		
1954	Pacific Grinding Wheel Mfg. Co.		
1937	Pennsylvania Glass Sand Corporation		
1956	Pennsylvania Manufacturers' Assn. Insurance Company		
1960	Petrobras/RPBC		
1964	Pittsburgh Activated Carbon Co. Div. of Calgon Corporation		
1938	Portland Cement Association		
1937	PPG Industries		

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Date Joined	Company
1937	Abrasive Grain Association
1970	Abrasive Materials Division Norton Company
1937	Abrasive Products Company
1970	Abrasives Division Bendix Corporation
1966	Acme Abrasive Company
1934	Allegheny Ludlum Steel Corp.
1964	Allied Chemical Corporation
1970	Allison Campbell Division American Chain & Cable Co., Inc.
1936	Aluminum Company of America
1969	Aluminum Co. of Canada (Alcan)
1947	American Can Company, Inc.
1937	American Emery Wheel Works
1938	American Insurance Association
1944	American Iron and Steel Institute
1967	American Metal Climax, Inc.
1937	American Mining Congress
1946	American Mutual Insurance Alliance
1944	American Optical Company
1967	American Petroleum Institute
1964	American Potash & Chemical Corp.
1936	American Smelting & Refining Co.
1968	American Standard, Inc.
1969	American Textile Mfrs. Institute
1936	Anaconda Company
1961	Armco Steel Corporation
1966	Armstrong Chemcon, Inc.
1969	Asbestos Cement Products Assn.
1966	Asbestos Textile Institute
1970	Atlantic Abrasive Corporation
1947	Atlas Chemical Industries, Inc.
1966	Auto-Flo Company Division of Masco Corporation
1936	Automobile Manufacturers Assn.
1937	Avco Bay State Abrasives Division
1970	The Bahnsen Company
1966	Frank Bancroft Company, Inc.
1966	Bituminous Coal Operators' Assn.
1966	The Boeing Company
1970	Borden, Inc.
1970	Brockway Glass Company, Inc.
1944	Brush Beryllium Company
1967	Buckeye Abrasive, Inc.
1962	George H. Bullard Company, Inc.
1961	Butler County Mushroom Farm, Inc.
1963	Can Manufacturers Institute, Inc.
1937	Carborundum Company
1932	Celanese Corporation
1937	Central Silica Company
1967	Chaves Abrasives Division Chaves Dental Instrument Co.
1937	Chicago Wheel & Manufacturing Co.
1954	Cincinnati Milling Products Div. Cincinnati Milling Machine Co.
1944	Robert F. Coleman, Inc.
1961	Colonial Abrasive Products Co.
1960	Comasco Aluminum (Bell Bay) Ltd.
1966	Compennia Siderurgica Nacional
1936	Consolidation Coal Company, Inc.
1953	Continental Can Company, Inc.
1966	Continental Insurance Companies
1937	Cortland Division American Abrasive Corporation
1955	CPC International
1962	Cradle Petroleum Corporation
1937	A. P. deSanno & Son, Inc.
1952	Diamond Shamrock Corporation
1966	DL Skin Care Products, Inc.
1939	Dow Chemical Corporation
1937	Dresser Division Hercules, Inc.

*Multiple membership

Date Joined	Company
1937	Dravo Corporation
1962	E. I. du Pont de Nemours & Co.
1966	Eastman Kodak Company
1963	Edmar Abrasive Company
1943	Electro Refractories & Abrasives Division of Ferro Corporation
1969	Environmental Sciences, Inc.
1956	Equitable Life Assurance Society of the United States
1937	Ethyl Corporation
1937	Exolon Company
1949	Ferro Corporation
1964	FMC Corporation
1967	FMR Corporation
1937	Foots Mineral Company
1947	Ford Motor Company
1969	Fortoria Glass Company
1936	Foundry Supply Manufacturers Group
1969	Frantz, McConnell & Seymour
1963	Freeport Division Nalco Chemical Company
1943	Gardner Machine Company
1958	Geigy-Werke Schweizerhalle A. G.
1937	General Abrasive Company
1968	General Asbestos & Rubber Div. Raybestos-Mannhattan, Inc.
1970	General Dynamics Corporation
1947	General Electric Company
1937	General Grinding Wheel Corp.
1951	General Mills, Inc.
1942	General Motors Corporation
1954	Georgia Kaolin Company
1968	Glass Containers Mfrs. Institute, Inc.
1937	Glenaw Glass Company, Inc.
1967	Goodyear Tire & Rubber Company
1967	Grinding Wheel Division Norton Company
1937	Grinding Wheel Institute
1950	Gulf Oil Corporation
1968	Gustin-Bacon Division Certain-teed Products Corp.
1936	Hail China Company
1937	Hamilton Division American Abrasive Corporation
1968	Hamford Environmental Health Fdn.
1967	Hanson Company
1956	Hazleton Laboratories
1961	Hughson Chemical Company Division of Lord Corporation
1937	Huntington Alloy Products Division International Nickel Co., Inc.
1947	Inland Steel Company
1947	International Business Machines Corp.
1967	ITT Abrasive Products Company
1936	Johns-Manville Corporation
1939	Jones & Laughlin Steel Corp.
1963	Jowett & Rodgers Company
1967	Kasco Abrasives, Inc.
1955	Kaweck Berylico Industries, Inc.
1946	Kennecott Copper Corporation
1942	Koppers Company, Inc.
1970	Laclede Steel Company
1966	Homer Laughlin China Company
1964	Laverack & Haines, Inc.
1934	Lead Industries Association
1953	London Transport Board
1962	Louisiana Army Ammunition Plant Sperry Rand Corporation
1937	J. S. McCormick Company
1946	Mannhattan Rubber Division Raybestos-Mannhattan, Inc.
1968	Manufacturing Chemists Assn., Inc.
1966	Marcona Mining Company
1949	Metropolitan Life Insurance Co.

Date Joined	Company
1968	Midwestern Coating Corporation
1936	Mine Safety Appliances Company
1949	Mobil Oil Corporation
1956	Jesse S. Morie & Son, Inc.
1966	National Coal Association
1937	National Crushed Stone Assn., Inc.
1969	National Forge Company
1947	National Glass Sand Corporation
1937	National Grinding Wheel Division Federal-Mogul Corporation
1937	National Industrial Sand Assn.
1966	National Insulation Mfrs. Assn.
1937	National Lead Company
1945	National Sand & Gravel Assn., Inc.
1938	National Slag Association
1962	Nederland du Pont de Nemours N. V.
1963	Osborn Manufacturing Company
1953	Owens-Corning Fiberglass Corp.
1936	Owens-Illinois, Inc.
1954	Pacific Grinding Wheel Company, Inc.
1937	Pennsylvania Glass Sand Corp.
1956	Pennsylvania Manufacturers' Assn. Insurance Company
1960	Petrobras/RPBC
1964	Pittsburgh Activated Carbon Div. Calgon Corporation
1970	Pneumafil Corporation
1938	Portland Cement Association
1937	PPG Industries
1967	Precision Grinding Wheel Co., Inc.
1952	Red Hill Grinding Wheel Corp.
1970	Rex-Cut Products Company Division of Cleveland Corp.
1937	H. H. Robertson Company
1969	Rome Division Revere Copper and Brass, Inc.
1937	St. Joseph Lead Company
1956	Sauerssen Cements Company
1967	Simonds Abrasive Division Wallace-Murray Corporation
1966	Sinclair-Koppers Company
1956	Soap and Detergent Association
1968	Sprayed Mineral Fiber Mfrs. Assn., Inc.
1964	Standard Oil Company (New Jersey)
1962	Stauffer Chemical Company
1965	Sturm, Ruger & Company, Inc.
1953	Sugar Beet Products Company
1968	Systemed Corporation
1945	Tata Services Limited
1969	Tenneco, Inc.
1946	Tennessee Copper Company Div. of Tennessee Corporation
1938	Texas Gulf Sulphur Company
1960	Toms River Chemical Corporation
1970	Travelers Insurance Companies
1938	Union Carbide Corporation
1968	United States Asbestos Division Raybestos-Mannhattan, Inc.
1936	United States Potters Association
1936	United States Steel Corporation
1960	Van Stratten Chemical Company
1938	Vesuvius Crucible Company
1937	Waltham/Hampden Grinding Wheel Co.
1937	Washington Mills Abrasive Co.
1937	Wedron Silica Company
1962	Western Electric Company, Inc.
1937	Westfield Grinding Wheel Co.
1937	Westinghouse Electric Corporation
1968	Arthur C. Withrow Company
1936	Zinc Institute, Inc.

MEMBERS

Date Joined	Company	Date Joined	Company	Date Joined	Company
1937	*Abrasive Grain Association	1937	A. P. deSanno & Son, Inc.	1970	Medical Supply Company
1970	Abrasive Materials Division Norton Company	1952	Diamond Shamrock Corporation	1970	Metal Carbides Corporation
1937	Abrasive Products Company	1939	Dow Chemical Corporation	1949	Metropolitan Life Insurance Group
1970	Abrasive Division Bendix Corporation	1937	Drakefield Division, Hercules, Inc.	1937	Michigan Abrasive Company Grinding Wheel Division
1936	Acme Abrasive Company	1937	Dravo Corporation	1968	Midwestern Coating Corporation
1971	Adamas Carbide Corporation	1962	E. I. du Pont de Nemours & Co.	1946	Mine Safety Appliances Company
1936	Allegheny Ludlum Steel Corporation	1966	Eastman Kodak Company	1949	Mobil Oil Corporation
1936	Allied Chemical Corporation	1963	Edmar Abrasive Company	1936	Jesse S. Moore & Son, Inc.
1970	Allison Campbell Division American Chain & Cable Co., Inc.	1943	Electro Refractories & Abrasives Division of Ferro Corporation	1971	Multi Metals, Inc.
1936	Aluminum Company of America	1969	Environmental Sciences, Inc.	1971	National Association of Manufacturers
1969	Aluminum Company of Canada, Ltd.	1936	Equirable Life Assurance Society of the United States	1966	National Coal Association
1971	American Apparel Manufacturers Assn.	1937	Ethyl Corporation	1937	National Grinding Wheel Division Federal-Mogul Corporation
1947	American Can Company	1937	Exolon Company	1937	National Industrial Sand Association
1938	*American Insurance Association	1967	FMR Corporation	1966	National Insulation Mfrs. Association
1944	American Iron and Steel Institute	1949	Ferro Corporation	1937	National Lead Company
1957	American Metal Climax, Inc.	1971	Firth Sterling, A Teledyne Company	1938	National Slag Association
1937	American Mining Congress	1937	Foots Mineral Company	1962	Nederland du Pont de Nemours & Co.
1943	*American Mutual Insurance Alliance	1947	Ford Motor Company	1971	Newcomer Products, Inc.
1944	American Optical Corporation	1936	Foundry Supply Manufacturers' Group Preprint Division	1964	Osborn Manufacturing Company
1967	American Petroleum Institute	1963	Nalco Chemical Company	1933	Owens-Corning Fiberglass Corporation
1946	American Smelting & Refining Company	1943	Gardner Machine Company	1936	Owens-Illinois, Inc.
1969	American Standard, Inc.	1937	General Abrasive Company	1937	PPG Industries, Inc.
1969	*American Textile Mfrs. Institute	1968	General Asbestos & Rubber Division Raybestos-Manhattan, Inc.	1951	Pacific Grinding Wheel Company, Inc.
1936	Anacunda Company	1970	General Cigar Company	1937	Pennsylvania Glass Sand Corporation
1970	Anso American Corp. of South Africa, Ltd.	1970	Gen. J. Dynamics Corporation	1970	Pneumant Corporation
1970	Arano Insurance Company	1947	General Electric Company	1938	Portland Cement Association
1963	Armstrong Chemcon, Inc.	1937	General Electric Company	1970	Potters Brothers, Inc.
1969	Asbestos Cement Products Association	1937	General Grinding Wheel Corporation	1967	Precision Grinding Wheel Co., Inc.
1970	Asbestoray Corporation	1931	General Mills, Inc.	1952	Red Hill Grinding Wheel Corporation
1966	Asbestos Textile Institute	1942	General Motors Corporation	1970	Res-Cut Products Company Division of Cleopak Corporation
1970	Atlantic Abrasive Corporation	1934	Georgia Kaolin Company	1937	H. H. Robertson Company
1947	Atlas Chemical Industries, Inc.	1968	Glass Containers Mfrs. Institute, Inc.	1937	St. Joe Minerals Corporation
1968	Auto-Flo Company	1937	Glenshaw Glass Company, Inc.	1971	Sandvik Steel, Inc.
	Division of Masco Corporation	1967	Goodyear Tire & Rubber Company	1936	Sauerstein Cements Company
1946	Automobile Manufacturers Association	1967	Grinding Wheel Division Norton Company	1971	Selenium-Tellurium Development Ass.
1947	Aven Bay State Abrasives Division	1937	*Grinding Wheel Institute	1967	Simonds Abrasive Division Wallace-Murray Corporation
1970	The Bahson Company	1950	Gulf Oil Corporation	1966	Sinclair-Koppers Company
1963	Frank Bancroft Company, Inc.	1968	Gustin Bacon Division Certain-Red Products Corporation	1936	Soap and Detergent Association
1936	The Boring Company	1936	Hall China Company	1968	Sprayed Mineral Fiber Mfrs. Assn., Inc.
1970	Borjoc, Inc.	1937	Haxson Division American Abrasive Corporation	1964	Standard Oil Company (New Jersey)
1971	Bright Bay Industrial Division Weldon Roberts Rubber Company	1937	Haxson Division American Abrasive Corporation	1962	Scauder Chemical Company
1933	Brush Beryllium Company	1966	Hanford Environmental Health Fdn.	1963	Sturm, Rueger & Company, Inc.
1967	Buckeye Abrasive, Inc.	1967	Hanson Company	1933	Sugar Beet Products Company
1952	George H. Bullard Company, Inc.	1937	Huntington Alloy Products Division International Nickel Company, Inc.	1968	Systemed Corporation
1961	Butler County Mushroom Farm, Inc.	1971	Hydro Carbide Corporation	1959	TRW Hazleton Laboratories
1953	CP International	1947	Inland Steel Company	1944	Tata Services Limited
1933	Can Manufacturers Institute, Inc.	1947	International Business Machines Corp.	1969	Tenneco, Inc.
1971	Carbide Division, Hammer Corp.	1970	International Lead Zinc Research Org.	1938	Texas Gulf Sulphur Company
1937	Carborundum Company	1967	ITT Abrasive Products Company	1960	Toms River Chemical Corporation
1971	Carmet Company	1936	Johns-Manville Corporation	1970	Travelers Insurance Companies
1952	Celanese Corporation	1939	Jones & Laughlin Steel Corporation	1971	Tungsten Alloy Mfrs. Co., Inc.
1971	*Cemented Carbide Producers Assn.	1963	Jowett & Rodgers Company	1936	Union Carbide Corporation
1937	Central Silica Company	1967	Kasco Abrasives Coleman Systems Company	1970	United States Mineral Products Co.
1967	Chaves Abrasives Division Chaves Dental Instrument Co.	1953	Kawachi Beryllio Industries, Inc.	1936	United States Potters Association
1937	Chascon Wheel & Manufacturing Co.	1946	Kennecott Copper Corporation	1936	United States Steel Corporation
1936	Ciba-Geny AG	1942	Koppers Company, Inc.	1960	Van Straten Chemical Company
1934	Cincinnati Milacron, Inc. Products Division	1970	Laclede Steel Company	1938	Vesuvius Crucible Company
1934	Robert F. Coleman, Inc.	1968	Homer Laughlin China Company	1971	VR/Weym Company
1951	Colonial Abrasive Products Company	1964	Lavack & Haines, Inc.	1937	Walmer Corporation
1938	Companhia Siderurgica Nacional	1936	Lead Industries Association, Inc.	1937	Waltham/Hampden Grinding Wheel Co.
1946	Continuation Coal Company, Inc.	1938	London Transport Executive	1937	Washington Mills Abrasive Company
1953	Continental Can Company, Inc.	1962	Louisiana Army Ammunition Plant Sperry Rand Corporation	1937	Wedron Silica Company
1968	Continental Insurance Companies	1937	J. S. McCormick Company	1971	Wendt-Sonit/Unimet, United Greenfield Div. of TRW, Inc.
1946	Coppernill Operations Div. of Cities Service Company	1946	Manhattan Rubber Division Raybestos-Manhattan, Inc.	1962	Western Electric Company, Inc.
1937	Cortland Division American Abrasive Corporation	1966	Manufacturing Chemists Association	1937	Westfield Grinding Wheel Company
1962	Crescent Petroleum Corporation	1966	Marcona Mining Company	1971	Westinghouse Electric Corporation

* Membership in Association

† Group membership

NEW MEMBERS -- 1971

American Apparel Manufacturer's Association

American Foundrymen's Society

American Steel Foundries

Argonaut Insurance Company

Asbestospray Corporation

Cemented Carbide Products Association

Chemico Metals Corp.

General Cigar Company

International Lead Zinc Research Organization

National Association of Manufacturers

Selenium-Tellurium Development Association, Inc.

Teledyne Brown Engineering

-- from Minutes of the Board of Trustees Meetings

March 9 & October 11, 1971

NEW MEMBERS -- 1972

Buhl Optical Company ,
Chicopee Manufacturing Company
Columbia Gas System Service Corporation
Consolidated Natural Gas Service Co.,
and Peoples Natural Gas Company
Industrial Bio-Test Laboratories, Inc.
Lee-Norse Company
Miles Laboratories
Organization Resources Counselors, Inc.
Safety First Industries, Inc.
Shell Oil Company
Tri-State Engineering Company

-- from Minutes of the Board of Trustees Meetings

February 8, May 9, and October 9, 1972

III MEMBERS

Date Joined	Company	Date Joined	Company
1937	*Abrasive Grain Association	1952	Celanese Corporation
1936	Allegheny Ludlum Industries, Inc.	1971	*Cemented Carbide Producers Association
1956	Allied Chemical Corporation	1968	Certain-Teed Saint Gobain Insulation Corp.
1936	Aluminum Company of America	1972	Chicopee Manufacturing Company
1969	Aluminum Company of Canada, Ltd.	1958	Ciba-Geigy AG
1947	American Can Company	1972	Columbia Gas System Service Corporation
1971	American Foundrymen's Society	1958	Companhia Siderurgica Nacional
1938	*American Insurance Association	1973	Consolidated Edison Company of N.Y., Inc.
1944	American Iron and Steel Institute	1972	Consolidated Natural Gas Service Company
1957	American Metal Climax, Inc.	1936	Consolidation Coal Company, Inc.
1937	American Mining Congress	1953	Continental Can Company, Inc.
1945	*American Mutual Insurance Alliance	1962	Creole Petroleum Corporation
1944	American Optical Corporation		
1967	American Petroleum Institute	1952	Diamond Shamrock Corporation
1936	American Smelting & Refining Company	1973	Dow Chemical U.S.A.
1969	American Textile Mfrs. Institute, Inc.	1937	Drakenfeld Division Hercules, Inc.
1970	Argonaut Insurance Company	1937	Dravo Corporation, Manufacturing Group
1973	Asbestospry Corporation		
1970	The Bahnsen Company	1936	E. I. du Pont de Nemours & Company
1970	Brockway Glass Company, Inc.	1966	Eastman Kodak Company
1944	Brush Wellman, Inc.	1973	Minerals & Chemical Division Engelhard Minerals and Chemical Corp.
1972	Buhl Optical Company	1973	Environmental Shields Services, Inc.
1961	Butler County Mushroom Farm, Inc.	1956	Equitable Life Assurance Society of the United States
1955	CPC International, Inc.	1964	Exxon Corporation
1953	Can Manufacturers Institute, Inc.		

*Multiple Membership

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Date Joined	Company	Date Joined	Company
1973	Falcon Foundry Company	1955	Kawecki Berylco Industries, Inc.
1949	Ferro Corporation	1973	Keystone Metal Company
1947	Ford Motor Company	1942	Koppers Company, Inc.
1936	Foundry Supply Manufacturers Group		
1968	General Asbestos & Rubber Division, Raybestos-Manhattan, Inc.	1970	Laclede Steel Company
1970	General Cigar Company, Inc.	1968	Homer Laughlin China Company
1947	General Electric Company	1972	Lee-Norse Company
1951	General Mills, Inc.	1962	Louisiana Army Ammunition Plant, Sperry Rand Corporation
1942	General Motors Corporation	1937	J. S. McCormick Company
1954	Georgia Kaolin Company	1966	Marcona Mining Company
1937	Glenshaw Glass Company, Inc.	1970	Marlon Health and Safety
1937	*Grinding Wheel Institute	1937	Metropolitan Life Insurance Company
1950	Gulf Oil Corporation	1965	Miles Laboratories, Inc.
		1936	Mine Safety Appliances Company
1936	Hall China Company	1949	Mobil Oil Corporation
1972	Heinz U.S.A., (Div. of H.J. Heinz Co.)	1956	Jesse S. Morie & Son, Inc.
1973	Howell Industrial Clinic	1936	Motor Vehicle Mfrs. Assn. of U.S., Inc.
1937	Huntingdon Alloy Products Division, International Nickel Co., Inc.	1937	NL Industries, Inc.
		1971	National Association of Manufacturers
1947	ICI America, Inc.	1973	National Forge Company
1972	Industrial Bio-Test Laboratories, Inc.	1938	National Slag Association
1973	Ingersoll-Rand Company		
1947	Inland Steel Company	1972	Organization Resources Counselors, Inc.
1947	International Business Machines Corp.	1953	Owens-Corning Fiberglass Corporation
1970	International Lead Zinc Research Org.	1936	Owens-Illinois, Inc.
1936	Johns-Manville Corporation	1937	PPG Industries, Inc.
1939	Jones & Laughlin Steel Corporation	1937	Pennsylvania Glass Sand Corporation

Date Joined	Company	Date Joined	Company
1972	Peoples Natural Gas Company	1965	Sturm, Ruger & Company, Inc.
1970	Pneumafil Corporation	1969	Tenneco, Inc.
1938	Portland Cement Association	1938	Texasgulf, Inc.
1970	Potters Industries, Inc.	1966	Thermal Insulation Manufacturers, Inc.
1973	Pullman-Standard	1960	Toms River Chemical Corporation
1937	H. H. Robertson Company	1970	Travelers Insurance Companies
1972	Safety First Industries, Inc.	1972	Tri-State Engineering Company
1973	The Sayer Glove Corporation	1936	Union Carbide Corporation
1937	St. Joe Minerals Corporation	1970	United States Mineral Products Company
1956	Sauerisen-Gemants Company	1936	United Potters Association
1956	Seattle Services Division	1936	United States Steel Corporation
	The Hoelz Company		
1971	Selenium-Tellurium Development Association, Inc.	1960	Van Stratten Chemical Company
1972	Shell Oil Company	1938	Vesuvius Crucible Company
1966	Glendale-Koppers Company	1937	Weldron Silica Div.
1956	Soap and Detergent Association		Del Monte Properties Company
1973	Stark Associates, Inc.	1962	Western Electric Company, Inc.
1962	Stauffer Chemical Company	1937	Westinghouse Electric Corporation
1973	A. Stuckl Company	1968	Arthur C. Withrow Company

Date Joined	Company	Date Joined	Company
1974	Fostoria Glass Company	1973	Keystone Metal Company
1936	Foundry Supply Manufacturers Group	1974	Kopp Glass, Inc.
1968	General Asbestos & Rubber Division, Raybestos-Manhattan, Inc.	1942	Koppers Company, Inc.
1970	General Cigar Company, Inc.	1970	Laclede Steel Company
1947	General Electric Company	1968	Homer Laughlin China Company
1951	General Mills, Inc.	1974	Lenox Crystal, Inc.
1942	General Motors Corporation	1962	Louisiana Army Ammunition Plant Thiokol/Louisiana Division
1974	General Refractories Company	1937	J. S. McCormick Company
1954	Georgia Kaolin Company	1966	Marcona Mining Company
1937	Glenshaw Glass Company, Inc.	1970	Marlon Health & Safety, Inc.
1937	*Grinding Wheel Institute	1974	Jas. H. Matthews & Company
1950	Gulf Oil Corporation	1937	Metropolitan Life Insurance Company
1936	Hall China Company	1965	Miles Laboratories, Inc.
1972	Heinz U. S. A. (Div. of H. J. Heinz Co.)	1974	Milliken Brick Company
1973	Howell Industrial Clinic	1936	Mine Safety Appliances Company
1937	Huntington Alloy Products Division, International Nickel Co., Inc.	1974	Mobay Chemical Company
1947	ICI-America, Inc.	1949	Mobil Oil Corporation
1973	Ingersoll-Rand Company	1936	Motor Vehicle Manufacturers Assn. of U. S., Inc.
1947	Inland Steel Company	1937	N.L. Industries, Inc.
1947	International Business Machines Corp.	1974	National Annealing Box Company
1970	International Lead Zinc Research Org.	1973	National Forge Company
1974	International Technical Information Institute	1974	National Independent Coal Operators' Assn.
1936	Johns-Manville Corporation	1938	National Slag Association
1939	Jones & Laughlin Steel Corporation	1972	Organization Resources Counselors, Inc.
1955	Kawceki Berylen Industries, Inc.	1953	Owens-Corning Fiberglas Corporation

Date Joined	Company	Date Joined	Company
1936	Owens-Illinois, Inc.	1973	Starks Associates, Inc.
1937	PPG Industries, Inc.	1962	Stauffer Chemical Company
1937	Pennsylvania Glass Sand Corp.	1965	Sturm, Ruger & Company, Inc.
1972	Peoples Natural Gas Company	1969	Tenneco, Inc.
1970	Pneumafil Corporation	1966	Thermal Insulation Manufacturers Assn., Inc.
1938	Portland Cement Association	1970	Travelers Insurance Company
1970	Potters Industries, Inc.	1972	Tri-State Engineering Company
1973	Pullman-Standard	1936	Union Carbide Corporation
1937	H. H. Robertson Company	1974	United States Gypsum Company
1972	Safety First Industries, Inc.	1970	U. S. Mineral Products Company
1973	The Sager Glove Corporation	1936	U. S. Pottery Association
1937	St. Joe Minerals Corporation	1936	United States Steel Corporation
1956	Saunderland Cement Company	1960	Van Stratten Chemical Company
1956	Seattle Services Division, The Boeing Company	1938	Vesuvius Crucible Company
1971	Selenium-Tellurium Development Association, Inc.	1974	Watson-Standard Company
1974	Sharon Steel Corporation	1937	Wedron Silica Division, Del Monte Properties Company
1972	Shell Oil Company	1962	Western Electric Company, Inc.
1974	Shenango Incorporated	1937	Westinghouse Electric Corporation
1956	Soap and Detergent Association	1968	Arthur C. Withrow Company

1937	*Abrasive Grain Association	1937	*Grinding Wheel Institute
1936	Allegheny Ludlum Industries, Inc.	1950	Gulf Oil Corporation
1956	Allied Chemical Corporation	1936	Hall China Company
1936	Aluminum Company of America	1972	Heinz U.S.A. (Div. of H. J. Heinz Co.)
1969	Aluminum Company of Canada, Ltd.	1973	Howell Industrial Clinic
1947	American Can Company	1937	Huntington Alloys, Inc.
1971	American Foundrymen's Society	1975	Industrial Gasket & Shim Co., Inc.
1938	*American Insurance Association	1973	Ingersoll-Rand Company
1944	American Iron and Steel Institute	1947	Inland Steel Company
1957	American Metal Climax, Inc.	1947	IBM Corporation
1937	American Mining Congress	1970	International Lead Zinc Research Org.
1945	*American Mutual Insurance Alliance	1974	International Technical Information Inst.
1944	American Optical Corporation	1936	Johns-Manville Corporation
1967	American Petroleum Institute	1939	Jones & Laughlin Steel Corporation
1936	ASARCO Incorporated	1955	Kawecki Berylico Industries, Inc.
1969	American Textile Mfrs. Institute, Inc.	1974	Kopp Glass, Inc.
1966	ARCO/Polymers, Inc.	1942	Koppers Company, Inc.
1970	Argonaut Insurance Company	1970	Laclede Steel Company
1974	BASF Wyandotte Corporation	1968	Homer Laughlin China Company
1970	The Bahnsen Company	1974	Lenox Crystal, Inc.
1944	Brush Wellman, Inc.	1937	J. S. McCormick Company
1955	CPC International, Inc.	1966	Marcona Mining Company
1953	Can Manufacturers Institute, Inc.	1970	Marion Health & Safety, Inc.
1952	Celanese Corporation	1937	Metropolitan Life Insurance Company
1971	*Cemented Carbide Producers Assn.	1965	Miles Laboratories, Inc.
1968	Certain-Tech St. Gobain Insulation Corp.	1974	Milliken Brick Company
1974	Chrysler Corporation	1936	Mine Safety Appliances Company
1958	Ciba-Geigy AG	1974	Mobay Chemical Company
1974	Cuk Industries Inc.	1975	Monongahela Iron & Metal Company, Inc.
1972	Columbia Gas System Service Corporation	1936	Motor Vehicle Mfrs. Assn. of U.S., Inc.
1975	Commercial Shearing, Inc.	1937	NL Industries, Inc.
1958	Companhia Siderurgica Nacional	1974	National Annealing Box Company
1973	Consolidated Edison Co. of New York, Inc.	1973	National Forge Company
1972	Consolidated Natural Gas Service Company	1972	Organization Resources Counselors, Inc.
1975	Consolidation Coal Company, Inc.	1953	Owens-Corning Fiberglass Corporation
1975	D'Appolonia Consulting Engineers, Inc.	1936	Owens-Illinois, Inc.
1974	DeSoto, Inc.	1937	PPG Industries, Inc.
1952	Diamond Shamrock Corporation	1937	Pennsylvania Glass Sand Corporation
1973	Dow Chemical U.S.A.	1972	Peoples Natural Gas Company
1917	Drakenfeld Division, Hercules, Inc.	1975	Pittsburgh & Lake Erie Railroad
1917	Dravo Corporation	1970	Pneumafil Corporation
1936	E. I. du Pont de Nemours & Company	1938	Portland Cement Association
1966	Eastman Kodak Company	1970	Potters Industries, Inc.
1973	Minerals & Chemicals Division, Fyrerhard Minerals & Chemicals Corp.	1973	Pullman-Standard
1975	Epi Metals Corporation	1968	Raybestos-Manhattan, Inc.
1954	Equitable Life Assurance Society of U.S.	1937	H. H. Robertson Company
1964	Faxon Corporation	1972	Safety First Industries, Inc.
1973	Falcon Foundry Company	1973	The Sager Glove Corporation
1974	Festoria Glass Company	1937	St. Joe Minerals Corporation
1936	Foundry Supply Manufacturers Group	1956	Sauereisen Cements Company
1970	General Cigar Company, Inc.	1956	Seattle Services Division, The Boeing Co.
1947	General Electric Company	1971	Selenium-Tellurium Development Assn., Inc.
1951	General Mills, Inc.	1974	Sharon Steel Corporation
1942	General Motors Corporation	1972	Shell Oil Company
1974	General Refractories Company	1974	Shenango Incorporated
1954	Georgia Kaolin Company	1956	Soap and Detergent Association
		1975	The Standard Oil Company

*Multiple Membership

<u>Date Joined</u>	<u>Company</u>
1962	Stauffer Chemical Company
1965	Sturm, Ruger & Company, Inc.
1969	Tenneco, Inc.
1966	Thermal Insulation Manufacturers Association, Inc.
1970	Travelers Insurance Companies
1972	Tri-State Engineering Company
1936	Union Carbide Corporation
1974	United States Gypsum Company
1970	U. S. Mineral Products Company
1936	U. S. Potters Association
1936	United States Steel Corporation

<u>Date Joined</u>	<u>Company</u>
1960	Van Straaten Chemical Company
1938	Vesuvius Crucible Company
1975	Vulcan Mold & Iron Company
1975	Washington Mould, Machine & Foundry Company
1974	Watson-Standard Company
1937	Wedron Silica Division, Del Monte Properties Company
1962	Western Electric Company, Inc.
1937	Westinghouse Electric Corporation
1968	Arthur C. Withrow Company
1975	Young Galvanizing, Inc.

NEW MEMBERS

The Ansul Company
 Consolidation Coal Company, Inc.
 E. D'Appolonia Consulting Engineers, Inc.
 Epic Metals Corporation
 Industrial Gasket & Shirm Company, Inc.
 Monongahela Iron & Metal Company, Inc.
 Pittsburgh & Lake Erie Railroad
 The Standard Oil Company
 Vulcan Iron & Mold Company
 Washington Mould, Machine & Foundry Company
 Young Galvanizing, Inc.

Member - 1976 Annual Reports

<u>Date Joined</u>	<u>Company</u>	<u>Date Joined</u>	<u>Company</u>
1937	*Abrasive Grain Association	1973	Falcon Foundry Co.
1976	Allegheny County Sanitary Authority	1976	Fort Pitt Steel Casting
1936	Allegheny Ludlum Industries, Inc.	1974	Fostoria Glass Co.
1956	Allied Chemical Corp.	1976	Franklin Glue Co.
1936	Aluminum Company of America	1936	Foundry Supply Manufacturers Group
1969	Aluminum Company of Canada, Ltd.	1970	General Cigar Co., Inc.
1947	American Can Co.	1947	General Electric Co.
1971	American Foundrymen's Society	1951	General Mills, Inc.
1938	*American Insurance Association	1942	General Motors Corp.
1944	American Iron and Steel Institute	1974	General Refractories Co.
1957	AMAX, Inc.	1954	Georgia Kaolin Co.
1937	American Mining Congress	1937	Grinding Wheel Institute
1945	*American Mutual Insurance Alliance	1950	Gulf Oil Corp.
1944	A. O. Safety Products (Div. of American Optical Corp.)	1976	Halcon International, Inc.
1967	American Petroleum Institute	1936	Hall China Co.
1976	American Restaurant China Council, Inc.	1976	Harbison-Walker Refractories
1936	ASARCO Incorporated	1972	Heinz U.S.A. (Div. of H. J. Heinz Co.)
1969	American Textile Mfrs. Institute, Inc.	1976	Hill & Griffith Co.
1976	American Welding & Manufacturing Co.	1973	Howell Industrial Clinic
1976	American Wood Preservers Institute	1937	Huntington Alloys, Inc.
1976	Americhem Inc.	1975	Industrial Casket & Shim Co., Inc.
1976	Anaconda Co., Wire & Cable Div.	1973	Ingersoll-Rand Co.
1966	ARCO/Polymers, Inc.	1947	Inland Steel Co.
1970	Argonaut Insurance Co.	1947	IBM Corp.
1974	BASF Wyandotte Corp.	1970	International Lead Zinc Research Org.
1970	The Bahnsen Co.	1974	International Technical Information Inst.
1944	Brush Wellman, Inc.	1936	Johns-Manville Corp.
1955	CPC International, Inc.	1939	Jones & Laughlin Steel Corp.
1953	Can Manufacturers Institute, Inc.	1955	Kawachi Berylico Industries, Inc.
1971	*Cemented Carbide Producers Association	1974	Kopp Glass, Inc.
1968	Certain-Teed St. Gobain Insulation Corp.	1942	Koppers Co., Inc.
1974	Chrysler Corp.	1970	Laclede Steel Co.
1958	Ciba-Geigy AG	1962	Lagoven, S.A.
1974	Colt Industries Inc.	1968	Homer Laughlin China Co.
1972	Columbia Gas System Service Corp.	1974	Lenox Crystal, Inc.
1976	Commercial Shearing, Inc.	1937	J. S. McCormick Co.
1958	Companhia Siderurgica Nacional	1976	Marathon Oil Co.
1973	Consolidated Edison Co. of New York, Inc.	1966	Marcona Mining Co.
1972	Consolidated Natural Gas Service Co.	1970	Marion Health & Safety, Inc.
1975	Consolidation Coal Co., Inc.	1937	Metropolitan Life Insurance Co.
1975	D'Appolonia Consulting Engineers, Inc.	1965	Miles Laboratories, Inc.
1974	DeSoto, Inc.	1974	Milliken Brick Co.
1952	Diamond Shamrock Corp.	1936	Mine Safety Appliances Co.
1976	Dick Corp.	1974	Mobay Chemical Co.
1973	Dow Chemical U.S.A.	1975	Monongahela Iron & Metal Co., Inc.
1976	Dow Corning Corp.	1936	Motor Vehicle Mfrs. Assn. of U.S., Inc.
1947	Drazenfeld Division, Hercules, Inc.	1937	NL Industries, Inc.
1937	Dravo Corp.	1974	National Annealing Box Co.
1936	E. I. du Pont de Nemours & Co.	1973	National Forge Co.
1966	Eastman Kodak Co.	1972	Organization Resources Connectors, Inc.
1973	Minerals & Chemicals Division, Engelhard Minerals & Chemicals Corp.	1953	Owens-Corning Fiberglas Corp.
1975	Epic Metals Corp.	1937	PPG Industries, Inc.
1956	Equitable Life Assurance Society of U. S.	1937	Pennsylvania Glass Sand Corp.
1964	Exxon Corp.	1972	Peoples Natural Gas Co.
1976	Essex Group	1975	Pittsburgh & Lake Erie Railroad
		1970	Pneumatil Corp.
		1938	Portland Cement Association

IHR Members (continued)

1976

<u>Date Joined</u>	<u>Company</u>	<u>Date Joined</u>	<u>Company</u>
1970	Potters Industries, Inc.	1969	Tenneco, Inc.
1973	Pullman-Standard	1966	Thermal Insulation Mfrs. Assn., Inc.
1976	RAD Services, Inc.	1976	Tile Council of America, Inc.
1968	Raybestos-Manhattan, Inc.	1970	Travelers Insurance Co.
1976	The Refractories Institute	1972	Tri-State Engineering Co.
1937	H. H. Robertson Co.	1976	II-VI Inc.
1976	SCM Corp.	1936	Union Carbide Corp.
1972	Safety First Industries, Inc.	1974	United States Gypsum Co.
1976	Schering-Plough Corp.	1970	U. S. Mineral Products Co.
1973	The Sager Glove Corp.	1936	U. S. Potters Association
1937	St. Joe Minerals Corp.	1936	United States Steel Corp.
1956	Sauereisen Cements Co.	1960	Van Straaten Chemical Co.
1956	Seattle Services Div., The Boeing Co.	1972	Vesuvius Crucible Co.
1971	Selectum-Tellurium Development Assn., Inc.	1975	Vulcan Mold & Iron Co.
1976	Senco Products, Inc.	1976	WABCO Transportation Systems Group
1974	Sharon Steel Corp.	1975	Washington Mould Machine & Foundry Co.
1972	Shell Oil Co.	1974	Watson-Standard Co.
1974	Shenango Inc.	1937	Wedron Silica Division, Del Monte Properties Co.
1956	Soap and Detergent Association	1962	Western Electric Co., Inc.
1975	The Standard Oil Co.	1937	Westinghouse Electric Corp.
1962	Stauffer Chemical Co.	1976	Williams & Co., Inc.
1976	Stellite Division, Cabot Corp.	1968	Arthur C. Withrow Co.
1965	Sturm, Ruger & Co., Inc.	1975	Young Galvanizing, Inc.

NEW MEMBERS

Allegheny County Sanitary Authority
 American Restaurant China Council, Inc.
 American Welding and Manufacturing Company
 American Wood Preservers Institute
 Americhem, Incorporated
 Anaconda Company, Wire and Cable Division
 Commercial Shearing, Incorporated
 Dick Corporation
 Dow Corning Corporation
 Essex Group, Incorporated
 Fort Pitt Steel Casting
 The Franklin Glue Company
 Halcon International, Incorporated
 Harbison-Walker Refractories
 Hill and Griffith Company
 Marathon Oil Company
 RAD Services, Incorporated
 The Refractories Institute
 Schering-Plough Corporation
 Senco Products, Incorporated
 SCM Corporation
 Stellite Division, Cabot Corporation
 Tile Council of America, Incorporated
 II-VI Incorporated
 WABCO Transportation Systems Group
 Williams and Company, Incorporated

NEW MEMBERS - 1977 Annual Report

Date Joined	Company	Date Joined	Company
1937	*Abrasive Grain Association	1956	Equitable Life Assurance Society of New York
1976	Allegheny County Sanitary Authority	1976	Essex Group, Inc.
1936	Allegheny Ludlum Industries, Inc.	1964	Exxon Corp.
1945	*Alliance of American Insurers	1973	Falcon Foundry Co.
1956	Allied Chemical Corp.	1976	Fort Pitt Steel Casting
1936	Aluminum Co. of America	1974	Fostoria Glass Co.
1969	Aluminum Co. of Canada, Ltd.	1936	Foundry Supply Manufacturers Group
1957	AMAX, Inc.	1976	The Franklin Glue Co.
1947	American Can Co.	1970	General Cigar & Tobacco Co., Inc.
1971	American Foundrymen's Society		of Culbro Corp.
1973	American Industrial Hygiene Association	1947	General Electric Co.
1938	*American Insurance Association	1951	General Mills, Inc.
1944	American Iron & Steel Institute	1942	General Motors Corp.
1937	American Mining Congress	1974	General Refractories Co.
1967	American Petroleum Institute	1954	Georgia Kaolin Co.
1976	American Restaurant China Council, Inc.	1937	*Grinding Wheel Institute
1936	ASARCO, Inc.	1950	Gulf Oil Corp.
1969	American Textile Manufacturers Institute, Inc.	1976	Halcon International, Inc.
1976	American Welding & Manufacturing Co.	1936	Hall China Co.
1976	American Wood Preservers Institute	1977	Hankison Corp.
1976	Americhem, Inc.	1976	Harbison-Walker Refractories
1976	Anaconda Co., Wire & Cable Division	1972	Helar U.S.A. (Div. of H. J. Heinz Co.)
1966	AKCO/Polymers, Inc.	1966	Hierro-Peru
1970	Argonaut Insurance Co.	1976	Hill & Griffith Co.
1974	BASF Wyandotte Corp.	1973	Howell Industrial Clinic
1977	Borg-Warner Chemicals	1937	Huntington Alloys, Inc.
1944	Brush Wellman, Inc.	1975	Industrial Gasket & Shim Co., Inc.
1977	Buffalo Color Corp.	1947	Inland Steel Co.
1955	CPC International, Inc.	1947	International Business Machines Corp.
1977	Campbell Soup Co.	1970	International Lead Zinc Research Organization
1971	*Cemented Carbide Producers Association	1936	Johns-Manville Corp.
1977	Central Medical Health Services	1919	Jones & Laughlin Steel Corp.
1968	Certain Feed Corp.	1955	Kawecki Berylico Industries, Inc.
1974	Chrysler Corp.	1974	Kopp Glass, Inc.
1956	Ciba-Geigy AG	1970	Laclede Steri Co.
1971	Colt Industries Inc.	1962	Lagoven, S.A.
1972	Columbia Gas System Service Corp.	1968	Horner Laughlin China Co.
1975	Commercial Shearing, Inc.	1974	Lenox Crystal, Inc.
1956	Companhia Siderurgica Nacional	1937	J. S. McCormick Co.
197	Consolidated Edison Co. of New York, Inc.	1976	Marathon Oil Co.
1975	Consolidated Natural Gas Service Co.	1977	Metropolitan Life Insurance Co.
1975	Consolidation Coal Co., Inc.	1936	Min Safety Appliances Co.
1977	Cummins Engine Co., Inc.	1971	Mobay Chemical Co.
1972	Cummins Diesel Engine Corp.	1977	Monsanto Chemical Co.
1976	Dow Chemical U.S.A.	1977	Motor Cords Manufacturing Co.
1976	Dow Corning Corp.	1936	Motor Vehicle Manufacturers Association of U. S., Inc.
1947	Drakenfeld Division, Hercules, Inc.	1974	National Annealing Box Co.
1937	Dravo Corp.	1972	National Forge Co.
1966	Eastman Kodak Co.	1977	National Health Watch, Inc.
1946	F. I. du Pont de Nemours & Co.	1972	Organization Resources Consultants, Inc.
1971	Minerals & Chemicals Division	1953	Owens-Corning Fiberglass Corp.
	Engelhard Minerals & Chemicals Corp.	1937	PPG Industries, Inc.
1975	Epi Metals Corp.	1937	Pennsylvania Glass Sand Corp.

*Multiple Membership

DHF MEMBERS (continued)

<u>Date Joined</u>	<u>Company</u>	<u>Date Joined</u>	<u>Company</u>
1972	Peoples Natural Gas Co.	1976	Stellite Division, Cabot Corp.
1973	Pittsburgh & Lake Erie Railroad	1969	Tenneco, Inc.
1970	Pneumafil Corp.	1966	Thermal Insulation Manufacturers Assn.
1938	Portland Cement Association	1976	Tile Council of America, Inc.
1970	Potters Industries, Inc.	1970	Travelers Insurance Companies
1973	Pullman-Standard	1972	Tri-State Engineering Co.
1977	Quaker State Oil Refining Corp.	1976	II-VI Inc.
1976	RAD Services, Inc.	1936	Union Carbide Corp.
1968	Raybestos-Manhattan, Inc.	1974	United States Gypsum Co.
1976	The Refractories Institute	1970	U. S. Minerals Products Co.
1937	H. H. Robertson Co.	1936	U. S. Potters Association
1976	SCM Corp.	1936	United States Steel Corp.
1972	Safety First Industries, Inc.	1960	Van Straaten Chemical Co.
1973	The Sager Glove Corp.	1972	Vesuvius Crucible Co.
1937	St. Joe Minerals Corp.	1977	Volkswagen Mfg. Corp. of America
1937	Sauereisen Cements Co.	1976	WABCO Railway Products Group
1977	Schuylkill Metals Corp.	1975	Washington Mould, Machine & Foundry Co.
1956	Seattle Services Div., The Boeing Co.	1974	Watson-Standard Co.
1976	Senco Products, Inc.	1937	Wedron Silica Div., Pyroclastic Corp.
1974	Sharon Steel Corp.	1977	Wenzel Tile Co.
1972	Shell Oil Co.	1962	Western Electric Co., Inc.
1974	Shenango Inc.	1937	Westinghouse Electric Corp.
1956	Soap & Detergent Association	1977	Whirlpool Corp.
1977	Spartek, Inc.	1976	Williams & Co., Inc.
1975	The Standard Oil Co.	1975	Young Galvanizing, Inc.
1937	Stauffer Chemical Co.		

NEW MEMBERS — 1977

Borg-Warner Chemicals
Buffalo Color Corp.
Campbell Soup Co.
Central Medical Health Services
John D. Copanos Co., Inc.
Hankison Corp.
Motor Coils Manufacturing Co.
National Health Watch, Inc.
Quaker State Oil Refining Corp.
Schuylkill Metals Corp.
Spartek, Inc.
Volkswagen Manufacturing Corp. of America
Wenzel Tile Co.
Whirlpool Corp.

IHF MEMBERS - 1978 Annual Report

DEPOSITION
EXHIBIT

Pif. No. 39

1/29/86

Date Joined	Company
1937	*Abrasive Grain Association
1978	Alberta Dept. of Labour
1976	Allegheny County Sanitary Authority
1936	Allegheny Ludlum Industries, Inc.
1945	*Alliance of American Insurers
1956	Allied Chemical Corp.
1936	Aluminum Co. of America
1969	Aluminum Co. of Canada
1957	AMAX, Inc.
1947	American Can Co.
1971	American Foundryman's Society
1973	American Industrial Hygiene Association
1938	*American Insurance Association
1944	American Iron & Steel Institute
1937	American Mining Congress
1967	American Petroleum Institute
1976	American Restaurant China Council, Inc.
1969	American Textile Mfrs. Institute, Inc.
1976	American Welding & Manufacturing Co.
1976	American Wood Preservers Institute
1976	Americhem Inc.
1976	Anaconda Co., Wire & Cable Div.
1966	AECO/Polymers, Inc.
1970	Argonaut Insurance Co.
1936	ASARCO, Inc.
1977	Borg-Warner Chemicals
1944	Brush Wellman, Inc.
1977	Buffalo Color Corp.
1977	Campbell Soup Co.
1971	*Cemented Carbide Producers Assn.
1977	Central Medical Health Services
1968	CertainTeed Corp.
1974	Chrysler Corp.
1958	Ciba-Geigy AG
1974	Cult Industries Inc.
1972	Columbia Gas System Service Corp.
1978	Columbia Nitrogen Corp.
1975	Commercial Shearing, Inc.
1958	Companhia Siderurgica Nacional
1973	Consolidated Edison Co. of New York, Inc.
1972	Consolidated Natural Gas Service Co.
1975	Consolidation Coal Co., Inc.
1977	John D. Copanos Co., Inc.
1978	D'Appolonia Consulting Engineers, Inc.
1952	Diamond Shamrock Corp.
1976	Dick Corp.
1973	Dow Chemical U.S.A.
1976	Dow Corning Corp.
1937	Drakenfeld Div., Hercules, Inc.
1937	Dravo Corp.
1936	E. I. du Pont de Nemours & Co.
1978	Duraloy Blaw-Knox, Inc.
1973	Minerals & Chemicals Division
1977	Engelhard Minerals & Chemicals Corp.

Date Joined	Company
1976	Essex Group
1964	Exxon Corp.
1973	Falcon Foundry Co.
1978	Fisher Controls Co.
1976	Fort Pitt Steel Casting
1974	Fostoria Glass Co.
1936	Foundry Supply Manufacturers Group
1976	The Franklin Glue Co.
1978	General Alloy Casting Co.
1970	General Cigar & Tobacco Co.
1947	General Electric Co.
1951	General Mills, Inc.
1942	General Motors Corp.
1974	General Refractories Co.
1954	Georgia Kaolin Research
1937	*Grinding Wheel Institute
1950	Gulf Oil Corp.
1976	Halcon International, Inc.
1936	Hall China Co.
1977	Hankison Corp.
1976	Harbison-Walker Refractories
1978	Harvey Industries, Inc.
1966	Hierro-Peru
1976	Hill & Griffith Co.
1973	Howell Industrial Clinic
1937	Huntington Alloys, Inc.
1978	Huntington Plating, Inc.
1978	ICI Americas, Inc.
1978	ILCO, Inc.
1978	Imaging Systems Corp.
1975	Industrial Gasket & Shim Co.
1947	Inland Steel Co.
1947	International Business Machines Corp.
1970	International Lead Zinc Research Org.
1936	Johns-Manville Corp.
1939	Jones & Laughlin Steel Corp.
1955	Kaweco Beryco Industries, Inc.
1974	Kopp Glass, Inc.
1942	Koppers Co., Inc.
1970	Laclede Steel Co.
1962	Lagoven, S.A.
1968	Homer Laughlin China Co.
1974	Lenox Crystal, Inc.
1978	M & T Chemicals, Inc.
1937	J. S. McCormick Co.
1976	Marathon Oil Co.
1978	C. H. Masland & Sons
1937	Metropolitan Life Insurance Co.
1936	Mine Safety Appliances Co.
1974	Mobay Chemical Co.
1978	Molded Fiber Glass Tray Co.
1975	Monongahela Iron & Metal Co.
1977	Motor Coils Manufacturing Co.
1936	Motor Vehicle Man...

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IHF MEMBERS (continued)

<u>Date</u> <u>Joined</u>	<u>Company</u>	<u>Date</u> <u>Joined</u>	<u>Company</u>
1977	National Health Watch, Inc.	1974	Shenango Inc.
1972	Organization Resources Counselors, Inc.	1956	Soap & Detergent Association
1953	Owens-Corning Fiberglass Corp.	1977	Spartek, Inc.
1937	Pennsylvania Glass Sand Corp.	1975	The Standard Oil Co.
1978	Pennsylvania Power Co.	1976	Stellite Div., Cabot Corp.
1972	Peoples Natural Gas Co.	1969	Tenneco Inc.
1975	Pittsburgh & Lake Erie Railroad	1966	Thermal Insulation Manufacturers Assn
1970	Pneumafil Corp.	1978	Tile Council of America, Inc.
1938	Portland Cement Association	1970	Travelers Insurance Companies
1970	Potters Industries, Inc.	1972	Tri-State Engineering Co.
1937	PFG Industries, Inc.	1976	II-VI Inc.
1973	Pullman-Standard	1936	Union Carbide Corp.
1977	Quaker State Oil Refining Corp.	1974	United States Gypsum Co.
1976	RAD Services, Inc.	1970	U. S. Mineral Products Co.
1968	Raybestos-Manhattan, Inc.	1936	U. S. Potters Association
1976	The Refractories Institute	1960	Van Straaten Chemical Co.
1937	H. H. Robertson Co.	1972	Vesuvius Crucible Co.
1978	Roux Laboratories, Inc.	1977	Volkswagen Mfg. Corp. of America
1972	Safety First Industries, Inc.	1976	WABCO Railway Products Group
1973	The Sager Glove Corp.	1975	Washington Mould, Machine & Foundry Co.
1937	St. Joe Minerals Corp.	1974	Watson-Standard Co.
1956	Sauereisen Cements Co.	1977	Wenzel Tile Co.
1977	Schuykill Metals Corp.	1962	Western Electric Co.
1976	SCM Corp.	1937	Westinghouse Electric Corp.
1956	Seattle Services Div., Boeing Co.	1977	Whirlpool Corp.
1976	Seneca Products, Inc.	1976	Williams & Co.
1974	Sharon Steel Corp.	1975	Young Galvanizing, Inc.
1972	Shell Oil Co.		

NEW MEMBERS — 1978

Alberta Department of Labour
Columbia Nitrogen Corp.
Duraloy Blaw-Knox, Inc.
Fisher Controls Co.
General Alloy Casting Co.
Harvey Industries, Inc.
Huntington Plating, Inc.
ILCO, Inc.
Imaging Systems Corp.
M & T Chemicals, Inc.
C. H. Masland & Sons
Molded Fiber Glass Tray Co.
Pennsylvania Power Co.
Roux Laboratories, Inc.

IHF MEMBERSHIP LISTS

1981 - From Acme dated Sept. 17, 1981

1980 - Complete (Annual Report)

1979 - " "

1978 - " "

1977 - " "

1976 - " "

1975 - " "

1974 - " "

1973 - " "

1972 - New members only (Minutes Board of Trustees Meetings, Feb. 8, May 9, Oct.

1971 - New members only (Minutes Board of Trustees Meetings, Mar. 9 and Oct. 11)

1970 - Complete (Annual Report)

1969 - " "

1968 - " "

1967 - " "

1966 - " "

1965 - " "

1964 - " "

1963 - Members represented by proxies, new members, members resigned.
(Meeting of Members, October 23, 1963)

1962 - New members only (Annual Report)

1961 - " " " "

1960 - No record

EX.	<u>B</u>
WIT.	<u>R. Powers</u>
DATE	<u>5-5-82</u>
R. POWERS RPTR.	

IHF MEMBERSHIP LISTS (Contd.)

- 1959 - Complete (Annual Report)
- 1958 - No record
- 1957 - New members only (Transactions Bulletin No. 31, 22nd Annual Meeting, October 30-31, 1957)
- 1956 - New members only (Transactions Bulletin No. 30, 21st Annual Meeting, November 14-15, 1956)
- 1955 - New members only (Transactions Bulletin No. 29, 20th Annual Meeting, November 16-17, 1955)
- 1954 - New members only (Transactions Bulletin No. 28, 19th Annual Meeting, November 17-18, 1954)
- 1953 - New members only (Transactions Bulletin No. 26, 18th Annual Meeting, November 19, 1953)
- 1952 - No record
- 1951 - New members only (Transactions Bulletin No. 19, 16th Annual Meeting, November 15, 1951)
- 1950 - New members only (Transactions Bulletin No. 15, 15th Annual Meeting, November 16, 1950)
- 1949 - New members only (Transactions Bulletin No. 11, 14th Annual Meeting, November 17, 1949)
- 1948 - New members only (Transactions Bulletin No. 10, 13th Annual Meeting, November 18, 1948)
- 1947 - New members only (Transactions Bulletin No. 9, 12th Annual Meeting, November 20, 1947)
- 1946 - Complete (Transactions Bulletin No. 8, 11th Annual Meeting, November 7, 1946)
- 1945 - Complete (Proceedings, 10th Annual Meeting, November 14-15, 1945, Part IV)
- 1944 - Complete (Proceedings, 9th Annual Meeting, November 15-16, 1944, Part IV)
- 1943 - Complete (Proceedings, 8th Annual Meeting, November 10-11, 1943)
- 1942 - New members only (Proceedings, 7th Annual Meeting, November 10-11, 1942)

IHf MEMBERSHIP LISTS (Contd.)

1941 - New members only (Proceedings, 6th Annual Meeting, November 12-13, 1941)

1940 - New members only (Proceedings, 5th Annual Meeting, November 12-13, 1940)

1939 - No record

1938 - No record

1937 - Complete (Proceedings of Special Meeting, November 30, 1937)

Trans. Bull. No. 31, 22nd Ann. Meeting,
Oct 30-31, 1957

Foundation Facts

C. RICHARD WALMER, M.D., Pittsburgh

It is indeed a pleasure to welcome all of you to this 22d Annual Meeting of Industrial Hygiene Foundation, not only because I am always happy to see so many members of the Foundation here, but because I believe this audience represents the formula for hurdling obstacles that present themselves in just about every major human endeavor. And that formula is communication—not just communication within the boundaries of our own specialties, but communication across lines, across barriers of misunderstanding that lack of information and insight can create.

We hope that the program which has been arranged for you will help to bring about a clearer understanding of the interrelationship of management, technical, and medical aspects of health maintenance.

We want at this time to welcome 11 new members to this year's meeting. They are the following:

The American Metal Co., Ltd.
The Atchison, Topeka and Santa Fe Railway System
Brazilian National Steel Company
Dick Corporation
General Foods Corporation
Ingersoll-Humphreys Division of Borg-Warner Corporation
Laclede Steel Company
Minnesota Mining & Manufacturing Co.
Research Motors, Inc.
Research-Carrall, Inc.
Schenck Steel Division of Armco Steel Corporation

We hope that you will consider the Foundation as part of your own technical staff, and we look forward to being of assistance to you.

During the past year the Foundation's staff completed a number of important field

and research projects. Environmental surveys were made for member companies to evaluate the degree of hazardous exposures to dust, fumes, and other atmospheric contaminants. Control measures were based upon this evaluation of the working environment. Investigations were also made of community air pollution, and stack discharges at industrial plants were measured to determine whether these were a contributing factor.

Two major epidemiological studies were carried on during the year, one to determine the health status of workers in a specific industry and whether there is a relationship between environmental exposures and certain biologic effects, and the other to investigate the biologic effects of certain chemical compounds.

Another major medical study was the survey of the medical program of one member company, a redesigning of it, and the preparation of a manual of procedures.

A number of research investigations in the Foundation's toxicological laboratory were concerned with the development of fundamental information appraising and controlling occupational disease hazards. Among long-range projects of this type is one being conducted for an association of industries to study biological factors in air pollution. Another is a research project to study potential hazards of a new product, and includes pulmonary, gastrointestinal, and eye-irritation studies. Findings serve as a basis for evolving proper control measures to protect the health of workers and consumers.

These are just the highlights of the work carried on this year. There were many other projects of a lesser magnitude but equally

given specific information on their dust problem wrote and thanked us for this assistance and stated "Your advice and references have 'cleared the air' enabling us to face our atmospheric pollution with something more than doubt and suspicion."

A second training course for industrial hygiene engineers and chemists was conducted in cooperation with the Occupational Health Research Training Facility of the U. S. Public Health Service. An intensive two weeks was devoted to work in the laboratory and lectures. The response of those taking the course is evidence of the benefits to be derived from this activity and it is planned to repeat the course in 1962. A two-day seminar on the current aspects of the dust problem was conducted under the sponsorship of the National Industrial Sand Association and the Foundry Facing Manufacturers Association. This provided an opportunity for the members of these associations to obtain up-to-date information on the medical, engineering and legal aspects of problems associated with their operations.

The Foundation provides an opportunity for representatives of industry to come together as working groups to explore and better define what they are doing and to take leadership in planning and developing policies to anticipate and prepare for new problems which we must face in the future. The real strength of the Foundation is in the unified action of its members.

On behalf of the staff, I wish to express our deep appreciation for the helpful and encouraging support and the valuable contributions of the Board of Trustees and its Executive Committee, the Technical Committees, and the executive staff of Mellon Institute.

NEW MEMBERS - 1961

American Viscose Corporation
Armco Steel Corporation
Butler County Mushroom Farm, Inc.
The Cooper-Bessemer Corporation
Davison Chemical Division
W. H. Grace & Company
Ferro-Glo Corporation
Hanley Company
Hughson Chemical Company
Powdered Products Company
Westinghouse Brake & Signal, Ltd.
West Virginia Pulp and Paper Company

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ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

NEW MEMBERS AND MEMBERS RESIGNED

January 1 - September 30, 1963

New Members

Comalco Aluminium, Ltd.	\$ 75.00	
Freeport Division, Nalco Chemical Co.	75.00	
Marbon Chemical Div., Borg Warner Corp.	175.00	
Pipe Fabrication Institute	75.00	
Stiffler Industrial Lubricants Co.	<u>75.00</u>	\$ 475.00

Members Increasing Dues

Ethyl Corporation (from \$100 to \$350)	<u>250.00</u>
	725.00

Members Resigned

Association of American Railroads	\$ 50.00	
Autometric, Inc.	100.00	
Bethlehem Steel Co.	1,000.00	
Gustin-Bacon Manufacturing Co.	200.00	
Keasbey & Mattison Co.	150.00	
New Jersey Pulverizing Co.	50.00	
Shenango Furnace Co.	150.00	
Standard Ultramarine & Color Co.	150.00	
Universal Rundle Corp.	<u>100.00</u>	- <u>\$1,950.00</u>

Loss to September 30, 1963 - \$1,225.00

A third training course for industrial hygiene engineers and chemists was conducted in cooperation with the Occupational Health Research and Training Facility of the United States Public Health Service. A concentrated two weeks was devoted to work in the laboratory, lectures and homework assignments. The response was again most satisfying and the course will be repeated in 1963.

On behalf of the staff, I wish to express our deep appreciation for the helpful and encouraging support and the valuable contributions of the Board of Trustees and its Executive Committee, the Technical Committees, and the executive staff of Mellon Institute.

NEW MEMBERS - 1962

E. I. du Pont de Nemours & Company

International Research and Development Corporation

Louisiana Ordnance Plant of Remington Rand
Division, Sperry Rand Corporation

Netherlands du Pont (foreign)

Semiconductor Products Division of Motorola, Inc.

Stauffer Chemical Company

Tamms Industries Company

Western Electric Company

Member companies represented by proxies:

Abrasive Grain Association
Allegheny Pittsburgh Coal Company
Aluminum Company of America
American Air Filter Company, Inc.
American Iron and Steel Institute
American Zinc Institute
Anaconda Company
American Can Company
American Metal Climax, Inc.
American Smelting & Refining Company
American Viscose Div., FMC Corporation
American Zinc, Lead & Smelting Company
Armco Steel Corporation
Atlas Chemical Industries
Ball Brothers Company, Inc.
Boeing Company
Brush Beryllium Company
Butler County Mushroom Farm
Central Silica Company
Robert F. Coleman, Inc.
Cooper-Bessemer Corporation
Davison Chemical Div., W. R. Grace & Company
Deckers Creek Sand Company
Deere & Company
Dow Chemical Company
B. F. Drakenfeld & Co., Inc.
E. I. du Pont de Nemours & Company
Ebasco Services Incorporated
Electric Storage Battery Company
Equitable Life Assurance Society of the U. S.
Ethyl Corporation
Ferro Corporation
Foundry Facings Manufacturers Association
General Electric Company
General Motors Corporation
Glenshaw Glass Company
Grinding Wheel Institute
Hall China Company
Hanley Company
Hazleton Laboratories, Inc.
Hercules Powder Company
Inland Steel Company
International Business Machines Corp.
Johns-Manville Corporation
Jones & Laughlin Steel Corporation

Kaiser Refractories
Kennecott Copper Corporation
Lava Crucible-Refractories Company
Louisiana Ordnance Plant, Remington Office Equipment Div.,
Sperry Rand Corporation
Marbon Chemical Div., Borg-Warner Corporation
J. S. McCormick Company
Minneapolis-Honeywell Regulator Company
Minnesota Mining and Manufacturing Company
Jesse S. Morie & Son, Inc.
National Assoc. of Mutual Casualty Companies
National Crushed Stone Association
National Industrial Sand Association
National Slag Association
Owens-Corning Fiberglas Corporation
Owens-Illinois Glass Company
G. H. Packwood Manufacturing Company
Penn Rillton Company
Pennsylvania Manufacturers' Assoc. Casualty Insurance Co.
Phelps Dodge Corporation
Philadelphia Quartz Company
Pipe Fabrication Institute
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
Portland Cement Association
Powdered Products Company
Pullman-Standard
Reaction Motors Div., Thiokol Chemical Corporation
Republic Steel Corporation
Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauereisen Cements Company
Claude B. Schneible Company
Scott Aviation Corporation
Socony Mobil Oil Company, Inc.
Stauffer Chemical Company
Sugar Beet Products Company
Tennessee Copper Company Division of Tennessee Corporation
Union Carbide Corporation
U. S. Steel Corporation
Wedron Silica Company
Westinghouse Electric Corporation
Whitehead Brothers Company

Company		Date Joined	Company
1937	Abrasive Grain Association	1961	Davison Chemical Division
1937	Abrasive Products Company		W. R. Grace & Company
1936	Acme Abrasive Company	1937	Deckers Creek Sand Company
1936	Acme Quality Paints, Inc.	1937	A. P. de Sanno & Son, Inc.
1936	Allegheny Ludlum Steel Corp.	1952	Diamond Alkali Company
1940	Allegheny Pittsburgh Coal Co.	1939	Dow Chemical Company
1936	Allied Chemical Corporation	1937	B. F. Drakenfeld & Co., Inc.
1936	Aluminum Company of America	1937	Dravo Corporation
1937	American Abrasive Company	1962	E. I. duPont de Nemours & Co.
1947	American Can Company, Inc.		
1937	American Emery Wheel Works	1963	Edmar Abrasive Company
1944	American Iron and Steel Institute	1943	Electro Refractories & Abrasives Co.
1937	American Metal Glimax, Inc.	1945	Eljer Plumbingware Division
1937	American Mining Congress		The Murray Corp. of America
1944	American Optical Company	1956	Equitable Life Assurance Society of the United States
1964	American Potash & Chemical Corp.		
1936	American Smelting & Refining Co.	1937	Ethyl Corporation
1936	American Zinc Institute, Inc.	1937	Exolon Company
1937	American Zinc, Lead & Smelting Co.		
1936	Anaconda Company		
1961	Armco Steel Corporation	1949	Ferro Corporation
1936	Association of Casualty & Surety Companies*	1964	FMC Corporation
1964	Atlas Chemical Industries, Inc.	1937	Foots Mineral Company
1936	Automobile Manufacturers Assn.	1947	Ford Motor Company
		1936	Foundry Fatings Manufacturers Assn.
		1963	Freeport Division
64	Ball Brothers Company, Inc.		Nalco Chemical Company
37	Bartlett-Collins Company	1943	Fuller Merriam Company
37	Bay State Abrasive Products Co.		
1937	Beryllium Corporation	1943	Gardner Machine Company
1937	Bleached Board Division	1958	Geigy-Werke Schweizerhalle A. G.
	West Virginia Pulp and Paper Co.	1937	General Abrasive Company, Inc.
	Boeing Company	1947	General Electric Company
1937	Brush Beryllium Company	1937	General Grinding Wheel Corp.
1937	George H. Bullard Company, Inc.	1951	General Mills, Inc.
	Bunker Hill Company	1942	General Motors Corporation
1937	Butler County Mushroom Farm, Inc.	1954	Georgia Kaolin Company
		1937	Glenshaw Glass Company, Inc.
3	Can Manufacturers Institute, Inc.	1937	Grinding Wheel Institute
7	Carborundum Company	1950	Gulf Oil Corporation
2	Celanese Corp. of America	1964	Gypsum Association
1	Central Silica Company		
7	Chicago Wheel & Manufacturing Co.	1937	Hall China Company
1	Cincinnati Milling Products Division	1937	Hamilton Emery & Corundum Co.
	Cincinnati Milling Machine Co.	1937	Hampden Grinding Wheel Company
6	Robert F. Coleman, Inc.	1961	Hanley Company
1	Colonial Abrasive Products Co.	1959	Hazleton Laboratories
3	Comalco Aluminum (Bell Bay) Ltd.	1956	Honeywell Inc.
1	Commonwealth Sanitation Company	1961	Hughson Chemical Company
1	Companhia Siderurgica Nacional	1937	Huntington Alloy Products Division
1	Consolidation Coal Company, Inc.		International Nickel Company
1	Continental Can Company, Inc.		
1	Couper-Bessemer Corporation	1957	Ingersoll-Humphrey Division
1	Corn Products Company		Borg-Warner Corporation
1	Cortland Grinding Wheels Corporation	1947	Inland Steel Company
1	Crook Petroleum Corporation	1947	International Business Machines

*Multiple Membership (126 member companies)

1940	Jones & Laughlin Steel Corp.	1964	Pittsburgh Activated Coal Company
1953	Jowett & Rodgers Company	1937	Pittsburgh Plate Glass Company
1960	Kaiser Refractories Division	1955	Pittsburgh Steel Company
	Kaiser Aluminum & Chem. Corp.	1938	Portland Cement Association
1953	Massachusetts Copper Corporation	1961	Powdered Products Company
1942	Koppers Company, Inc.	1937	Process Air Division
		1950	American Air Filter Company
1937	Lava Crucible-Refractories Co.		Pullman-Standard
1964	Laverack & Haines, Inc.	1957	Reaction Motors Division
1936	Lead Industries Association		Thiokol Chemical Corporation
1958	London Transport Board	1952	Red Hill Grinding Wheel Corp.
1962	Louisiana Ordnance Plant	1945	Republic Steel Corporation
	Remington Rand Division	1937	H. H. Robertson Company
	Sperry Rand Corporation	1956	Robertson Manufacturing Company
1937	Macklin Company	1939	Safety First Supply Company
1950	Manhattan Rubber Division	1937	St. Joseph Lead Company
	Raybestos-Manhattan, Inc.	1950	Sandia Corporation
1940	Maryland Self-Insurers' and	1956	Sauers Eisen Cements Company
	Employers' Compensation Assn.	1937	Claude B. Schneible Company
1937	J. S. McCormick Company	1946	Scott Aviation Corporation
1964	Merck & Co., Inc.	1937	Simonds Abrasive Company
1937	Mid-West Abrasive Company	1937	Simonds Worden White Company
1936	Mine Safety Appliances Company	1956	Soap and Detergent Association
1957	Minnesota Mining & Manufacturing Co.	1949	Socony Mobil Oil Company, Inc.
1956	Jesse S. Morris & Son, Inc.	1941	Standard Lime and Cement Company
		1964	Standard Oil Company (New Jersey)
1945	National Association of Mutual	1962	Stauffer Chemical Company
	Casualty Companies	1937	Sterling Grinding Wheel Company
1937	National Crushed Stone Assn., Inc.	1963	Stifflez Industrial Lubricants Co.
1947	National Glass Sand Corporation	1953	Sugar Beet Products Company
1937	National Grinding Wheel Co., Inc.		
1937	National Industrial Sand Assn.	1952	Tata Industries Limited
1937	National Lead Company	1946	Taylor, Smith & Taylor Company
1964	National Ready-Mixed Concrete Assn.	1946	Tennessee Copper Company
1945	National Sand and Gravel Assn., Inc.		Division of Tennessee Corp.
1938	National Slag Association	1938	Texas Gulf Sulphur Company
1947	National Steel Corporation	1937	Titan Abrasives Company
1962	Nederland duPont de Nemours, N. Y.	1960	Toms River-Cincinnati Chemical
1964	Newport Division		Corporation
	Hayden Newport Chemical Corp.	1936	Union Carbide Corporation
1963	Oeborn Manufacturing Company	1936	United States Pottery Association
1937	Ottawa Silica Company	1936	United States Steel Corporation
1953	Owens-Corning Fiberglass Corp.		
1936	Owens-Illinois Glass Company	1937	Valley Mould and Iron Corporation
		1960	Van Straaten Chemical Company
1954	Pacific Grinding Wheel Manufacturing	1938	Vesuvius Crucible Company
1954	G. H. Packwood Manufacturing Co.		
1937	Peninsular Grinding Wheel Division	1937	Waltham Grinding Wheel Company
	Wakefield Corporation	1937	Washington Mills Abrasive Company
1937	Pennsylvania Glass Sand Corp.	1937	Wedron Silica Company
1956	Pennsylvania Manufacturers' Assn.	1962	Western Electric Company, Inc.
	Casualty Insurance Company	1937	Westfield Grinding Wheel Company
1964	Perkin-Elmer Corporation	1961	Westinghouse Brake and Signal
1960	Petroleo Brasileiro S. A.		Company, Limited
1936	Phelps Dodge Corporation	1937	Westinghouse Electric Corporation
1951	Philadelphia Quartz Company	1937	Whitehead Brothers Company
		1937	Willson Products Division
			Ray-O-Vac Company
		1937	Youngstown Sheet and Tube Company

* Multiple Membership (27 member companies)

Company	Year	Company
Refractory-Refractories Company	1952	Red Hill Grinding Wheel Corporation
Clark & Haines, Inc.	1945	Republic Steel Corporation
Shippers Association	1937	H. H. Robertson Company
Export Board	1956	Robertson Manufacturing Company
Ordnance Plant		
Road Division	1939	Safety First Supply Company
Hand Corporation	1937	St. Joseph Lead Company
	1950	Sandia Corporation
Company	1956	Sauereisen Cements Company
Rubber Division	1937	Claude B. Schneible Company
Stos-Manhattan, Inc.	1946	Scott Aviation Corporation
Chemists' Association	1937	Simonds Abrasive Company
Mining Company	1937	Simonds Worden White Company
Self-Insurers' and	1956	Soap and Detergent Association
Workers' Compensation Assn.	1949	Socony Mobil Oil Company, Inc.
Cormick Company	1941	Standard Lime and Cement Company
Company, Inc.	1964	Standard Oil Company (New Jersey)
Abrasive Company	1962	Stauffer Chemical Company
Laboratories, Inc.	1937	Sterling Grinding Wheel Company
Appliances Company	1963	Stiffler Industrial Lubricants Company
Mining & Manufacturing Co.	1965	Sturm, Ruger & Company, Inc.
Morris & Son, Inc.	1953	Sugar Beet Products Company
Coal Association	1952	Tata Services Limited
Crushed Stone Assn., Inc.	1946	Taylor, Smith & Taylor Company
Glass Sand Corporation	1946	Tennessee Copper Company
Grinding Wheel Company, Inc.		Division of Tennessee Corporation
Industrial Sand Assn.	1938	Texas Gulf Sulphur Company
Lead Company	1937	Titan Abrasives Company
Ready Mixed Concrete Assn.	1960	Toms River Chemical Corporation
Sand and Gravel Assn., Inc.		
Association	1936	Union Carbide Corporation
St. Corporation	1936	United States Pottery Association
Post de Nemours N. V.	1936	United States Steel Corporation
Chemicals, Inc.	1937	Valley Mould and Iron Corporation
	1960	Van Straaten Chemical Company
Manufacturing Company	1938	Vesuvius Crucible Company
Silica Company		
Fiberglass Corp.	1937	Waltham Grinding Wheel Company
Illinois Glass Company	1937	Washington Mills Abrasive Company
	1937	Wedron Silica Company
Grinding Wheel Manufacturing	1962	Western Electric Company, Inc.
Wood Manufacturing Co.	1937	Westfield Grinding Wheel Company
Grinding Wheel Division	1961	Westinghouse Brake and Signal Co., Ltd.
Id Corporation	1937	Westinghouse Electric Corporation
Glass Sand Corporation	1937	Willson Products Division
Manufacturers' Assn.		Ray-O-Vac Company
Insurance Company		
ner Corporation	1937	Youngstown Sheet and Tube Company
Brasileiro S. A.		
ge Corporation		
Quartz Company		
Activated Carbon Company		
Plate Glass Company		
Steel Company		
ment Association		
Products Company		
Division		
Filter Company		
Id		
Division		
Chemical Corporation		

MEMBERS OF INDUSTRIAL HYGIENE FOUNDATION

-A-

Abingdon Potteries, Inc.
 Abrasive Grain Association
 Abrasive Products Company
 Acme Abrasive Company
 Aerovent Fan Company, Inc.
 Allegheny Ludlum Steel Corporation
 Allegheny Pittsburgh Coal Company
 Allied Chemical Corporation
 Allis-Chalmers Manufacturing Company
 Aluminum Company of America
 American Abrasive Company
 American Air Filter Company, Inc.
 American Brake Shoe Company
 American Can Company
 American Emery Wheel Works
 American Iron and Steel Institute
 American Metal Climax, Inc.
 American Mining Congress
 American Optical Company
 American Smelting & Refining Company
 American Zinc Institute, Inc.
 American Zinc, Lead & Smelting Company
 Anaconda Company
 Asbestos Corporation Limited
 Assn. of American Railroads
 Assn. of American Soap & Glycerine
 Producers, Inc.
 Assn. Argentina de Empresarios Mineros
 Assn. of Casualty & Surety Companies
 Atchison, Topeka and Santa Fe
 Railway System
 Automobile Manufacturers Association

-B-

Ball Brothers Company
 Bartlett-Collins Company
 Baugh and Sons Company
 Bay State Abrasive Products Company
 Beryllium Corporation
 Bethlehem Steel Company, Inc.
 Bird & Son, Inc.
 Bituminous Casualty Corporation
 Boeing Airplane Company
 Brush Beryllium Company
 George H. Bullard Company
 Bunker Hill Company

-C-

Can Manufacturers Institute, Inc.
 Carborundum Company
 Catalytic Combustion Corporation
 Celanese Corporation of America
 Central Silica Company
 Chicago Wheel & Manufacturing Company
 Cincinnati Milling Products
 Cleveland Graphite Bronze Company
 Robert F. Coleman, Inc.
 Colonial Abrasive Products Company
 Commonwealth Sanitation Company
 Companhia Siderurgica Nacional
 Consolidation Coal Company, Inc.
 Continental Can Company, Inc.
 Copperweld Steel Company
 Corn Products Company
 Cortland Grinding Wheels Corporation

-D-

Deckers Creek Sand Company
 Deere & Company
 A. P. de Sanno & Son, Inc.
 Diamond Alkali Company
 Dow Chemical Company
 B. F. Drakenfeld & Company, Inc.
 Dravo Corporation

-E-

Eagle-Picher Company
 Ebasco Services, Inc.
 Electric Storage Battery Company
 Electro Refractories & Abrasives Corporation
 Eljer Company
 Equitable Life Assurance Society of the U.S.
 Esso Research and Engineering Company
 Ethyl Corporation
 Exolon Company

-F-

Falk Corporation
 Farrell-Cheek Steel Company
 Ferro Corporation
 Foote Mineral Company
 Ford Motor Company
 Fostoria Glass Company
 Foundry Facing Manufacturers Association
 Fuller Merriam Company

* Multiple Membership (147 member companies)

MEMBERS (continued)

—G—

Gardner Machine Company
Geigy-Werke Schweizerhalle A.G.
General Abrasive Company, Inc.
General Ceramics Corporation
General Electric Company
General Grinding Wheel Corporation
General Mills, Inc.
General Motors Corporation
General Refractories Company
Georgia Kaolin Company
Glenshaw Glass Company, Inc.
W. R. Grace & Company
Grinding Wheel Institute
Gulf Oil Corporation

—H—

Hall China Company
Hamilton Emery & Corundum Company
Hampden Grinding Wheel Company
Hazleton Laboratories
Hercules Powder Company
Homestake Mining Company

—I—

Ingersoll-Humphreys
Inland Steel Company
International Business Machines Corp.
International Nickel Company

—J—

Jehrs-Manville Corporation

—K—

Keasbey & Mattison Company
Kennecott Copper Corporation
Keystone Abrasive Wheel Company
Kirk & Blum Manufacturing Company
Koppers Company, Inc.

—L—

Homer Laughlin China Company
Lava Crucible-Refractories Company
E. J. Lavino and Company
Lead Industries Association
London Transport Executive

—M—

Macklin Company
Manhattan Rubber
Maryland Self-Insurers' Association
J. S. McCormick Company
Mexico Refractories
Mid-West Abrasive Company
Mine Safety Appliances Company
Minneapolis-Honeywell Regulator Company
Minnesota Mining & Manufacturing Company
Jesse S. Morie & Son, Inc.

—N—

National Assn. of Mutual Casualty Cos. *
National Crushed Stone Association, Inc.
National Glass Sand Corporation
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Lead Company
National Sand & Gravel Association, Inc.
National Slag Association
National Steel Corporation
Neville Chemical Company
New Jersey Pulverizing Company

—O—

Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois Glass Company

—P—

Pacific Grinding Wheel Manufacturing Co.
G. H. Packwood Manufacturing Company
Pangborn Corporation
Peninsular Grinding Wheel
Penn-Rillton Company
Pennsylvania Glass Sand Corporation
Pennsylvania Manufacturers' Association
Casualty Insurance Company *
Phelps Dodge Corporation
Philadelphia Quartz Company
Phillips Petroleum Company
Pittsburgh Coke & Chemical Company
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
Portland Cement Association
Pullman Incorporated Foundation

* Multiple Membership (24 member companies)

MEMBERS (continued)

—R—

Reaction Motors
Red Hill Grinding Wheel Corporation
Republic Steel Corporation
Research-Cottrell, Inc.
H. H. Robertson Company
Robertson Manufacturing Company
Rome Cable Corporation

—S—

Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauerstein Cements Company
Claude B. Schneible Company
Scott Aviation Corporation
Sharon Steel Corporation
Sheffield Steel
Shenango Furnace Company
Simonds Abrasive Company
Simonds Worden White Company
Socony Mobil Oil Company, Inc.
Standard Lime and Cement Company
Standard Oil Company of California
Standard Ultramarine and Color Company
Singer Grinding Wheel Company
Singer Beet Products Company

—T—

Tata Industries Limited
Taylor, Smith & Taylor Company
Tennessee Copper Company
Texas Gulf Sulphur Company
Titan Abrasives Company
Trenton Potteries Company
Trilon, Inc.
Tusco Corporation

—U—

Union Carbide Corporation
United States Pottery Association
United States Rubber Company
United States Steel Corporation
Universal-Rundle Corporation

—V—

Valley Mould & Iron Corporation
Vesuvius Crucible Company
Vitrified Wheel Company

—W—

Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
Western Maryland Railway Company
Westfield Grinding Wheel Company
Westinghouse Air Brake Company
Westinghouse Electric Corporation
Wheelabrator Corporation
Whitehead Brothers Company
Willson Products
Wyckoff Steel Company

—Y—

Youngstown Sheet and Tube Company

Kaiser Aluminum & Chemical Corp.
Kaiser Refractories Division

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Kennecott Copper Corporation
Keystone Brass Works, Inc.
Koppers Company, Inc.

Laundry & Cleaners Allied Trades Assn.
Leverack & Haines, Inc.
Lords Industries Association
London Transport Board

Macklin Company
Manufacturing Chemists Assn., Inc.
Marcona Mining Company
Maryland Self-Ins. & Empl. Comp. Assn.
J. S. McCormick Company
Merck and Company, Inc.
Metropolitan Life Insurance Company
Mid-West Abrasive Company
Miles Laboratories, Inc.
Mine Safety Appliances Company
Minnesota Mining & Manufacturing Co.
Mobil Oil Corporation
Jesse S. Morie & Son, Inc.

Nalco Chemical Company
Freeport Division
National Coal Association
National Crushed Stone Association, Inc.
National Glass Sand Corporation
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Insulation Manufacturers Assn.
National Lead Company
National Sand & Gravel Association, Inc.
National Slag Association
Nederland du Pont de Nemours N. V.

Osborn Manufacturing Company
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois Glass Company

Pacific Grinding Wheel Manufacturing Co.
C. H. Packwood Manufacturing Company
Pennsylvania Glass Sand Corporation
Pennsylvania Mfrs. Assn. Inc. Co.
Perkin-Elmer Corporation
Petroleo Brasileiro S. A.
Philadelphia Quartz Company
Pittsburgh Activated Carbon Company
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
H. K. Porter Company, Inc.
Simonds Worden White Works
Portland Cement Association

Raybestos-Manhattan, Inc.
Manhattan Rubber Division
Red Hill Grinding Wheel Corporation
Republic Steel Corporation
H. H. Robertson Company
Robertson Manufacturing Company

Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauers & Sons Cement Company
Simonds Abrasive Company
Sincclair-Koppers Company
Soap and Detergent Association
Sperry Rand Corporation
Louisiana Army Ammunition Plant
Standard Oil Company (New Jersey)
Stauffer Chemical Company
Sterling Grinding Wheel Company
Sturm, Ruger & Company, Inc.
Sugar Beet Products Company

Tata Services Limited
Tennessee Copper Company
Texas Gulf Sulphur Company
Thiokol Chemical Corporation
Reaction Motors Division
Titan Abrasives Company
Toma River Chemical Corporation

Union Carbide Corporation
United States Potters Association
United States Steel Corporation

Valley Mould and Iron Corporation
Van Straaten Chemical Company
Vesuvius Crucible Company

Wakefield Corporation
Peninsular Grinding Wheel Division
Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
Western Electric Company, Inc.
Westfield Grinding Wheel Company
Westinghouse Brake and Signal Company, Ltd.
Westinghouse Electric Corporation
West Virginia Pulp and Paper Company
Bleached Board Division

I H F MEMBERS

- Abrasive Grain Association
- Abrasive Products Company
- Acme Abrasive Company
- ... Air Preheater Company
- Alcolac Chemical Corporation
- Allegheny Ludlum Steel Corporation
- Allegheny Pittsburgh Coal Company
- Allied Chemical Corporation
- Aluminum Company of America
- American Abrasive Company
- American Can Company
- American Emery Wheel Works
- American Insurance Association
- American Iron and Steel Institute
- American Metal Climax, Inc.
- American Mining Congress
- American Mutual Insurance Alliance
- American Optical Company
- American Petroleum Institute
- American Potash & Chemical Corp.
- American Smelting & Refining Co.
- American Welding & Manufacturing Co.
- American Zinc Company
- American Zinc Institute, Inc.
- Anastasia Company
- Arnico Steel Corporation
- Armstrong Paint & Varnish Works, Inc.
- Asbestos Textile Institute
- Atlas Chemical Industries, Inc.
- Automobile Manufacturers Association, Inc.
- Avco Bay State Abrasives Division
- Frank Bancroft Company, Inc.
- Beryllium Corporation
- Blanchard Machine Company
- Bueing Company
- Brush Beryllium Company
- Buckeye Abrasive, Inc.
- George H. Bullard Company
- Bunker Hill Company
- Butler County Mushroom Farm, Inc.
- Calgon Corporation
- Packwood Manufacturing Co.
- Pittsburgh Activated Carbon Co.
- Can Manufacturers Institute, Inc.
- Carborundum Company
- Celanese Corporation
- Central Silica Company
- Chaves Dental Instrument Corp.
- Chicago Wheel & Manufacturing Co.
- Chrysler Corporation
- Cincinnati Milling Machine Co.
- Cincinnati Milling Products Division
- Robert F. Coleman, Inc.
- Colonial Abrasive Products Co.
- Comarco Aluminium (Bell Bay) Limited
- Companhia Siderurgica Nacional
- Consolidation Coal Company, Inc.
- Continental Can Company, Inc.
- Corn Products Company
- Cortland Grinding Wheels Corporation
- Creole Petroleum Corporation
- A. P. deSanno & Son, Inc.
- Diamond Alkali Company
- Dow Chemical Company
- Dravo Corporation
- E. I. du Pont de Nemours & Company
- Eastman Kodak Company
- Edmar Abrasive Company
- Electric Storage Battery Company
- Willson Products Division
- Electro Refractories & Abrasives Corp.
- Equitable Life Assurance Society of the U. S.
- Ethyl Corporation
- Exolon Company
- Ferro Corporation
- FMC Corporation
- FMR Corporation
- Foote Mineral Company
- Ford Motor Company
- Foundry Facings Manufacturers Group
- Gardner Machine Company
- Geigy-Warke Schweizerhalle A. G.
- General Abrasive Company, Inc.
- General Electric Company
- General Grinding Wheel Corporation
- General Mills, Inc.
- General Motors Corporation
- Georgia Kaolin Company
- Glenshaw Glass Company, Inc.
- Goodyear Tire & Rubber Company
- Grinding Wheel Institute
- Gulf Oil Corporation
- Gypsum Association
- Hall China Company
- Hamilton Emery & Corundum Company
- Hampden Grinding Wheel Company
- Hanford Occupational Health Foundation
- Hanson Company
- Hazleton Laboratories
- Hercules, Inc.
- Drakenfeld Division
- Hughson Chemical Company
- Inland Steel Company
- International Business Machines Corp.
- International Nickel Company, Inc.
- Huntington Alloy Products Division
- ITT Abrasive Products Company

• Multiple Membership

Johns-Manville Corporation
Jones & Laughlin Steel Corporation
Jowitt & Rodgers Company

Kasco Abrasives, Inc.
Kennecott Copper Corporation
Keystone Brass Works, Inc.
Koppers Company, Inc.

Laundry & Cleaners Allied Trades Assn.
Laversack & Haines, Inc.
Lead Industries Association
London Transport Board

Macklin Abrasives Company
Manufacturing Chemists Assn., Inc.
Marcona Mining Company
Maryland Self-Ins. & Empl. Comp. Assn.
J. S. McCormick Company
Merck and Company, Inc.
Metropolitan Life Insurance Company
Mid-West Abrasive Company
Miles Laboratories, Inc.
Mine Safety Appliances Company
Mobil Oil Corporation
Jesse S. Morris & Son, Inc.

Nalco Chemical Company
Freeport Division
National Coal Association
National Crushed Stone Association, Inc.
National Glass Sand Corporation
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Insulation Manufacturers Assn.
National Lead Company
National Sand & Gravel Association, Inc.
National Slag Association
Nederland du Pont de Nemours N. V.
Norton Company

Osborn Manufacturing Company
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois, Inc.

Pacific Grinding Wheel Manufacturing Co.
Pennsylvania Glass Sand Corporation
Pennsylvania Mfrs'. Assn. Inc. Co.
Perkin-Elmer Corporation
Petrobras/RPBC
Portland Cement Association
PPG Industries
Precision Grinding Wheel Co., Inc.

Raybestos-Manhattan, Inc.
Manhattan Rubber Division
Red Hill Grinding Wheel Corporation
Republic Steel Corporation
H. H. Robertson Company

Safety First Supply Company
St. Joseph Lead Company
Sandia Corporation
Sauerisen Cements Company
Sinclair-Koppers Company
Soap and Detergent Association
Sperry Rand Corporation
Louisiana Army Ammunition Plant
Standard Oil Company (Indiana)
Standard Oil Company (New Jersey)
Stauffer Chemical Company
Sturm, Ruger & Company, Inc.
Sugar Beet Products Company

Tata Services Limited
Tennessee Copper Company
Texas Gulf Sulphur Company
Thiokol Chemical Corporation
Reaction Motors Division
Toms River Chemical Corporation

Union Carbide Corporation
United States Potters Association
United States Steel Corporation

Valley Mould and Iron Corporation
Van Stratten Chemical Company
Vesuvius Crucible Company

Wallace-Murray Corporation
Simonds Abrasive Division
Waltham Grinding Wheel Company
Washington Mills Abrasive Company
Wedron Silica Company
Western Electric Company, Inc.
Westfield Grinding Wheel Company
Westinghouse Air Brake Division
Westinghouse Air Brake Company
Westinghouse Brake and Signal Company, Ltd.
Westinghouse Electric Corporation
West Virginia Pulp and Paper Company
Bleached Board Division

MEMBERS — 1968

Date Joined	Company	Date Joined	Company
1937	Abrasive Grain Association	1953	Continental Can Company, Inc.
1937	Abrasive Products Company	1968	Continental Insurance Companies
1956	Acme Abrasive Company	1955	Corn Products Company
1965	The Air Preheater Company	1937	Cortland Grinding Wheels Corp.
1936	Allegheny Ludlum Steel Corp.	1962	Crcole Petroleum Corporation
1940	Allegheny Pittsburgh Coal Co.		
1936	Aluminum Company of America	1937	A. P. deSanno & Son, Inc.
1969	*Aluminum Co. of Canada (Alcan)	1952	Diamond Shamrock Corporation
1937	American Abrasive Company	1968	DL Skin Care Products, Inc.
1947	American Can Company, Inc.	1939	Dow Chemical Company
1937	American Emery Wheel Works	1937	Dravo Corporation
1938	*American Insurance Association	1962	Er-L. du Pont de Nemours & Co.
1944	American Iron and Steel Institute		
1957	American Metal Climax, Inc.	1966	Eastman Kodak Company
1937	American Mining Congress	1963	Edmar Abrasive Company
1945	*American Mutual Insurance Alliance	1943	Electro Refractories & Abrasives Corp.
1944	American Optical Company	1956	Equitable Life Assurance Society of the United States
1967	American Petroleum Institute		
1964	American Potash & Chemical Corp.	1937	Ethyl Corporation
1936	American Smelting & Refining Co.	1937	Exolon Company
1967	American Welding & Manufacturing Co.		
1937	American Zinc Company	1949	Ferro Corporation
1936	Anaconda Company	1964	FMC Corporation
1961	Armco Steel Corporation	1967	FMR Corporation
1965	Armstrong Paint & Varnish Works, Inc.	1937	Foots Mineral Company
1966	Asbestos Textile Institute	1947	Ford Motor Company
1947	Atlas Chemical Industries, Inc.	1936	Foundry Facings Manufacturers Assn.
1968	Auto-Flo Company	1969	**Frantz, McConnell & Seymour
1936	Automobile Manufacturers Assn.		
1937	Avco Bay State Abrasives Division	1943	Gardner Machine Company
		1958	Geigy-Werke Schweizerhalle A.G.
1965	Frank Bancroft Company, Inc.	1937	General Abrasive Company, Inc.
1955	Beryllium Corporation	1947	General Electric Company
1968	Bituminous Coal Operators' Assn.	1937	General Grinding Wheel Corp.
1967	Blanchard Machine Company	1951	General Mills, Inc.
1956	The Boeing Company	1942	General Motors Corporation
1944	Brush Beryllium Company	1954	Georgia Kaolin Company
1967	Buckeye Abrasive, Inc.	1968	Glass Container Manufacturers Institute, Inc.
1952	George H. Bullard Company, Inc.		
1936	Bunker Hill Company	1937	Glenshaw Glass Company, Inc.
1961	Butler County Mushroom Farm, Inc.	1967	Goodyear Tire & Rubber Company
		1937	Grinding Wheel Institute
1953	Can Manufacturers Institute, Inc.	1950	Gulf Oil Corporation
1937	Carborundum Company		
1952	Celanese Corporation	1936	Hall China Company
1937	Central Silica Company	1937	Hamilton Emery & Corundum Company
1968	Certain-teed Products Corporation Gustin-Bacon Division	1937	Hampden Grinding Wheel Company
1967	Chayer Dental Instrument Company	1966	Hanford Occupational Health Foundation
1937	Chicago Wheel & Manufacturing Co.	1967	Hanson Company
1966	Chrysler Corporation	1959	Hazleton Laboratories
1954	Cincinnati Milling Machine Co. Cincinnati Milling Products Div.	1937	Hercules, Inc. Drakenfild Division
1944	Robert F. Coleman, Inc.		
1951	Colonial Abrasive Products Co.	1947	Inland Steel Company
1963	Cornalco Aluminum (Bell Bay) Ltd.	1947	International Business Machines Corp.
1958	Companhia Siderurgica Nacional	1966	International Nickel Company, Inc.
1936	Consolidation Coal Company, Inc.		Huntington Alloy Products Division

*Multiple membership

**January 1, 1969 member

Date Joined	Company	Date Joined	Company
1967	ITT Abrasive Products Co.	1967	Precision Grinding Wheel Company, Inc.
1936	Johns-Manville Corporation	1968	Raybestos-Manhattan, Inc.
1936	Jones & Laughlin Steel Corp.		Manhattan Rubber Division
1963	Jowitt & Rodgers Company	1952	Red Hill Grinding Wheel Corporation
		1937	H. H. Robertson Company
1967	Kasco Abrasives, Inc.		
1953	Kennecott Copper Corporation	1937	St. Joseph Lead Company
1965	Keystone Brass Works, Inc.	1956	Sauereisen Cements Company
1962	Koppers Company, Inc.	1966	Sinclair-Koppers Company
		1956	Soap and Detergent Association
1968	Homer Laughlin China Company	1962	Sperry Radco Corporation
1966	Laundry and Cleaners Allied Trades Association		Louisiana Army Ammunition Plant
1964	Leverack & Haines, Inc.	1968	Sprayed Mineral Fiber Manufacturers Association, Inc.
1936	Lead Industries Association	1967	Standard Oil Company (Indiana)
1958	London Transport Board	1964	Standard Oil Company (New Jersey)
1961	Lord Corporation	1965	Sturm, Ruger & Company, Inc.
	Hugheon Chemical Co. Div.	1953	Sugar Beet Products Company
		1968	Systemed Corporation
1937	J. S. McCormick Company		
1937	Macklin Company	1945	Tata Services Limited
1966	Manufacturing Chemists' Assn.	1946	Tennessee Copper Company
1966	Marcona Mining Company		Div. of Tennessee Corporation
1949	Metropolitan Life Insurance Co.	1938	Texas Gulf Sulphur Company
1937	Mid-West Abrasive Company	1960	Toms River Chemical Corporation
1968	Midwestern Coating Corporation		
1936	Mine Safety Appliances Company	1936	Union Carbide Corporation
1968	Mobay Chemical Company	1936	United States Potters Association
1966	Mobil Oil Corporation	1936	United States Steel Corporation
1956	Jesse S. Morie & Son, Inc.		
		1937	Valley Mould and Iron Corporation
1963	Nalco Chemical Company	1960	Van Straaten Chemical Company
	Freeport Division	1938	Vesuvius Crucible Company
1966	National Coal Association		
1937	National Crushed Stone Assn., Inc.	1967	Wallace-Murray Corporation
1947	National Glass Sand Corporation		Simonds Abrasive Division
1937	National Grinding Wheel Co., Inc.	1937	Waltham Grinding Wheel Company
1937	National Industrial Sand Assn.	1937	Washington Mills Abrasive Company
1966	National Insulation Manufacturers Association	1937	Wearon Silica Company
		1962	Western Electric Company, Inc.
1937	National Lead Company	1937	Westfield Grinding Wheel Company
1945	National Sand and Gravel Assn., Inc.	1967	Westinghouse Air Brake Company
1938	National Slag Association		Westinghouse Air Brake Division
1962	Nederland duPont deNemours N. V.	1961	Westinghouse Brake and Signal Co., Ltd.
1967	Norton Company	1937	Westinghouse Electric Corporation
	Grinding Wheel Division	1968	Arthur C. Withrow Company
1963	Osborn Manufacturing Company	1936	Zinc Institute, Inc.
1953	Owens-Corning Fiberglass Corp.		
1936	Owens-Illinois, Inc.		
1954	Pacific Grinding Wheel Mfg. Co.		
1937	Pennsylvania Glass Sand Corporation		
1956	Pennsylvania Manufacturers' Assn. Insurance Company		
1960	Petrobras/RPBC		
1964	Pittsburgh Activated Carbon Co. Div. of Calgon Corporation		
1938	Portland Cement Association		
1937	PPG Industries		

MEMBERS — 1968

Date Joined	Company	Date Joined	Company
1937	Abrasive Grain Association	1953	Continental Can Company, Inc.
1937	Abrasive Products Company	1968	Continental Insurance Companies
1956	Acme Abrasive Company	1955	Corn Products Company
1965	The Air Preheater Company	1937	Cortland Grinding Wheels Corp.
1936	Allegheny Ludlum Steel Corp.	1962	Creole Petroleum Corporation
1940	Allegheny Pittsburgh Coal Co.		
1936	Aluminum Company of America	1937	A. P. deSanno & Son, Inc.
1969	Aluminum Co. of Canada (Alcan)	1952	Diamond Shamrock Corporation
1937	American Abrasive Company	1968	DL Skin Care Products, Inc.
1947	American Can Company, Inc.	1939	Dow Chemical Company
1937	American Emery Wheel Works	1937	Dravo Corporation
1938	American Insurance Association	1962	E. I. du Pont de Nemours & Co.
1944	American Iron and Steel Institute		
1957	American Metal Climax, Inc.	1966	Eastman Kodak Company
1937	American Mining Congress	1963	Edmar Abrasive Company
1945	American Mutual Insurance Alliance	1943	Electro Refractories & Abrasives Corp.
1944	American Optical Company	1956	Equitable Life Assurance Society of the United States
1967	American Petroleum Institute		
1964	American Potash & Chemical Corp.	1937	Ethyl Corporation
1936	American Smelting & Refining Co.	1937	Exolon Company
1967	American Welding & Manufacturing Co.		
1937	American Zinc Company	1949	Ferro Corporation
1936	Anaconda Company	1964	FMC Corporation
1961	Armco Steel Corporation	1967	FMR Corporation
1965	Armstrong Paint & Varnish Works, Inc.	1937	Foots Mineral Company
1966	Asbestos Textile Institute	1947	Ford Motor Company
1947	Atlas Chemical Industries, Inc.	1936	Foundry Facings Manufacturers Assn.
1968	Auto-Flo Company	1969	Frantz, McConnell & Seymour
1936	Automobile Manufacturers Assn.		
1937	Avco Bay State Abrasives Division	1943	Gardner Machine Company
		1958	Geigy-Werke Schweizerhalle A. G.
1965	Frank Bancroft Company, Inc.	1937	General Abrasive Company, Inc.
1955	Beryllium Corporation	1947	General Electric Company
1968	Bituminous Coal Operators' Assn.	1937	General Grinding Wheel Corp.
1967	Blanchard Machine Company	1951	General Mills, Inc.
1956	The Boeing Company	1942	General Motors Corporation
1944	Brush Beryllium Company	1954	Georgia Kaolin Company
1967	Buckeye Abrasive, Inc.	1968	Glass Container Manufacturers Institute, Inc.
1952	George H. Bullard Company, Inc.		
1936	Bunker Hill Company	1937	Glenahaw Glass Company, Inc.
1961	Butler County Mushroom Farm, Inc.	1967	Goodyear Tire & Rubber Company
		1937	Grinding Wheel Institute
1953	Can Manufacturers Institute, Inc.	1950	Gulf Oil Corporation
1937	Carborundum Company		
1952	Celanese Corporation	1936	Hall China Company
1937	Central Silica Company	1937	Hamilton Emery & Corundum Company
1968	Certain-teed Products Corporation Gustin-Bacon Division	1937	Hampden Grinding Wheel Company
1967	Chayes Dental Instrument Company	1966	Hanford Occupational Health Foundation
1937	Chicago Wheel & Manufacturing Co.	1967	Hanson Company
1966	Chrysler Corporation	1959	Hazleton Laboratories
1954	Cincinnati Milling Machine Co. Cincinnati Milling Products Div.	1937	Hercules, Inc. Drakenfield Division
1944	Robert F. Coleman, Inc.		
1951	Colonial Abrasive Products Co.	1947	Inland Steel Company
1963	Comalco Aluminum (Bell Bay) Ltd.	1947	International Business Machines Corp.
1958	Companhia Siderurgica Nacional	1966	International Nickel Company, Inc.
1936	Consolidation Coal Company, Inc.		Huntington Alloy Products Division

*Multiple membership

**January 1, 1969 member

Date Joined	Company	Date Joined	Company
1967	ITT Abrasive Products Co.	1967	Precision Grinding Wheel Company, Inc.
1936	Johns-Manville Corporation	1968	Raybestos-Manhattan, Inc.
1936	Jones & Laughlin Steel Corp.		Manhattan Rubber Division
1963	Jowitt & Rodgers Company	1952	Red Hill Grinding Wheel Corporation
		1937	H. H. Robertson Company
1967	Kasco Abrasives, Inc.		
1953	Kennecott Copper Corporation	1937	St. Joseph Lead Company
1965	Keystone Brass Works, Inc.	1956	Sauereisen Cements Company
1942	Koppers Company, Inc.	1966	Sinclair-Koppers Company
		1956	Soap and Detergent Association
1968	Homer Laughlin China Company	1962	Sperry Rand Corporation
1966	Laundry and Cleaners Allied Trades Association		Louisiana Army Ammunition Plant
1964	Leverack & Haines, Inc.	1968	Sprayed Mineral Fiber Manufacturers Association, Inc.
1936	Lead Industries Association	1967	Standard Oil Company (Indiana)
1958	London Transport Board	1964	Standard Oil Company (New Jersey)
1961	Lord Corporation	1965	Sturm, Ruger & Company, Inc.
	Hughes Chemical Co. Div.	1953	Sugar Beet Products Company
		1968	Systemed Corporation
1937	J. S. McCormick Company		
1937	Macklin Company	1945	Tata Services Limited
1966	Manufacturing Chemists' Assn.	1946	Tennessee Copper Company
1966	Marcona Mining Company		Div. of Tennessee Corporation
1949	Metropolitan Life Insurance Co.	1938	Texas Gulf Sulphur Company
1937	Mid-West Abrasive Company	1960	Toms River Chemical Corporation
1968	Midwestern Coating Corporation		
1936	Mine Safety Appliances Company	1936	Union Carbide Corporation
1968	Mobay Chemical Company	1936	United States Potters Association
1966	Mobil Oil Corporation	1936	United States Steel Corporation
1956	Jesse S. Morris & Son, Inc.		
		1937	Valley Mould and Iron Corporation
1963	Nalco Chemical Company	1960	Van Straaten Chemical Company
	Freeport Division	1938	Vesuvius Crucible Company
1966	National Coal Association		
1937	National Crushed Stone Assn., Inc.	1967	Wallace-Murray Corporation
1947	National Glass Sand Corporation		Simonds Abrasive Division
1937	National Grinding Wheel Co., Inc.	1937	Waltham Grinding Wheel Company
1937	National Industrial Sand Assn.	1937	Washington Mills Abrasive Company
1966	National Insulation Manufacturers Association	1937	Wecon Silica Company
		1962	Western Electric Company, Inc.
1937	National Lead Company	1937	Westfield Grinding Wheel Company
1945	National Sand and Gravel Assn., Inc.	1967	Westinghouse Air Brake Company
1938	National Slag Association		Westinghouse Air Brake Division
1962	Nederland duPont de Nemours N. V.	1961	Westinghouse Brake and Signal Co., Ltd.
1967	Norton Company	1937	Westinghouse Electric Corporation
	Grinding Wheel Division	1968	Arthur C. Withrow Company
1963	Osborn Manufacturing Company	1936	Zinc Institute, Inc.
1953	Owens-Corning Fiberglass Corp.		
1936	Owens-Illinois, Inc.		
1954	Pacific Grinding Wheel Mfg. Co.		
1937	Pennsylvania Glass Sand Corporation		
1956	Pennsylvania Manufacturers' Assn. Insurance Company		
1960	Petrobras/RPBC		
1964	Pittsburgh Activated Carbon Co. Div. of Calgon Corporation		
1938	Portland Cement Association		
1937	PPG Industries		

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Date Joined	Company
1937	Abrasive Grain Association
1970	Abrasive Materials Division Norton Company
1937	Abrasive Products Company
1970	Abrasives Division Bendix Corporation
1966	Acme Abrasive Company
1936	Allegheny Ludlum Steel Corp.
1966	Allied Chemical Corporation
1970	Allison Campbell Division American Chain & Cable Co., Inc.
1936	Aluminum Company of America
1969	Aluminum Co. of Canada (Alcan)
1947	American Can Company, Inc.
1937	American Emery Wheel Works
1938	American Insurance Association
1944	American Iron and Steel Institute
1967	American Metal Climax, Inc.
1937	American Mining Congress
1946	American Mutual Insurance Alliance
1944	American Optical Company
1967	American Petroleum Institute
1964	American Potash & Chemical Corp.
1936	American Smelting & Refining Co.
1969	American Standard, Inc.
1969	American Textile Mfrs. Institute
1934	Anaconda Company
1961	Armco Steel Corporation
1966	Armstrong Chemcon, Inc.
1969	Asbestos Cement Products Assn.
1966	Asbestos Textile Institute
1970	Atlantic Abrasive Corporation
1947	Atlas Chemical Industries, Inc.
1966	Auto-Flo Company Division of Masco Corporation
1936	Automobile Manufacturers Assn.
1937	Avco Bay State Abrasives Division
1970	The Bahnsen Company
1966	Frank Bancroft Company, Inc.
1966	Bituminous Coal Operators' Assn.
1966	The Boeing Company
1970	Borden, Inc.
1970	Brookway Glass Company, Inc.
1944	Bruen Beryllium Company
1967	Buckeye Abrasive, Inc.
1962	George H. Bullard Company, Inc.
1961	Butler County Mushroom Farm, Inc.
1963	Can Manufacturers Institute, Inc.
1937	Carborundum Company
1932	Celanese Corporation
1937	Central Silica Company
1967	Chayes Abrasives Division Chayes Dental Instrument Co.
1937	Chicago Wheel & Manufacturing Co.
1954	Cincinnati Milling Products Div. Cincinnati Milling Machine Co.
1944	Robert F. Coleman, Inc.
1961	Colonial Abrasive Products Co.
1963	Comasco Aluminum (Bay Bay) Ltd.
1966	Companhia Siderurgica Nacional
1936	Consolidation Coal Company, Inc.
1953	Continental Can Company, Inc.
1966	Continental Insurance Companies
1937	Cortland Division American Abrasive Corporation
1955	CPC International
1962	Credle Petroleum Corporation
1937	A. P. deSanto & Son, Inc.
1952	Diamond Shamrock Corporation
1966	DL Skin Care Products, Inc.
1950	Dow Chemical Corporation
1937	Dresser Division Hercules, Inc.

*Multiple membership

Date Joined	Company
1937	Dravo Corporation
1962	E. I. du Pont de Nemours & Co.
1966	Eastman Kodak Company
1963	Edmar Abrasive Company
1943	Electro Refractories & Abrasives Division of Ferro Corporation
1969	Environmental Sciences, Inc.
1956	Equitable Life Assurance Society of the United States
1937	Ethyl Corporation
1937	Exolon Company
1949	Ferro Corporation
1964	FMC Corporation
1967	FMR Corporation
1937	Foots Mineral Company
1947	Ford Motor Company
1969	Fostoria Glass Company
1936	Foundry Supply Manufacturers Group
1969	Frantz, McConnell & Seymour
1963	Freeport Division Nalco Chemical Company
1943	Gardner Machine Company
1958	Geigy-Werke Schwellenbach A. G.
1937	General Abrasive Company
1966	General Asbestos & Rubber Div. Raybestos-Mannhattan, Inc.
1970	General Dynamics Corporation
1947	General Electric Company
1937	General Grinding Wheel Corp.
1951	General Mills, Inc.
1942	General Motors Corporation
1954	Georgia Kaolin Company
1966	Glass Containers Mfrs. Institute, Inc.
1937	Glenshaw Glass Company, Inc.
1967	Goodyear Tire & Rubber Company
1967	Grinding Wheel Division Norton Company
1937	Grinding Wheel Institute
1950	Gulf Oil Corporation
1966	Gustin-Bacon Division Certain-teed Products Corp.
1936	Hail China Company
1937	Hamilton Division American Abrasive Corporation
1966	Hanford Environmental Health Fdn.
1967	Hanson Company
1956	Hazleton Laboratories
1961	Hughson Chemical Company Division of Lord Corporation
1937	Huntington Alloy Products Division International Nickel Co., Inc.
1947	Inland Steel Company
1947	International Business Machines Corp.
1967	ITT Abrasive Products Company
1936	Johns-Manville Corporation
1939	Jones & Laughlin Steel Corp.
1963	Jowett & Rodgers Company
1967	Kasco Abrasives, Inc.
1955	Kaweckl Beryco Industries, Inc.
1948	Kennecott Copper Corporation
1942	Koppers Company, Inc.
1970	Laclede Steel Company
1966	Homer Laughlin China Company
1964	Laverack & Haines, Inc.
1938	Lead Industries Association
1958	London Transport Board
1962	Louisiana Army Ammunition Plant Sperry-Rand Corporation
1937	J. S. McCormick Company
1946	Manhattan Rubber Division Raybestos-Mannhattan, Inc.
1966	Manufacturing Chemists Assn., Inc.
1966	Marcona Mining Company
1949	Metropolitan Life Insurance Co.

Date Joined	Company
1968	Midwestern Coating Corporation
1936	Mine Safety Appliances Company
1949	Mobil Oil Corporation
1956	Jesse S. Morie & Son, Inc.
1966	National Coal Association
1937	National Crushed Stone Assn., Inc.
1969	National Forge Company
1947	National Glass Sand Corporation
1937	National Grinding Wheel Division Federal-Mogul Corporation
1937	National Industrial Sand Assn.
1966	National Insulation Mfrs. Assn.
1937	National Lead Company
1945	National Sand & Gravel Assn., Inc.
1938	National Slag Association
1962	Nederland du Pont de Nemours N. V.
1963	Osborn Manufacturing Company
1953	Owens-Corning Fiberglass Corp.
1936	Owens-Illinois, Inc.
1954	Pacific Grinding Wheel Company, Inc.
1937	Pennsylvania Glass Sand Corp.
1956	Pennsylvania Manufacturers' Assn. Insurance Company
1960	Petrobras/RPBC
1964	Pittsburgh Activated Carbon Div. Calgon Corporation
1970	Pneumafil Corporation
1938	Portland Cement Association
1937	PPG Industries
1967	Precision Grinding Wheel Co., Inc.
1952	Red Hill Grinding Wheel Corp.
1970	Rex-Cut Products Company Division of Cleveland Corp.
1937	H. H. Robertson Company
1969	Rome Division Revere Copper and Brass, Inc.
1937	St. Joseph Lead Company
1956	Seuereisen Cements Company
1967	Simonds Abrasive Division Wallace-Murray Corporation
1966	Sinclair-Koppers Company
1956	Soap and Detergent Association
1958	Sprayed Mineral Fiber Mfrs. Assn., Inc.
1964	Standard Oil Company (New Jersey)
1962	Stauffer Chemical Company
1965	Sturm, Ruger & Company, Inc.
1953	Sugar Beet Products Company
1968	Systemed Corporation
1945	Tata Services Limited
1969	Tenneco, Inc.
1946	Tennessee Copper Company Div. of Tennessee Corporation
1938	Texas Gulf Sulphur Company
1950	Toms River Chemical Corporation
1970	Travelers Insurance Companies
1938	Union Carbide Corporation
1968	United States Asbestos Division Raybestos-Mannhattan, Inc.
1936	United States Potters Association
1936	United States Steel Corporation
1960	Van Straten Chemical Company
1938	Vesuvius Crucible Company
1937	Waltham/Hampden Grinding Wheel Co.
1937	Washington Mills Abrasive Co.
1937	Wedron Silica Company
1962	Western Electric Company, Inc.
1937	Westfield Grinding Wheel Co.
1937	Westinghouse Electric Corporation
1966	Arthur C. Withrow Company
1936	Zinc Institute, Inc.

MEMBERS

Date Joined	Company	Date Joined	Company	Date Joined	Company
1917	* Abrasive Grain Association	1937	A. P. deSanno & Son, Inc.	1970	Medical Supply Company
1970	Abrasive Materials Division Norton Company	1952	Diamond Shamrock Corporation	1970	Metal Carbides Corporation
1937	Abrasive Products Company	1939	Dow Chemical Corporation	1949	Metropolitan Life Insurance Comp.
1970	Abrasives Division Bendix Corporation	1937	Drakenfeld Division, Hercules, Inc.	1937	Michigan Abrasive Company
1936	Acme Abrasive Company	1937	Dravo Corporation		Grinding Wheel Division
1971	Adamas Carbide Corporation	1962	E. I. du Pont de Nemours & Co.	1968	Midwestern Coating Corporation
1936	Allegheny Ludlum Steel Corporation	1966	Eastman Kodak Company	1936	Mine Safety Appliances Company
1936	Allied Chemical Corporation	1963	Edmar Abrasive Company	1949	Mobil Oil Corporation
1970	Allison Campbell Division American Chain & Cable Co., Inc.	1943	Electro Refractories & Abrasives Division of Ferro Corporation	1936	Jesse S. Morse & Son, Inc.
1936	Aluminum Company of America	1969	Environmental Sciences, Inc.	1971	Multi Metals, Inc.
1969	Aluminum Company of Canada, Ltd.	1936	Equirable Life Assurance Society of the United States	1971	National Association of Manufactur
1971	American Apparel Manufacturers Assn.			1966	National Coal Association
1947	American Can Company	1937	Ethyl Corporation	1937	National Grinding Wheel Division Federal-Mogul Corporation
1938	* American Insurance Association	1937	Exolon Company	1937	National Industrial Sand Association
1944	American Iron and Steel Institute	1967	FMR Corporation	1966	National Insularum Mfrs. Association
1937	American Metal Climax, Inc.	1949	Ferro Corporation	1937	National Lead Company
1937	American Mining Congress	1971	Firth Sterling, A Teledyne Company	1938	National Slag Association
1945	* American Mutual Insurance Alliance	1937	Foots Mineral Company	1962	Nederland du Pont de Nemours N
1944	American Optical Corporation	1947	Ford Motor Company	1971	Newcomer Products, Inc.
1967	American Petroleum Institute	1936	Foundry Supply Manufacturers' Group	1963	Osborn Manufacturing Company
1946	American Smelting & Refining Company	1963	Freeport Division Nalco Chemical Company	1933	Owens-Corning Fiberglas Corporation
1969	American Standard, Inc.	1943	Gardner Machine Company	1936	Owens-Illinois, Inc.
1969	American Textile Mfrs. Institute	1937	General Abrasive Company	1937	PPG Industries, Inc.
1936	Anacunda Company	1968	General Asbestos & Rubber Division Raybestos-Manhattan, Inc.	1931	Pacific Grinding Wheel Company, Inc.
1970	Anso American Corp. of South Africa, Ltd.	1970	General Cigar Company	1937	Pennsylvania Glass Sand Corporation
1970	Atlas Insurance Company	1970	Gen. Dynamics Corporation	1970	Pneumant Corporation
1963	Armstrong Chemcon, Inc.	1947	General Electric Company	1938	Portland Cement Association
1969	Asbestos Cement Products Association	1937	General Grinding Wheel Corporation	1970	Potters Brothers, Inc.
1970	Asbestoplay Corporation	1931	General Mills, Inc.	1967	Precision Grinding Wheel Co., Inc.
1966	Asbestos Textile Institute	1942	General Motors Corporation	1932	Red Hill Grinding Wheel Corporation
1970	Atlantic Abrasive Corporation	1954	Georgia Kaolin Company	1970	Rex-Cut Products Company
1947	Atlas Chemical Industries, Inc.	1968	Glass Containers Mfrs. Institute, Inc.		Division of Clevopak Corporation
1968	Auto-Flo Company	1937	Glenshaw Glass Company, Inc.	1937	H. H. Robertson Company
	Division of Masco Corporation	1967	Goodyear Tire & Rubber Company	1937	St. Joe Minerals Corporation
1946	Automobile Manufacturers Association	1967	Grinding Wheel Division Norton Company	1971	Sandvik Steel, Inc.
1947	Aven Bay State Abrasives Division	1937	* Grinding Wheel Institute	1936	Sauerisen Cements Company
1970	The Bahson Company	1950	Gulf Oil Corporation	1971	Selenium-Tellurium Development Ass
1963	Frank Bancroft Company, Inc.	1968	Gustin Bacon Division Certain-Tred Products Corporation	1967	Simonds Abrasive Division Wallace-Murray Corporation
1936	The Bueink Company			1966	Sinclair-Koppers Company
1970	Borden, Inc.	1936	Hall China Company	1936	Soap and Detergent Association
1971	Bright Boy Industrial Division Weldon Roberts Rubber Company	1937	Haggen Division American Abrasive Corporation	1964	Sprayed Mineral Fiber Mfrs. Assn., Inc.
1941	Brush Beryllium Company			1962	Standard Oil Company (New Jersey)
1967	Buckeye Abrasive, Inc.	1966	Hanford Environmental Health Fdn.	1962	Stauffer Chemical Company
1952	George H. Bullard Company, Inc.	1967	Hanson Company	1963	Sturm, Ruger & Company, Inc.
1961	Butler County Mushroom Farm, Inc.	1937	Huntinton Alloy Products Division International Nickel Company, Inc.	1933	Sugar Beet Products Company
1955	CP International	1971	Hydro Carbide Corporation	1964	Syntex Corporation
1933	Can Manufacturers Institute, Inc.	1947	Inland Steel Company	1959	TRW Hazleton Laboratories
1971	Carbide Division, Hawmet Corp.	1947	International Business Machines Corp.	1945	Tara Services Limited --
1937	Carborundum Company	1970	International Lead Zinc Research Org.	1969	Tenneco, Inc.
1952	Carmet Company	1967	ITT Abrasive Products Company	1938	Texas Gulf Sulphur Company
1952	Celanese Corporation	1936	Johns-Manville Corporation	1960	Toms River Chemical Corporation
1971	* Cemented Carbide Producers Assn.	1939	Jones & Laughlin Steel Corporation	1970	Travelers Insurance Companies
1947	Central Silica Company	1963	Jowett & Rodgers Company	1971	Tungsten Alloy Mfr. Co., Inc.
1967	Chaves Abrasives Division Chaves Dental Instrument Co.	1967	Kasco Abrasives Coleman Systems Company	1936	Union Carbide Corporation
1947	Chicago Wheel & Manufacturing Co.	1933	Kaweco Beryllio Industries, Inc.	1970	United States Mineral Products Co.
1948	Ciba Geigy AG.	1946	Kennecott Copper Corporation	1936	United States Proctors Association
1944	Cincinnati Milacron, Inc. Products Division	1942	Koppers Company, Inc.	1936	United States Steel Corporation
1944	Robert F. Coleman, Inc.	1970	Laclede Steel Company	1960	Van Straten Chemical Company
1951	Colonial Abrasive Products Company	1968	Homer Laughlin China Company	1938	Vesuvius Crucible Company
1938	Companhia Siderurgica Nacional	1964	Laverack & Haines, Inc.	1971	VR/Wesson Company
1946	Continuation Coal Company, Inc.	1936	Lead Industries Association, Inc.	1971	Walmer Corporation
1933	Continental Can Company, Inc.	1938	London Transport Executive	1937	Waltham/Hampden Grinding Wheel Co.
1968	Continental Insurance Companies	1962	Louisiana Army Ammunition Plant Sperry Rand Corporation	1937	Washington Mills Abrasive Company
1946	Coppernill Operations Div. of Cities Service Company	1947	J. S. McCormick Company	1937	Wedron Silica Company
1957	Cutlana Division American Abrasive Corporation	1946	Manhattan Rubber Division Raybestos-Manhattan, Inc.	1971	Wende-Sonns/Unimet, United Greenfield Div. of TRW, Inc.
1962	Cycle Petroleum Corporation	1966	Manufacturing Chemists Association	1962	Western Electric Company, Inc.
		1966	Martona Mining Company	1937	Westfield Grinding Wheel Company

* Membership in 1970

‡ Group membership

NEW MEMBERS -- 1971

American Apparel Manufacturer's Association
American Foundrymen's Society
American Steel Foundries
Argonaut Insurance Company
Asbestospray Corporation
Cemented Carbide Products Association
Chemico Metals Corp.
General Cigar Company
International Lead Zinc Research Organization
National Association of Manufacturers
Selenium-Tellurium Development Association, Inc.
Teledyne Brown Engineering

-- from Minutes of the Board of Trustees Meetings

March 9 & October 11, 1971

NEW MEMBERS -- 1972

Buhl Optical Company
Chicopee Manufacturing Company
Columbia Gas System Service Corporation
Consolidated Natural Gas Service Co.,
and Peoples Natural Gas Company
Industrial Bio-Test Laboratories, Inc.
Lee-Norse Company
Miles Laboratories
Organization Resources Counselors, Inc.
Safety First Industries, Inc.
Shell Oil Company
Tri-State Engineering Company

-- from Minutes of the Board of Trustees Meetings
February 8, May 9, and October 9, 1972

MEMBERS

Date Joined	Company	Date Joined	Company
1937	*Abrasive Grain Association	1952	Celanese Corporation
1936	Allegheny Ludlum Industries, Inc.	1971	*Cemented Carbide Producers Association
1956	Allied Chemical Corporation	1968	Certain-Ted Saint Gobain Insulation Corp.
1936	Aluminum Company of America	1972	Chicopee Manufacturing Company
1969	Aluminum Company of Canada, Ltd.	1958	Ciba-Geigy AG
1947	American Can Company	1972	Columbia Gas System Service Corporation
1971	American Foundrymen's Society	1958	Companhia Siderurgica Nacional
1938	*American Insurance Association	1973	Consolidated Edison Company of N.Y., Inc.
1944	American Iron and Steel Institute	1972	Consolidated Natural Gas Service Company
1957	American Metal Climax, Inc.	1936	Consolidation Coal Company, Inc.
1937	American Mining Congress	1953	Continental Can Company, Inc.
1945	*American Mutual Insurance Alliance	1962	Creole Petroleum Corporation
1944	American Optical Corporation		
1967	American Petroleum Institute	1952	Diamond Shamrock Corporation
1936	American Smelting & Refining Company	1973	Dow Chemical U.S.A.
1969	American Textile Mfrs. Institute, Inc.	1937	Drakenfeld Division Hercules, Inc.
1970	Argonaut Insurance Company	1937	Dravo Corporation, Manufacturing Group
1973	Asbestospray Corporation		
1970	The Bahnsen Company	1936	E. I. du Pont de Nemours & Company
1970	Brockway Glass Company, Inc.	1966	Eastman Kodak Company
1944	Brush Wellman, Inc.	1973	Minerals & Chemical Division Engelhard Minerals and Chemical Corp.
1972	Buhl Optical Company	1973	Environmental Shields Services, Inc.
1961	Butler County Mushroom Farm, Inc.	1956	Equitable Life Assurance Society of the United States
1955	CPC International, Inc.	1964	Exxon Corporation
1953	Can Manufacturers Institute, Inc.		

*Multiple Membership

Date Joined	Company	Date Joined	Company
1973	Falcon Foundry Company	1955	Kaweck Berylo Industries, Inc.
1949	Ferro Corporation	1973	Keystone Metal Company
1947	Ford Motor Company	1942	Koppers Company, Inc.
1936	Foundry Supply Manufacturers Group		
1968	General Asbestos & Rubber Division, Raybestos-Manhattan, Inc.	1970	Laclede Steel Company
1970	General Cigar Company, Inc.	1968	Homer Laughlin China Company
1947	General Electric Company	1972	Lee-Norse Company
1951	General Mills, Inc.	1962	Louisiana Army Ammunition Plant, Sperry Rand Corporation
1942	General Motors Corporation		
1954	Georgia Kaolin Company	1937	J.S. McCormick Company
1937	Glenshaw Glass Company, Inc.	1966	Marcona Mining Company
1937	*Grinding Wheel Institute	1970	Marlon Health and Safety
1950	Gulf Oil Corporation	1937	Metropolitan Life Insurance Company
		1965	Miles Laboratories, Inc.
1936	Hall China Company	1936	Mine Safety Appliances Company
1972	Heinz U.S.A. (Div. of H.J. Heinz Co.)	1949	Mobil Oil Corporation
1973	Howell Industrial Clinic	1956	Jesse S. Morie & Son, Inc.
1937	Huntingdon Alloy Products Division, International Nickel Co., Inc.	1936	Motor Vehicle Mfrs. Assn. of U.S., Inc.
		1937	NL Industries, Inc.
1947	ICI America, Inc.	1971	National Association of Manufacturers
1972	Industrial Bio-Test Laboratories, Inc.	1973	National Forge Company
1973	Ingersoll-Rand Company	1938	National Slag Association
1947	Inland Steel Company		
1947	International Business Machines Corp.	1972	Organization Resources Counselors, Inc.
1970	International Lead Zinc Research Org.	1953	Owens-Corning Fiberglass Corporation
		1936	Owens-Illinois, Inc.
1936	Johna-Manville Corporation	1937	PPG Industries, Inc.
1939	Jones & Laughlin Steel Corporation	1937	Pennsylvania Glass Sand Corporation

1937	*Abrasive Grains Association	1937	*Grinding Wheel Institute
1936	Allegheny Ludlum Industries, Inc.	1950	Gulf Oil Corporation
1956	Allied Chemical Corporation	1936	Hall China Company
1936	Aluminum Company of America	1972	Heinz U.S.A. (Div. of H. J. Heinz Co.)
1969	Aluminum Company of Canada, Ltd.	1973	Howell Industrial Clinic
1947	American Can Company	1937	Huntington Alloys, Inc.
1971	American Foundrymen's Society	1975	Industrial Gasket & Shim Co., Inc.
1938	*American Insurance Association	1973	Ingersoll-Rand Company, Inc.
1944	American Iron and Steel Institute	1947	Inland Steel Company
1957	American Metal Climax, Inc.	1947	IBM Corporation
1937	American Mining Congress	1970	International Lead Zinc Research Org.
1945	*American Mutual Insurance Alliance	1974	International Technical Information Inst.
1944	American Optical Corporation	1936	Johns-Manville Corporation
1967	American Petroleum Institute	1939	Jones & Laughlin Steel Corporation
1936	ASARCO Incorporated	1955	Kawecky Berylco Industries, Inc.
1969	American Textile Mfrs. Institute, Inc.	1974	Kopp Glass, Inc.
1966	ARCO/Polymers, Inc.	1942	Koppers Company, Inc.
1970	Argonaut Insurance Company	1970	Laclede Steel Company
1974	BASF Wyandotte Corporation	1968	Homer Laughlin China Company
1970	The Babson Company	1974	Lenox Crystal, Inc.
1944	Brush Wellman, Inc.	1937	J. S. McCormick Company
1955	CPC International, Inc.	1966	Marcona Mining Company
1951	Can Manufacturers Institute, Inc.	1970	Marion Health & Safety, Inc.
1952	Celanese Corporation	1937	Metropolitan Life Insurance Company
1971	*Cemented Carbide Producers Assn.	1965	Miles Laboratories, Inc.
1968	Certain-Tech St. Gobain Insulation Corp.	1974	Milliken Brick Company
1974	Chrysler Corporation	1936	Mine Safety Appliances Company
1958	Ciba-Geigy AG	1974	Mobay Chemical Company
1974	Cult Industries Inc.	1975	Monongahela Iron & Metal Company, Inc.
1972	Columbia Gas System Service Corporation	1936	Motor Vehicle Mfrs. Assn. of U.S., Inc.
1975	Commercial Shearling, Inc.	1937	NL Industries, Inc.
1958	Companhia Siderurgica Nacional	1974	National Annealing Box Company
1971	Consolidated Edison Co. of New York, Inc.	1973	National Forge Company
1972	Consolidated Natural Gas Service Company	1972	Organization Resources Counselors, Inc.
1975	Consolidation Coal Company, Inc.	1953	Owens-Corning Fiberglass Corporation
1975	D'Appolonia Consulting Engineers, Inc.	1936	Owens-Illinois, Inc.
1974	DeSoto, Inc.	1937	PPG Industries, Inc.
1952	Diamond Shamrock Corporation	1937	Pennsylvania Glass Sand Corporation
1973	Dow Chemical U.S.A.	1972	Peoples Natural Gas Company
1917	Drakenfeld Division, Hercules, Inc.	1975	Pittsburgh & Lake Erie Railroad
1937	Dravo Corporation	1970	Pneumafil Corporation
1916	E. I. du Pont de Nemours & Company	1938	Portland Cement Association
1966	Eastman Kodak Company	1970	Potters Industries, Inc.
1971	Minerals & Chemicals Division, Engelhard Minerals & Chemicals Corp.	1973	Pullman-Standard
1975	Epi Metals Corporation	1968	Raybestos-Manhattan, Inc.
1956	Equitable Life Assurance Society of U.S.	1937	H. H. Robertson Company
1964	Exxon Corporation	1972	Safety First Industries, Inc.
1971	Falcon Foundry Company	1973	The Sager Glove Corporation
1974	Fosteria Glass Company	1937	St. Joe Minerals Corporation
1916	Foundry Supply Manufacturers Group	1956	Sauereisen Cements Company
1970	General Cigar Company, Inc.	1956	Seattle Services Division, The Boeing Co.
1947	General Electric Company	1971	Selenium-Tellurium Development Assn., Inc.
1951	General Mills, Inc.	1974	Sharon Steel Corporation
1942	General Motors Corporation	1972	Shell Oil Company
1974	General Refractories Company	1974	Shenango Incorporated
1954	Georgia Kaolin Company	1956	Soap and Detergent Association
		1975	The Standard Oil Company

*Multiple Membership

<u>Date Joined</u>	<u>Company</u>
1962	Stauffer Chemical Company
1965	Sturm, Ruger & Company, Inc.
1969	Tenneco, Inc.
1966	Thermal Insulation Manufacturers Association, Inc.
1970	Travelers Insurance Companies
1972	Tri-State Engineering Company
1936	Union Carbide Corporation
1974	United States Gypsum Company
1970	U. S. Mineral Products Company
1936	U. S. Potters Association
1936	United States Steel Corporation

<u>Date Joined</u>	<u>Company</u>
1960	Van Straaten Chemical Company
1938	Vesuvius Crucible Company
1975	Vulcan Mold & Iron Company
1975	Washington Mould, Machine & Foundry Company
1974	Watson-Standard Company
1937	Wedron Silica Division, Del Monte Properties Company
1962	Western Electric Company, Inc.
1937	Westinghouse Electric Corporation
1968	Arthur C. Withrow Company
1975	Young Galvanizing, Inc.

NEW MEMBERS

The Ansul Company
 Consolidation Coal Company, Inc.
 E. D'Appolonia Consulting Engineers, Inc.
 Epic Metals Corporation
 Industrial Gasket & Shirm Company, Inc.
 Monongahela Iron & Metal Company, Inc.
 Pittsburgh & Lake Erie Railroad
 The Standard Oil Company
 Vulcan Iron & Mold Company
 Washington Mould, Machine & Foundry Company
 Young Galvanizing, Inc.

ALL members - 1976 Annual Reports

<u>Date Joined</u>	<u>Company</u>	<u>Date Joined</u>	<u>Company</u>
1937	*Abrasive Grain Association	1973	Falcon Foundry Co.
1976	Allegheny County Sanitary Authority	1976	Fort Pitt Steel Casting
1936	Allegheny Ludlum Industries, Inc.	1974	Fostoria Glass Co.
1956	Allied Chemical Corp.	1976	Franklin Glue Co.
1936	Aluminum Company of America	1936	Foundry Supply Manufacturers Group
1969	Aluminum Company of Canada, Ltd.	1970	General Cigar Co., Inc.
1947	American Can Co.	1947	General Electric Co.
1971	American Foundrymen's Society	1951	General Mills, Inc.
1938	*American Insurance Association	1942	General Motors Corp.
1944	American Iron and Steel Institute	1974	General Refractories Co.
1957	AMAX, Inc.	1954	Georgia Kaolin Co.
1937	American Mining Congress	1937	Grinding Wheel Institute
1945	*American Mutual Insurance Alliance	1950	Gulf Oil Corp.
1944	A. O. Safety Products (Div. of American Optical Corp.)	1976	Halcon International, Inc.
1967	American Petroleum Institute	1936	Hall China Co.
1976	American Restaurant China Council, Inc.	1976	Harbison-Walker Refractories
1936	ASARCO Incorporated	1972	Heinz U.S.A. (Div. of H. J. Heinz Co.)
1969	American Textile Mfrs. Institute, Inc.	1976	Hill & Griffith Co.
1976	American Welding & Manufacturing Co.	1973	Howell Industrial Clings
1976	American Wood Preservers Institute	1937	Huntington Alloys, Inc.
1976	Americhem Inc.	1975	Industrial Gasket & Shim Co., Inc.
1976	Anaconda Co., Wire & Cable Div.	1973	Ingersoll-Rand Co.
1966	ARCO/Polymers, Inc.	1947	Inland Steel Co.
1970	Argonaut Insurance Co.	1947	IBM Corp.
1974	BASF Wyandotte Corp.	1970	International Lead Zinc Research Org.
1970	The Bahnsen Co.	1974	International Technical Information Inst.
1944	Brush Wellman, Inc.	1936	Johns-Manville Corp.
1955	CPC International, Inc.	1939	Jones & Laughlin Steel Corp.
1953	Can Manufacturers Institute, Inc.	1955	Kawecki Berylco Industries, Inc.
1971	*Cemented Carbide Producers Association	1974	Kopp Glass, Inc.
1968	Certain-Ted St. Gobain Insulation Corp.	1942	Koppers Co., Inc.
1974	Chrysler Corp.	1970	Laclede Steel Co.
1958	Ciba-Geigy AG	1962	Lagoven, S.A.
1974	Colt Industries Inc.	1968	Homer Laughlin China Co.
1972	Columbia Gas System Service Corp.	1974	Lenox Crystal, Inc.
1976	Commercial Shearing, Inc.	1937	J. S. McCormick Co.
1958	Companhia Siderurgica Nacional	1976	Marathon Oil Co.
1973	Consolidated Edison Co. of New York, Inc.	1966	Marcona Mining Co.
1972	Consolidated Natural Gas Service Co.	1970	Marion Health & Safety, Inc.
1975	Consolidation Coal Co., Inc.	1937	Metropolitan Life Insurance Co.
1975	D'Appolonia Consulting Engineers, Inc.	1965	Miles Laboratories, Inc.
1974	DeSoto, Inc.	1974	Milliken Brick Co.
1952	Diamond Shamrock Corp.	1936	Mine Safety Appliances Co.
1976	Dick Corp.	1974	Mobay Chemical Co.
1973	Dow Chemical U.S.A.	1975	Monongahela Iron & Metal Co., Inc.
1976	Dow Corning Corp.	1936	Motor Vehicle Mfrs. Assn. of U.S., Inc.
1947	Drakenfeld Division, Hercules, Inc.	1937	NL Industries, Inc.
1937	Dravo Corp.	1974	National Annealing Box Co.
1936	E. I. du Pont de Nemours & Co.	1973	National Forge Co.
1966	Eastman Kodak Co.	1972	Organization Resources Consultants, Inc.
1973	Minerals & Chemicals Division, Engelhard Minerals & Chemicals Corp.	1953	Owens-Corning Fiberglas Corp.
1975	Epic Metals Corp.	1937	PPG Industries, Inc.
1956	Equitable Life Assurance Society of U. S.	1937	Pennsylvania Glass Sand Corp.
1964	Exxon Corp.	1972	Peoples Natural Gas Co.
1976	Essex Group	1975	Pittsburgh & Lake Erie Railroad
		1970	Pneumafil Corp.
		1938	Portland Cement Association

IHR Members (continued)

1976

<u>Date Joined</u>	<u>Company</u>	<u>Date Joined</u>	<u>Company</u>
1970	Potters Industries, Inc.	1969	Tenneco, Inc.
1973	Pullman-Standard	1966	Thermal Insulation Mfrs. Assn., Inc.
1976	RAD Services, Inc.	1976	Tile Council of America, Inc.
1968	Raybestos-Manhattan, Inc.	1970	Travelers Insurance Co.
1976	The Refractories Institute	1972	Tri-State Engineering Co.
1937	H. H. Robertson Co.	1976	II-VI Inc.
1976	SCM Corp.	1936	Union Carbide Corp.
1972	Safety First Industries, Inc.	1974	United States Gypsum Co.
1976	Schering-Plough Corp.	1970	U. S. Mineral Products Co.
1973	The Sager Glove Corp.	1936	U. S. Potters Association
1937	St. Joe Minerals Corp.	1936	United States Steel Corp.
1956	Sauereisen Cements Co.	1960	Van Straaten Chemical Co.
1956	Seattle Services Div., The Boeing Co.	1972	Vesuvius Crucible Co.
1971	Selantum-Tellurium Development Assn., Inc.	1975	Vulcan Mold & Iron Co.
1976	Senco Products, Inc.	1976	WABCO Transportation Systems Group
1974	Sharon Steel Corp.	1975	Washington Mould Machine & Foundry Co.
1972	Shell Oil Co.	1974	Watson-Standard Co.
1974	Shenango Inc.	1937	Wedron Silica Division, Del Monte Properties Co.
1956	Soap and Detergent Association	1962	Western Electric Co., Inc.
1975	The Standard Oil Co.	1937	Westinghouse Electric Corp.
1962	Stauffer Chemical Co.	1976	Williams & Co., Inc.
1976	Stallite Division, Cabot Corp.	1968	Arthur C. Withrow Co.
1965	Sturm, Ruger & Co., Inc.	1975	Young Galvanizing, Inc.

NEW MEMBERS

Allegheny County Sanitary Authority
 American Restaurant China Council, Inc.
 American Welding and Manufacturing Company
 American Wood Preservers Institute
 Americhem, Incorporated
 Anaconda Company, Wire and Cable Division
 Commercial Shearing, Incorporated
 Dick Corporation
 Dow Corning Corporation
 Essex Group, Incorporated
 Fort Pitt Steel Casting
 The Franklin Glue Company
 Halcon International, Incorporated
 Harbison-Walker Refractories
 Hill and Griffith Company
 Marathon Oil Company
 RAD Services, Incorporated
 The Refractories Institute
 Schering-Plough Corporation
 Senco Products, Incorporated
 SCM Corporation
 Stallite Division, Cabot Corporation
 Tile Council of America, Incorporated
 II-VI Incorporated
 WABCO Transportation Systems Group
 Williams and Company, Incorporated

NEW MEMBERS - 1977 Annual Report

Date Joined	Company	Date Joined	Company
1937	*Abrasive Grain Association	1956	Equitable Life Assurance Society of U.S.
1976	Allegheny County Sanitary Authority	1976	Essex Group, Inc.
1936	Allegheny Ludlum Industries, Inc.	1964	Exxon Corp.
1945	*Alliance of American Insurers	1973	Falcon Foundry Co.
1956	Allied Chemical Corp.	1976	Fort Pitt Steel Casting
1936	Aluminum Co. of America	1974	Fostoria Glass Co.
1969	Aluminum Co. of Canada, Ltd.	1936	Foundry Supply Manufacturers Group
1957	AMAX, Inc.	1976	The Franklin Glue Co.
1947	American Can Co.	1970	General Cigar & Tobacco Co., Inc.
1971	American Foundrymen's Society		of Culbro Corp.
1973	American Industrial Hygiene Association	1947	General Electric Co.
1938	*American Insurance Association	1951	General Mills, Inc.
1944	American Iron & Steel Institute	1942	General Motors Corp.
1947	American Mining Congress	1974	General Refractories Co.
1967	American Petroleum Institute	1954	Georgia Kaolin Co.
1976	American Restaurant China Council, Inc.	1937	*Grinding Wheel Institute
1936	ASARCO, Inc.	1950	Gulf Oil Corp.
1964	American Textile Manufacturers Institute, Inc.	1976	Halcon International, Inc.
1976	American Welding & Manufacturing Co.	1936	Hall China Co.
1976	American Wood Preservers Institute	1977	Hankison Corp.
1976	Americhem, Inc.	1976	Harbison-Walker Refractories
1976	Anaconda Co., Wire & Cable Division	1972	Helar U.S.A. (Div. of H. J. Heinz Co.)
1966	AKCO/Polymers, Inc.	1966	Hierro-Peru
1970	Argonaut Insurance Co.	1976	Hill & Griffith Co.
1974	BASF Wyandotte Corp.	1973	Howell Industrial Clinic
1977	Borg-Warner Chemicals	1937	Huntington Alloys, Inc.
1944	Brush Wellman, Inc.	1975	Industrial Gasket & Shim Co., Inc.
1977	Buffalo Color Corp.	1947	Inland Steel Co.
1955	CPC International, Inc.	1947	International Business Machines Corp.
1977	Campbell Soup Co.	1970	International Lead Zinc Research Organization
1971	*Cemented Carbide Producers Association	1936	Johns-Manville Corp.
1977	Central Medical Health Services	1939	Jones & Laughlin Steel Corp.
1968	CertainFeed Corp.	1955	Kawachi Beryllum Industries, Inc.
1974	Chrysler Corp.	1974	Kopp Glass, Inc.
1956	Ciba-Geigy AG	1970	Laclede Steel Co.
1971	Coh Industries Inc.	1962	Lagoven, S.A.
1972	Columbia Gas System Service Corp.	1968	Homer Laughlin China Co.
1973	Commercial Shearing, Inc.	1974	Lenox Crystal, Inc.
1956	Companhia Siderurgica Nacional	1937	J. S. McCormick Co.
197	Consolidated Edison Co. of New York, Inc.	1976	Marathon Oil Co.
197	Consolidated Natural Gas Service Co.	1977	Metropolitan Life Insurance Co.
1977	Consolidation Coal Co., Inc.	1946	Mine Safety Appliances Co.
1977	Cummins Engine Co., Inc.	1971	Mohay Chemical Co.
1972	Danaher Corp.	1977	Monongahela Iron & Steel Co.
1976	Dow Corp.	1977	Motor Cables Manufacturing Co.
1973	Dow Chemical U.S.A.	1946	Motor Vehicle Manufacturers Assn. of U. S., Inc.
1976	Dow Corning Corp.	1974	National Aggregating Box Co.
1947	Drakenfeld Division, Hercules, Inc.	1972	National Forge Co.
1937	Dravo Corp.	1977	National Health Watch, Inc.
1966	Eastman Kodak Co.	1972	Organization Resources Consultants, Inc.
1946	F. I. du Pont de Nemours & Co.	1953	Owens-Corning Fiberglass Corp.
1971	Minerals & Chemicals Division Evangelhard Minerals & Chemicals Corp.	1937	PPG Industries, Inc.
1975	Fpm Metals Corp.	1937	Pennsylvania Glass Sand Corp.

*Multiple Membership

DHF MEMBERS (continued)

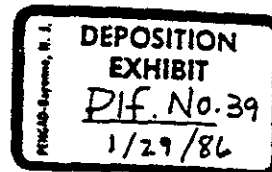
Date Joined	Company
1972	Peoples Natural Gas Co.
1975	Pittsburgh & Lake Erie Railroad
1970	Pneumafil Corp.
1938	Portland Cement Association
1970	Potters Industries, Inc.
1973	Pullman-Standard
1977	Quaker State Oil Refining Corp.
1976	RAD Services, Inc.
1968	Raybestos-Manhattan, Inc.
1976	The Refractories Institute
1937	H. H. Robertson Co.
1976	SCM Corp.
1972	Safety First Industries, Inc.
1973	The Sager Glove Corp.
1937	St. Joe Minerals Corp.
1937	Sauereisen Cements Co.
1977	Schuylkill Metals Corp.
1956	Seattle Services Div., The Boeing Co.
1976	Senco Products, Inc.
1974	Sharon Steel Corp.
1972	Shell Oil Co.
1974	Shenango Inc.
1956	Soap & Detergent Association
1977	Spartek, Inc.
1975	The Standard Oil Co.
1937	Stauffer Chemical Co.

Date Joined	Company
1976	Stellite Division, Cabot Corp.
1969	Tenneco, Inc.
1966	Thermal Insulation Manufacturers Assn.
1976	Tile Council of America, Inc.
1970	Travelers Insurance Companies
1972	Tri-State Engineering Co.
1976	II-VI Inc.
1936	Union Carbide Corp.
1974	United States Gypsum Co.
1970	U. S. Minerals Products Co.
1936	U. S. Potters Association
1936	United States Steel Corp.
1960	Van Straaten Chemical Co.
1972	Vesuvius Crucible Co.
1977	Volkswagen Mfg. Corp. of America
1976	WABCO Railway Products Group
1975	Washington Metal Machine & Foundry Co.
1974	Watson-Standard Co.
1937	Wedron Silica Div., Hbble Beach Corp.
1977	Wenger File Co.
1962	Western Electric Co., Inc.
1937	Westinghouse Electric Corp.
1977	Whirlpool Corp.
1976	Williams & Co., Inc.
1975	Young Galvanizing, Inc.

NEW MEMBERS — 1977

Borg-Warner Chemicals
Buffalo Color Corp.
Campbell Soup Co.
Central Medical Health Services
John D. Copanos Co., Inc.
Hankison Corp.
Motor Coils Manufacturing Co.
National Health Watch, Inc.
Quaker State Oil Refining Corp.
Schuylkill Metals Corp.
Spartek, Inc.
Volkswagen Manufacturing Corp. of America
Wenger File Co.
Whirlpool Corp.

IHF MEMBERS - 1978 Annual Report



<u>Date Joined</u>	<u>Company</u>
1937	*Abrasive Grain Association
1978	Alberta Dept. of Labour
1976	Allegheny County Sanitary Authority
1936	Allegheny Ludlum Industries, Inc.
1945	*Alliance of American Insurers
1956	Allied Chemical Corp.
1936	Aluminum Co. of America
1969	Aluminum Co. of Canada
1957	AMAX, Inc.
1947	American Can Co.
1971	American Foundryman's Society
1973	American Industrial Hygiene Association
1938	*American Insurance Association
1944	American Iron & Steel Institute
1937	American Mining Congress
1967	American Petroleum Institute
1976	American Restaurant China Council, Inc.
1969	American Textile Mfrs. Institute, Inc.
1976	American Welding & Manufacturing Co.
1976	American Wood Preservers Institute
1976	Americhem Inc.
1976	Anaconda Co., Wire & Cable Div.
1966	ARCO/Polymers, Inc.
1970	Argonaut Insurance Co.
1936	ASARCO, Inc.
1977	Borg-Warner Chemicals
1944	Brush Wellman, Inc.
1977	Buffalo Color Corp.
1977	Campbell Soup Co.
1971	*Cemented Carbide Producers Assn.
1977	Central Medical Health Services
1968	CertainTeed Corp.
1974	Chrysler Corp.
1958	Ciba-Geigy AG
1974	Colt Industries Inc.
1972	Columbia Gas System Service Corp.
1978	Columbia Nitrogen Corp.
1975	Commercial Shearing, Inc.
1958	Companhia Siderurgica Nacional
1973	Consolidated Edison Co. of New York, Inc.
1972	Consolidated Natural Gas Service Co.
1975	Consolidation Coal Co., Inc.
1977	John D. Copanos Co., Inc.
1978	D'Appolonia Consulting Engineers, Inc.
1952	Diamond Shamrock Corp.
1976	Dick Corp.
1973	Dow Chemical U.S.A.
1976	Dow Corning Corp.
1937	Drakenfeld Div., Hercules, Inc.
1937	Dravo Corp.
1936	E. I. du Pont de Nemours & Co.
1978	Duraloy Blaw-Knox, Inc.
1973	Minerals & Chemicals Division Engelhard Minerals & Chemicals Corp.

<u>Date Joined</u>	<u>Company</u>
1976	Essex Group
1964	Exxon Corp.
1973	Falcon Foundry Co.
1978	Fisher Controls Co.
1976	Fort Pitt Steel Casting
1974	Fostoria Glass Co.
1936	Foundry Supply Manufacturers Group
1976	The Franklin Glue Co.
1978	General Alloy Casting Co.
1970	General Cigar & Tobacco Co.
1947	General Electric Co.
1951	General Mills, Inc.
1942	General Motors Corp.
1974	General Refractories Co.
1954	Georgia Kaolin Research
1937	*Grinding Wheel Institute
1950	Gulf Oil Corp.
1976	Halcon International, Inc.
1936	Hall China Co.
1977	Hankison Corp.
1976	Harbison-Walker Refractories
1978	Harvey Industries, Inc.
1966	Hierro-Pern
1976	Hill & Griffith Co.
1973	Howell Industrial Clinic
1937	Huntington Alloys, Inc.
1978	Huntington Plating, Inc.
1978	ICI Americas, Inc.
1978	ILCO, Inc.
1978	Imaging Systems Corp.
1975	Industrial Gasket & Shim Co.
1947	Inland Steel Co.
1947	International Business Machines Corp.
1970	International Lead Zinc Research Org.
1936	Johns-Manville Corp.
1939	Jones & Laughlin Steel Corp.
1955	Kawacki Beryco Industries, Inc.
1974	Kopp Glass, Inc.
1942	Koppers Co., Inc.
1970	Laclede Steel Co.
1962	Lagoven, S.A.
1968	Homer Laughlin China Co.
1974	Lenox Crystal, Inc.
1978	M & T Chemicals, Inc.
1937	J. S. McCormick Co.
1976	Marathon Oil Co.
1978	C. H. Masland & Sons
1937	Metropolitan Life Insurance Co.
1936	Mine Safety Appliances Co.
1974	Mobay Chemical Co.
1978	Molded Fiber Glass Tray Co.
1975	Monongahela Iron & Metal Co.
1977	Motor Coils Manufacturing Co.
1936	Motor Vehicle Man...

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IHF MEMBERS (continued)

<u>Date</u> <u>Joined</u>	<u>Company</u>	<u>Date</u> <u>Joined</u>	<u>Company</u>
1977	National Health Watch, Inc.	1974	Shenango Inc.
1972	Organization Resources Counselors, Inc.	1956	Soap & Detergent Association
1953	Owens-Corning Fiberglas Corp.	1977	Spartek, Inc.
1937	Pennsylvania Glass Sand Corp.	1975	The Standard Oil Co.
1978	Pennsylvania Power Co.	1976	Stallite Div., Cabot Corp.
1972	Peoples Natural Gas Co.	1969	Tenneco Inc.
1975	Pittsburgh & Lake Erie Railroad	1966	Thermal Insulation Manufacturers Assn
1970	Pneumafil Corp.	1978	Tile Council of America, Inc.
1938	Portland Cement Association	1970	Travelers Insurance Companies
1970	Potters Industries, Inc.	1972	Tri-State Engineering Co.
1937	PPG Industries, Inc.	1976	II-VI Inc.
1973	Pullman-Standard	1936	Union Carbide Corp.
1977	Quaker State Oil Refining Corp.	1974	United States Gypsum Co.
1976	RAD Services, Inc.	1970	U. S. Mineral Products Co.
1968	Raybestos-Manhattan, Inc.	1936	U. S. Potters Association
1976	The Refractories Institute	1960	Van Straaten Chemical Co.
1937	R. H. Robertson Co.	1972	Vesuvius Crucible Co.
1978	Roux Laboratories, Inc.	1977	Volkswagen Mfg. Corp. of America
1972	Safety First Industries, Inc.	1976	WABCO Railway Products Group
1973	The Sager Glove Corp.	1975	Washington Mould, Machine & Foundry
1937	St. Joe Minerals Corp.	1974	Watson-Standard Co.
1956	Sauersisen Cements Co.	1977	Wenzel Tile Co.
1977	Schuykill Metals Corp.	1962	Western Electric Co.
1976	SCM Corp.	1937	Westinghouse Electric Corp.
1956	Seattle Services Div., Boeing Co.	1977	Whirlpool Corp.
1976	Senec Products, Inc.	1976	Williams & Co.
1974	Sharon Steel Corp.	1975	Young Galvanizing, Inc.
1972	Shell Oil Co.		

NEW MEMBERS — 1978

Alberta Department of Labour
Columbia Nitrogen Corp.
Duraloy Blaw-Knox, Inc.
Fisher Controls Co.
General Alloy Casting Co.
Harvey Industries, Inc.
Huntington Plating, Inc.
ILCO, Inc.
Imaging Systems Corp.
M & T Chemicals, Inc.
C. H. Masland & Sons
Molded Fiber Glass Tray Co.
Pennsylvania Power Co.
Roux Laboratories, Inc.

IHF MEMBERSHIP LISTS

1981 - From Acme dated Sept. 17, 1981

1980 - Complete (Annual Report)

1979 - " "

1978 - " "

1977 - " "

1976 - " "

1975 - " "

1974 - " "

1973 - " "

1972 - New members only (Minutes Board of Trustees Meetings, Feb. 8, May 9, Oct.

1971 - New members only (Minutes Board of Trustees Meetings, Mar. 9 and Oct. 11)

1970 - Complete (Annual Report)

1969 - " "

1968 - " "

1967 - " "

1966 - " "

1965 - " "

1964 - " "

1963 - Members represented by proxies, new members, members resigned.
(Meeting of Members, October 23, 1963)

1962 - New members only (Annual Report)

1961 - " " " "

1960 - No record

EX.	<u>B</u>
WIT.	<u>R. Powers</u>
DATE	<u>5-5-82</u>
R. POWERS RPTR.	

IHf MEMBERSHIP LISTS (Contd.)

- 1959 - Complete (Annual Report)
- 1958 - No record
- 1957 - New members only (Transactions Bulletin No. 31, 22nd Annual Meeting, October 30-31, 1957)
- 1956 - New members only (Transactions Bulletin No. 30, 21st Annual Meeting, November 14-15, 1956)
- 1955 - New members only (Transactions Bulletin No. 29, 20th Annual Meeting, November 16-17, 1955)
- 1954 - New members only (Transactions Bulletin No. 28, 19th Annual Meeting, November 17-18, 1954)
- 1953 - New members only (Transactions Bulletin No. 26, 18th Annual Meeting, November 19, 1953)
- 1952 - No record
- 1951 - New members only (Transactions Bulletin No. 19, 16th Annual Meeting, November 15, 1951)
- 1950 - New members only (Transactions Bulletin No. 15, 15th Annual Meeting, November 16, 1950)
- 1949 - New members only (Transactions Bulletin No. 11, 14th Annual Meeting, November 17, 1949)
- 1948 - New members only (Transactions Bulletin No. 10, 13th Annual Meeting, November 18, 1948)
- 1947 - New members only (Transactions Bulletin No. 9, 12th Annual Meeting, November 20, 1947)
- 1946 - Complete (Transactions Bulletin No. 8, 11th Annual Meeting, November 7, 1946)
- 1945 - Complete (Proceedings, 10th Annual Meeting, November 14-15, 1945, Part IV)
- 1944 - Complete (Proceedings, 9th Annual Meeting, November 15-16, 1944, Part IV)
- 1943 - Complete (Proceedings, 8th Annual Meeting, November 10-11, 1943)
- 1942 - New members only (Proceedings, 7th Annual Meeting, November 10-11, 1942)

IHF MEMBERSHIP LISTS (Contd.)

1941 - New members only (Proceedings, 6th Annual Meeting, November 12-13, 1941)

1940 - New members only (Proceedings, 5th Annual Meeting, November 12-13, 1940)

1939 - No record

1938 - No record

1937 - Complete (Proceedings of Special Meeting, November 30, 1937)