Lead Industries Association, Inc.
292 Madison Avenue • New York, N. Y. 10017 • Telephone: (212) 679-8030

October 19, 1973

SUBJECT: PUBLICITY STATUS REPORT
THIRD QUARTER -- 1973

TO THE MEMBERS OF THE LEAD INDUSTRIES ASSOCIATION, INC.:

Enclosed is the Third Quarter Report on articles and releases placed in the business press during the months of July through September of 1973.

Feature articles have continued to be printed in leading publications, and the backlog of material which we have been working on, leads us to expect an even better report during the next three-month period.

Very truly yours,

Lewis E. Gage

Lewis E. Gage
Assistant Secretary and
Director of Communications

LEG:mki
Enclosure

October, 1973

LEAD INDUSTRIES ASSOCIATION
TRADE PUBLICITY PROGRAM
THIRD QUARTER
July-September, 1973

Highlights of current publicity projects discussing lead applications....in LEAD ACID BATTERIES:

* Three articles on the use of battery-powered, special-purpose personnel carriers to replace diesel-powered vehicles at Morton Salt Company's Painesville, Ohio mine -- published in AMERICAN METAL MARKET, ENGINEERING & MINING JOURNAL, and ELECTRIC VEHICLE NEWS.

* Two feature articles on the use of battery-powered lift trucks to replace propane fueled internal combustion vehicles at Aberdeen Tricot, Inc., a knitting company in Aberdeen, N.C. Articles appeared in MODERN KNITTING MANAGEMENT, and MODERN MATERIALS HANDLING.

* Three articles on the new 18-ft.-long pleasure boat from the Branson Boat Company, Salerno, Florida. The article has appeared in ELECTRIC VEHICLE NEWS, AMERICAN METAL MARKET, and MARINE RETAILER.

* Two articles discussing the possibility of using battery-powered buses to solve vehicular pollution problems.

A release discussing the use of....SHEET LEAD SOUND BARRIERS at:

* A new Arts and Drama Center at Baldwin-Wallace College, Berea, Ohio. Sheet lead was used as roofing to provide an additional sound barrier between aircraft noise and the theaters inside. Release appeared in SOUND AND VIBRATION.

* A release on the use of sheet lead to solve noise control problems in the new Justice Building in Montreal, Canada, was published in NOISE/NEWS.

* A news article describing the use of lead/foam machinery noise control panels designed to meet OSHA standards was published in PRODUCTION MAGAZINE.

* A full-page color photo feature discussing the use of sheet lead to develop a machinery noise control panel system for Long Island Lighting Company's Northport, N.Y., plant was published in DESIGN NEWS.

- Editorial contact resulted in publication of a major feature article on lead/zirconate/titanate piezoelectric (PZT) components in MATERIALS ENGINEERING magazine.

- Publicity announcing the LIA exhibit at the 25th Annual Construction Specification Institute Meeting June 25-27 in Washington, D.C. was published in such magazines as COMMERCIAL CONSTRUCTION NEWS and AMERICAN METAL MARKET.

Four literature availability announcements appeared in a wide variety of magazines during the reporting period. The announcements included the following publications:

- "Annual Review of Lead Industry"
- "Lift Profits Electrically"
- "Practical Application of Sheet Lead for Sound Barriers"
- "Lead Magazine"

Releases announcing the re-election of D. Broward Craig and other personnel to various LIA posts appeared in such publications as ENGINEERING & MINING JOURNAL, BATTERY MAN, WELDING ENGINEER, PAINT & VARNISH PRODUCTION, MINING ENGINEERING and MATERIAL HANDLING.

Feature articles discussing a variety of lead applications have been completed and they are slated for publication in more than a dozen magazines.

* A feature story on the use of lead acid battery-powered postal delivery vehicles to appear in FLEET OWNER, PRODUCT ENGINEERING, and ELECTRICAL WORLD magazines.

* A case history telling how lead acid batteries provide uninterruptible power for IBM's computerized headquarters, to appear in ELECTRICAL WORLD and MODERN OFFICE magazines.

* A news article describing how sheet lead was used to line pollution control equipment at a major Canadian copper mine is slated to appear in MINING & ENGINEERING JOURNAL and NORTHERN MINER.

* A wrap-up on the latest developments in the use of sheet lead to solve industrial machinery noise control problems will be published in PRODUCT ENGINEERING, POLLUTION ENGINEERING and SOUND & VIBRATION magazines.

* Two related stories — one telling how Grumman Aviation Corp. uses leaded vinyl to insure quietness inside the company's Gulfstream II executive jet and another telling how the material has been used in the 300 mph rail-mounted tracked air cushion vehicle Grumman has built for the Department of Transportation's high-speed transportation demonstration program -- have been released to railroad and commercial aviation magazines.

* A feature article on a fleet of new battery-powered undersea workboats is slated for publication in OFFSHORE and OCEAN INDUSTRIES magazines.

....and watch for publication of articles discussing the use of "reclaimed" leaded stained glass in homes, apartments and restaurants; the use of lead/zirconate/titanate in piezoelectric applications; and the use of organolead in wood preservatives; and the use of sheet lead at the World Trade Center.

Also slated for publication is an article based on J. A. Peterson's paper, "Lead in the Automobile Industry Batteries". Presented at the LIA Annual Meeting, the article will appear in the November issue of AUTOPRODUCTS Magazine.

Feature Articles Published.....10

News Articles Published (including literature availability announcements)..33

News Releases Completed (including personnel announcements and literature availability announcements).....14

Feature Articles in Preparation..... 8

Editorial Request Responses..... 7

LIA15095

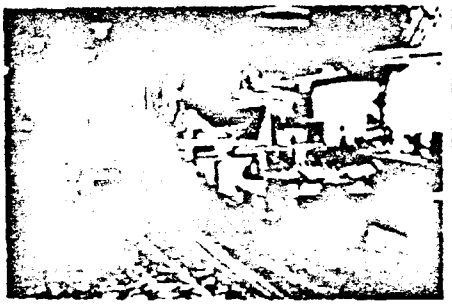
Vol. 2 No. 2

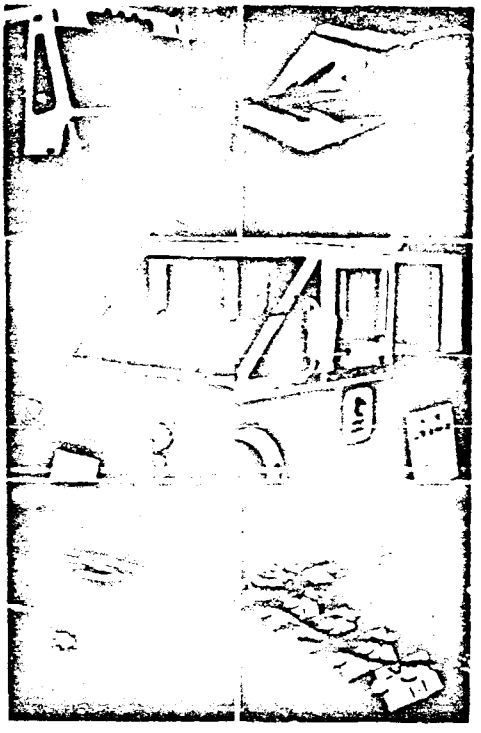
MAY 1973
(Published Quarterly)
$2.50

EVs GO BACK TO THE SALT MINES

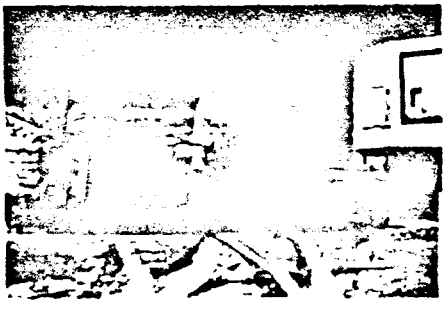
Vehicle News

ommitted To Better Transportation





Three of the five new battery-powered electric personnel carriers purchased by the Morton Salt Company to replace diesel-powered units are seen at the company's Fairport, Ohio, salt mine are seen assembling there near the mine's service yard, located 1,800 feet below ground at the working level of the mine. BOTTOM - A mine supervisor prepares to take one of the new two-man battery-powered personnel carriers on a tour of a 1,800 foot-long rock salt crown floor that has been prepared for blasting. The vehicle on the far left is the biggest of the five new electric vehicles and it can be adapted for use in hauling small parts and supplies. All five of the electric vehicles have been fitted with wide-turn tires to provide good traction on the floor of the mine, which is covered with a layer of fine rock salt.



Article: EV's Go Back To The Salt Mines

Published in: ELECTRIC VEHICLE NEWS

May, 1973

LIA15096

JUL 1973

Ohio salt mine now using lead acid battery-powered personnel carriers

Feature article: "Ohio Salt Mine Now Using Lead Acid Battery-Powered Personnel Carriers"

Published in: ENGINEERING & MINING JOURNAL

July, 1973

LIA15097

lead and zinc market

Morton Carriers Battery-Run

PAINESVILLE, Ohio – The replacement of diesel-powered personnel carriers with lead-acid battery-powered carriers at Morton Salt Co.'s salt dome here has resulted in improved personnel movements and air quality.

John J. Morton, associate mine manager, said, "The new vehicles are quiet and provide a comfortable, more comfortable ride than the diesel machines we use for our work force. Of particular importance to us is the fume-free aspect of the electric vehicles since they reduce the amount of diesel fumes that our mine ventilation system has to remove each

A total of five battery-powered personnel carrier vehicles are now in use at the mine. All five can transport four supervisors, Morton said. One of the carriers, the largest of the five, features a mine-equipment compartment that can be used to haul parts and supplies.

The vehicles are standard industrial models that have been fitted with steel-belted tires in order to insure good traction on the floor of the mine which is covered with a thick layer of coarse rock salt resulting from continuous blasting operations, Morton said.

Designed to withstand hardships of giant operations, standard rugged construction, and give maximum distance between battery charges, the electric vehicles accept mechanical damage frequent a maximum of maintenance, according to Morton.

There will continue to be a need for diesel tractors to perform a number of heavy hauling and pull-ing jobs involved in the everyday operations of the mine, explained the assistant manager. However, it is expected that the electric vehicles will provide us with an economical and beneficial measure of replacing a number of our older diesel tractors.

The batteries used to power the machines of the new vehicles are 6-volt. They range in price from $90 to $95 and, unlike automobile batteries, they take repeated deep cycling, or charging and discharging. The largest of the five vehicles is powered by a 36-volt DC traction type motor which transmits power to a worm gear differential through a mechanical set of three drive belts.

An automatic battery charger has been incorporated in the design of the five vehicles and it is a rugged and dependable piece of equipment, Morton noted.

No Steady Pattern Viewed In Platinum, Palladium Rise

NEW YORK – While dealer values for platinum and palladium are moderately higher this week over last, the premium is not considered steady due to the irregular behavior of gold, trade sources said. Meanwhile, the dollar continues to strengthen in Europe.

Yesterday the nominal dealer value for platinum was put at $161.50 a troy ounce, $5.50 over last week's figure, while palladium was priced $1.20 to $62.50 an ounce. The downward trend was reported to be a little weaker due to the weaker performance of gold on yesterday's London market.

London platinum and palladium were reported irregular due to monetary uncertainties and the erratic pattern of other precious metals. Most of the activity was attributed to short-covering and cautious liquidation, according to trade sources.

Feature article: Morton Carriers
Battery-Run

Published in: AMERICAN METAL MARKET
July 11, 1973

LIA15098

MODERN MATERIALS HANDLING
JUN 1973

Feature article: "Lead Acid Battery Solves Environmental Problems"

Published in: MODERN MATERIALS HANDLING

June, 1973

Battery powered truck solves environmental problems

The substitution of a lead-acid battery-powered lift truck for one powered by an internal combustion engine has solved a number of perplexing corrosion and environmental problems at Aberdeen Tricot, Inc., in Aberdeen, N.C.

Company president Glenn Faglioni reports that after the installation of the new electric truck there was a marked reduction of rusting on knitting needles, machinery parts, and other plant equipment. Employees also were no longer suffering from throat irritations and minor eye irritations.

The replacement came about after extensive tests by the Carolina Power & Light Co. and an independent laboratory indicated that the corrosive effects and high air pollutions were caused by exhaust in the controlled plant atmosphere.

The corrosive conditions became critical where they developed on the hundreds of delicate knitting needles arranged in the 14-ft long needle bars of almost half of the 14 knitting machines in the plant. The corrosive attacks were particularly aggressive when the machines were stopped to change a knitting pattern. The needles became corroded before the knitting operation could begin again. Corroded needles prevent yarn from traversing through the knitting zone. An estimated $1,000 was spent to replace running needles during a two month period. In addition, production time was also lost due to machinery downtime required to change the needles.

During the 18 months, the electric lift truck has been in operation, the plant has experienced no noticeable corrosion action or incidents of throats or eye irritations.

The truck used at Aberdeen Tricot has a 4000-lb. capacity. It is fitted with a long pole, which could be lowered to expand circular rolls of cloth onto trucks at the knitting dock or to unload bundles of hollow cores which are used to wrap the rolls of cloth. When huge spools of yarn, called beams, are to be moved into the plant or to and from the knitting machines, the long pole is replaced with two forks. Lead Industries Association, Inc.

86-4E MODERN KNITTING
MANAGEMENT

MAY 1973

Lead Acid Battery Solves Multiple Production, Environment[al Problems]

The substitution of a lead acid battery-powered lift truck for one powered by a propane fueled internal combustion engine has solved a number of perplexing corrosion and environmental problems at Aberdeen Tricot, Inc., a knitting company in Aberdeen, N.C.

Company president, Glenn Fogleman, reports that the following facts became evident soon after his plant began operating:

- Knitting needles, machinery parts and other plant equipment were rusting.
- Expensive maintenance and parts replacement were required to keep the plant operating.
- A few employees were suffering from minor nausea and minor eye irritations.
- Production and sales were decreasing due to equipment downtime and a loss in production [illegible].

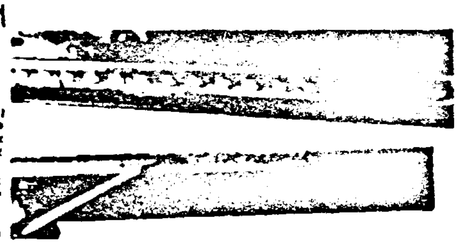
The solution to the problems, all of which were found to be related to the use of propane fueled lift truck, is an interesting case history of a search for the source and effects of pollutants that can develop under certain conditions in the controlled atmosphere of an industrial plant.

Closely controlled temperature and humidity conditions are critical requirements for the production of quality tricot fabric. At Aberdeen Tricot, the temperature is kept at 75 to 80°F. Humidifiers automatically maintain a relative humidity of 54 per cent.

The temperature and humidity, combined with exhaust fumes from a propane-fueled fork lift truck, were first thought to be causing the corrosion, eye irritation and nausea problems since they were most evident in the production area of the plant where the truck operated. Steps were therefore taken to replace the truck's carburetor, tune the engine and change the fuel tanks, thinking that some foreign elements may have been placed in the tanks.

[illegible]

vironmental health problems and this theory was strengthened by the fact that the company pres[ident] ...



One of the effects of emissions from a propane fueled vehicle was [illegible] many of the hundreds of needles that are a critical component of each machine. After spending about $1,000 to replace the corroded needles, the corrosion and other problems were solved using a lead acid battery-powered vehicle.

pany promotes the use of battery-powered electrics in industrial plants because they are normally recharged during off-peak hours), the Carolina Power & Light representative assisted in studying the corrosion and environmental problems.

Samples of the oily mist and rust from the plant equipment were taken to be chemically analyzed by an outside chemical laboratory. The tests showed that about 0.5 ppm nitric acid was present in the air in the knitting room.

Meanwhile the corrosion rate of the knitting needles was being observed. In this phase of the test, needles attached to tapes were placed on knitting machines throughout the plant. Needles placed near where the fork lift truck operated rusted in three hours while those at the rear of the building, and some distance from where the truck operated, rusted in 18 hours. While this also tended to prove the propane fuel fork lift truck theory, it was felt that the test was inconclusive because of the difference in conditions at the front and rear of the plant.

The problem was also discussed with a staff member of the North Carolina State Industrial Extension Service and it was learned that propane can contain sulfur which can be oxidized in the truck engine and result in sulfuric acid fumes being emitted into the air of the knitting room. They were therefore assured that presence of sulfuric acid fumes, plus nitric acid fumes, could promote the high rate of machinery rusting.

Based on this combined evidence, Aberdeen Tricot president Fogleman ordered a lead acid battery-powered fork lift truck as a replacement for the propane fueled vehicle. During the 18 months the lead acid battery-powered fork lift truck has been in operation, the plant has experienced no noticeable corrosion af[fects] ...

... the atmosphere. When the ... was mixed with the ... vapor continuously ... by the humidifiers and there... ed with the heated air dur... ter months. The nitrogen ... a chemical reaction the... in the formation of nitr[ic acid] ... which is highly corrosive [to] metals.

... utility company representative also concluded that the ... of mist also was the pol[lutant] that ultimately caused the [nausea] and eye irritation. They ... these two environmental ... were attributed to two acid-based poisonous gases ... oxide, which is formed when ... and combines with metal ... nitrogen dioxide, which is ... when nitric oxide combines with oxygen. The situation ... worse because the nitrogen dioxide was reacting with the ... of moisture in the air ... to form more nitric acid.

tion and there have been no further incidents of nausea or eye irritation.

The electric truck used has a 4000-lb. capacity. It is fitted with a long pole when used to move wrapped circular rolls of cloth onto trucks at the loading dock or to unload bundles of hollow cores which are used to wrap the rolls of cloth. To move the circular rolls of cloth or bundles of cores, the pole is inserted in a core and is used to lift the material to be transported. When huge spools of yarn, called beams, are to be moved into the plant or to and from the knitting machines, the long pole is replaced with two forks.

Based on the successful use of the electric truck at the Aberdeen plant, another one was ordered for a new 24,000 sq. ft. plant that Fogleman manages just across the street.

Feature article: "Lead Acid Battery Solves Environmental Problems"

Published in: MODERN KNITTING MANAGEMENT

May, 1973

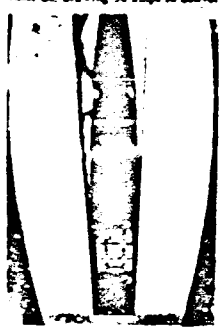
WHAT'S AN EB?

AN ELECTRIC BOAT!

The Brennan "Electra" 18-foot inboard is decidedly not for speed demons, but it does cut a smooth, graceful swathe when it is underway. In this case the inboard motor is really a motor—a permanent magnet (PM) D-36 motor rated at 1½ hp and supplied by Ohio Electric Motors, Division of Magnetek International, Inc., Maple Heights, Ohio.

Norman Brennan, President of Brennan Boat Company, Fort Lauderdale, Florida, had a definite purpose in mind when he designed the Electra. For those who enjoy quiet, serene cruising or leisurely trolling, Brennan's Boat is just the ticket. Capable of a cruising range of 30 miles at a speed of 5 miles per hour, the boat is veritably silent and produces no exhaust fumes. At 3 miles per hour, it can operate for over 12 hours.

The boat's power plant consists of two large, 12 volt, automotive-type marine batteries rated at 272 ampere hours. Normally, the motor is rated at 1½ hp, operating at 48 volts dc, drawing 30 amps to deliver



Heart of the propulsion plant for the "Electra" is a permanent magnet DC motor, supplied by Ohio Electric Motors and a pair of heavy duty marine storage batteries. The motor is directly coupled to a 10-inch diameter, three bladed propeller.

1,750 shaft rpm. In the Electra boat, the motor shaft is coupled directly to a 10-inch diameter, three bladed propeller which turns at approximately 850 rpm. At the full running speed of 5 mph, the motor draws about 28-30 amps, delivering an output of about ¾ hp.

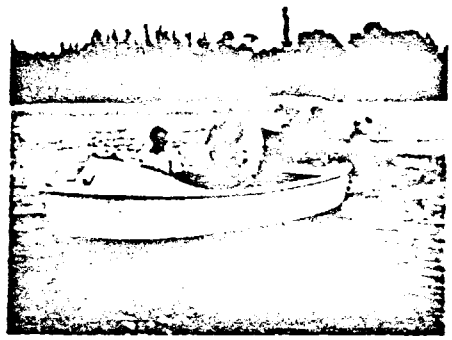
Commenting on the design, Mr. Brennan notes, "We knew that it would be possible to use the smaller motor with speed reduction to provide the same boat speed, but the slow turning motor is almost immortal, it is very rugged and provides long life.

"In some of our experimental boats we used wound field motors. However, we have found that the permanent magnet motors are more efficient and produce less arcing during switching. Speed is regulated by a solid state controller which is continuously variable to less than 1 mph.

"Refueling" is also simple. The propulsion system is outfitted with an automatic, transistorized battery charging device. At dockside, it can be plugged into any conventional 115 volt, 60 cycle power outlet. The charger cuts off automatically to prevent overcharging the batteries. With proper care, says Mr. Brennan, the batteries will last several years. The boat weighs approximately 1,100 lbs.

The boat is intended as an easy-going all-around family craft. Complementing the quietness, safety and ease of operation is a virtually maintenance-free design. The hull is custom fabricated from fiberglass reinforced plastic.

The hull and keel are designed for outstanding stability. Overall length is 18 ft. 2 in. with a 5 ft. 6 in. beam. With a draft of only 1 ft. the Electra lends itself for cruising close-to-shore. The keel keel design provides protection for the heavy duty bronze propeller and rudder as well. With more and more people seeking peace and quiet in nature, the Brennan Boat is making its mark.



ELECTRIC VEHICLE NEWS/AUGUST 1973

Feature Article: "Battery-Powered Pleasure Boat Introduced"

Published in: ELECTRIC VEHICLE NEWS

August, 1973

AUG 17 1973

Lead Batteries in Pleasure Boats Seen Answering Pollution Problems

FORT LAUDERDALE, Fla. — The use of lead acid batteries in pleasure boats may solve both noise and air-emission pollution, according to Brunswick Boat Co. here.

The company uses two heavy-duty marine lead acid batteries to power an 18-foot long boat, called the Electro-18. Each of these batteries, installed in a boat box, delivers 272 amp hours at 24 volts.

Lead Harrison Brunswick, president of the Florida boat company, "A lot of experimental manufacturers are replacing standard power boats. Commercialization and fabrication are pressing hard for tougher laws prohibiting noise and pollution of the waterways by internal combustion engine craft. Our boat is designed to eliminate these problems."

The onboard power system for the craft, a permanent magnet electric motor that delivers ¼-horsepower, can run the boat for about 20 miles at 5 miles per hour cruising speed, Brunswick pointed out. At 3 miles per hour, the Electro-18 can be operated for 12 hours. A solid state controller permits variable speeds down to below 1 mile per hour, he said.

To recharge, dual automatic marine battery chargers are plugged into any 115 volt 60 cycle outlet, the president explained. A transistorized circuit prevents overcharge and, with good care, the batteries should last several years, he added.

Designed for trolling, the boat is also gaining acceptance for leisure-time cruising, particularly and cruising in light traffic waters, said Brunswick.

JUN 1973

Lead Acid Battery Powered Boats.

The Brunson Boat Company introduces the "Electro-18", an 18 foot long boat that is powered by lead acid batteries. Designed for trolling, it is gaining acceptance for other uses since it reduces noise pollution and polluting of water by oil residue.

The Electro is powered by two heavy duty marine lead acid batteries, each delivering 272 amp hours at 24 volts and installed in a boat box. The boat box also contains the boat's electric motor and an automatic bilge pump that prevents the motor from flooding. To recharge, dual automatic marine battery chargers plug into any 115 volt 60 cycle outlet.

marineproduct

For more information contact Mr. Lewis Gage Lead Industries Association, Inc. 292 Madison Avenue New York, New York 10017

"Battery-Powered Pleasure Boat"

also appeared in: AMERICAN METAL MARKET, and MARINE RETAILER

BATTERY MAN

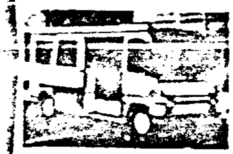
THE INTERNATIONAL JOURNAL FOR

Starting, Lighting, Ignition & Generating Systems

SEPTEMBER 1973

INCREASED POTENTIAL FOR BATTERY-POWERED BUSES

With the recent announcement that automobile manufacturers have a year's extension to meet the strict U.S. Government requirements for more efficient control of pollutant emissions from automotive vehicles, major metropolitan areas such as New York City are considering plans to limit or exclude vehicles such as cars and buses from operating in certain heavily trafficked intra-city sections. A lead acid battery powered bus that's now being produced could be the answer to some of the major intra-city transportation problems that might result from promulgation of vehicular restriction laws passed by various metropolitan authorities. The lead acid battery bus is, for example, one of the few non-polluting vehicles capable of meeting the need for intra-city use, as well as for servicing airports, resorts and other types of shuttle service.



Such an example is the 25 passenger bus that Cleveland Electric Illuminating Company is using to transport employees between its 26th Street Service center and the company's headquarters located on Cleveland's downtown Public Square. The bus makes eight round trips per day on runs that are approximately six miles long. It is one of the first electric powered mini-buses to be in permanent use in the United States and it could be the forerunner of a planned urban mass transit system for an American city.

The new bus is designed and manufactured by Battronic Truck Corp. of Boyertown, Pa. It has a top speed of 25 miles per hour, suited to city speed limits, and has a maximum range of 40 miles before the batteries have to be recharged or changed. Battronic has developed a new self-contained battery system that permits removal and replacement of the lead-acid battery power cell in less than five minutes. This means that the vehicle no longer has to be tied to a battery charger for long periods or taken out of service while the batteries are changed.

CLEAN AIR

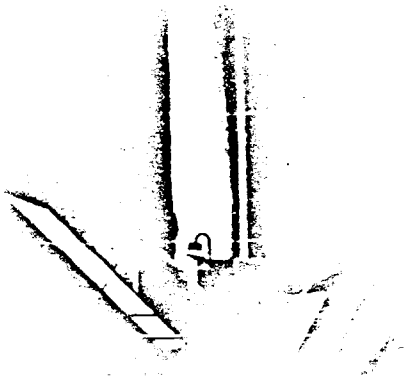
VEHICLES AND COMPONENTS

News article: Increased Potential for Battery-Powered Buses

Published in BATTERY MAN, September issue

LIA15103

Design News



Full-page photo feature:
sheet lead sound barrier helps to overcome noise problems encountered at Northport, N.Y. plant of Long Island Lighting Company -- capsule case history published in DESIGN NEWS, September

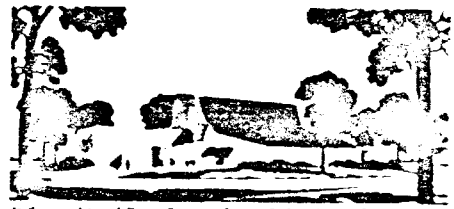
LIA15104

NOISEXPO Program
Open Plan Office Acoustics
Acoustical Privacy
Acoustical Windows
Architectural Products

September 1978

sound and vibration

Lead Roofing Specified for Sound Barrier



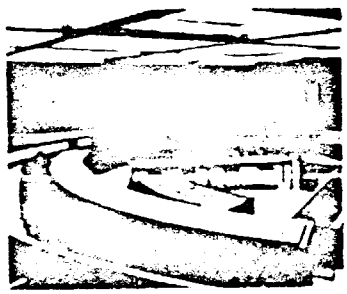
Article: "Lead Roofing Specified For Sound Barrier

Published in: SOUND AND VIBRATION

September, 1973

AUG 1973

Lead is Widely Used in Quebec Justice Building

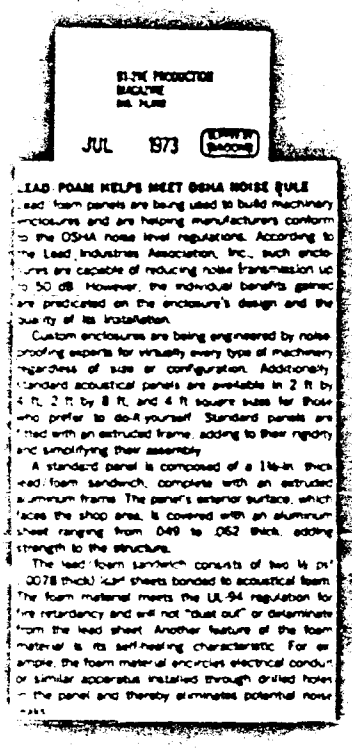


Article: "Lead Is Widely Used in Quebec Justice Building"

Published in: NOISE/NEWS

August, 1973

PRODUCTION



JUL 1973

LEAD FOAM HELPS MEET OSHA NOISE RULE

Lead foam panels are being used to build machinery enclosures and are helping manufacturers conform to the OSHA noise level regulations. According to the Lead Industries Association, Inc., such enclosures are capable of reducing noise transmission up to 50 dB. However, the individual benefits gained are predicated on the enclosure's design and the quality of its installation.

Custom enclosures are being engineered by noise proofing experts for virtually every type of machinery regardless of size or configuration. Additionally, standard acoustical panels are available in 2 ft by 4 ft, 2 ft by 8 ft, and 4 ft square sizes for those who prefer to do-it yourself. Standard panels are lined with an extruded frame, adding to their rigidity and simplifying their assembly.

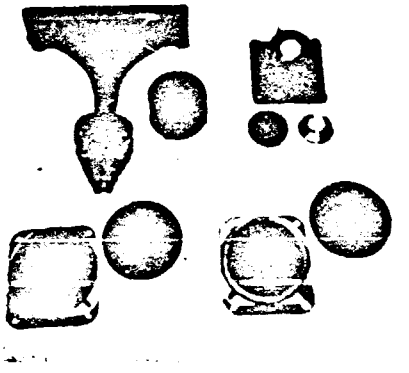
A standard panel is composed of a 1½-in. thick lead/foam sandwich, complete with an extruded aluminum frame. The panel's exterior surface, which faces the shop area, is covered with an aluminum sheet ranging from .049 to .062 thick, adding strength to the structure.

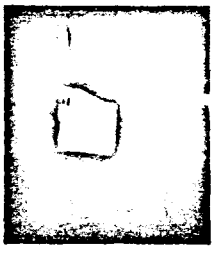
The lead/foam sandwich consists of two ½ pl[y] (.0078 thick) lead sheets bonded to acoustical foam. The foam material meets the UL-94 regulation for fire retardancy and will not "dust out" or deteriorate from the lead sheet. Another feature of the foam material is its self-healing characteristic. For example, the foam material encircles electrical conduit or similar apparatus installed through drilled holes in the panel and thereby eliminates potential noise [leak]

News article: Lead/Foam Helps Meet OSHA Noise Rule --- published in PRODUCTION magazine, July issue

LIA15107

Piezoelectric ceramics: novel engineering materials





Publicity resulting from editorial contact:
Feature on Piezoelectric ceramics
published in MATERIALS ENGINEERING
August issue.....three pages

LIA15108

JUN 1973

METALS MARKETS

In general, the demand for base metals is a reliable indicator of the business conditions in an industrial nation. A strong economy means a strong demand for metals and firm prices, while weak metal prices are the results of a lackluster and uncertain economic outlook.

Canada stands among the leaders in mineral production, being the world's third largest mineral producer and the largest mineral exporter. The country ranks first in the production of nickel, silver, and zinc, second in asbestos and sulphur, and third in aluminum, gold and lead. The United States is by far the largest consumer, followed by the European Common Market, and Japan. Canada's dependence on the U.S. market is best illustrated by table 1.

Although Canada is a major producer of metals, companies must sell their products on the world markets at world market prices. In the past, Canada has exerted only nominal influence on the world's commodity prices, with the possible exception of Nickel.

Because the United States is the largest user of metals, a prosperous commodity prices. That is why the state of the economic health of the United States is of primary importance in any analysis of metal markets. A strong recovery has set in after the recession of late 1970, and the demand for metals, after the usual lag, seems to be in a strong uptrend. The European Community and Japan are experiencing similar recoveries resulting in an ever greater demand for metals.

The dramatic turnabout in the economic outlook and the demand for metals can be shown by examining the two metals that have been under most pressure in recent years, namely lead and zinc.

Last year, 1972, the Lead Industries Association (LIA) and Zinc Institute (ZI), held their annual conventions in Montreal. Gloom and despair was evident everywhere, with even the most optimistic delegates succumbing that demand and prices in both commodities would darken. The reason for pessimism was overwhelming, especially for the lead producers.

This year, 1973, the meeting was held at Denver, giving emphasis to their reliance on the automobile industry. The tone of the meeting was a complete contrast to last year. Smiling confident faces were to be seen everywhere, with not a single pessimist in sight.

The prophets of doom were severely wrong, lead only had demand rates, but prices were firm. What had brought about this miracle? To answer this we have to look at the breakdown of lead consumption.

Storage batteries	40%
Gasoline additives	22%
Cable covering	14%
Ammuni. ion	9%
Others	15%

During the last several years there has been a trend in the automobile industry toward smaller and lighter cars. This also meant lighter and less bulky car batteries, which in turn meant a decrease in lead content of the batteries. Considering that 2/5th of total lead consumption would be affected by this change-over, visions of over supply and falling prices became commonplace. Very few expected improved demand and higher prices.

The unexpected did occur. In May 1973, the two biggest producers, St. Joe Minerals Corp of New York, and American Smelting and Refining Company, increased the price of lead in the United States by half a cent a pound to 16.5 cents. Both companies cited improved demand from domestic consumers, particularly the automotive industry, as the reason for this action.

Statistics for the first part of 1973 seem to be in accordance with these claims. Retail sales of automobiles in the U.S. climbed to 862,112 in April, setting the seventh monthly record in a row. Motor vehicle output in Canada for the first four months has increased by 11.9 percent from 513,344 units to 574,681 units, with even greater monthly outputs scheduled for the immediate future.

The mounting pressure to remove lead from gasolines was also of great concern to lead producers. After January 1 1974, no gasoline in Canada may contain more than 2.5 grams of lead per gallon. At present, gasoline contains up to 4 grams of lead per gallon. In the United States, the Environmental Protection Agency (EPA) requires that all major oil companies must have unleaded gasoline by July 1, 1974. The plan was to have less than 1.25 grams of lead in all gasoline by 1977.

As so often happens, a crisis is pushed into the background by an even greater crisis. For years, the automobile, burning lead-based gasoline, has been singled out as a major pollutant of our environment. Many people have grown so accustomed to wanting to ban the automobile entirely. Now, with the dramatic emergence of the energy shortage, the spectre of automobiles standing quietly in garages remaining no homes at all, has become a possibility.

Suddenly everyone is concerned with conserving energy. There are two choices open, stop driving, or make every gallon give better mileage.

When faced with this choice, even the most ardent pollution problem admit that the modest addition of lead to gasoline, to give better mileage, is acceptable. The latest indications are that the EPA may not press, after all, for the proposed schedule as indicated above. Some reduction in lead in gasoline is inevitable but if the schedule is

Table 1

COMMODITY	EXPORTS TO THE U.S. (% of total production)
Aluminum	55
Copper	23
Lead	27
Nickel	65
Zinc	46

Special publicity resulting from LIA annual meeting

METALWORKING magazine, June

Metalworking - June, 1973

COMMERCIAL CONSTRUCTION NEWS
MORRISTOWN, N.J.
JUN 1973

Noise control is theme of LIA exhibit at convention

Washington, D.C. — Noise control is the announced theme of the Lead Industries Association, Inc. exhibit at the 25th Annual Construction Specifications Institute Meeting to be held at the Sheraton Park Hotel, Washington, D.C., June 25-27.

The decision to feature noise control at the exhibit, according to Philip E. Robinson, executive vice president of the trade association, stems from the number of Federal, State and local noise control regulations which create sound transmission problems that can be solved by lead sound barriers.

A highlight of the exhibit will be a portable sound-survey booth, an enclosure designed to measure the power of hearing or the audibility or intensity of sounds. The booth, which has a sheet lead sound barrier in the walls and ceiling, is typical of the type being used by industry to test the hearing of employees exposed to high noise levels.

The exhibit will also feature samples of lead and lead-containing noise control products.

JUN 25 1973

Lead Sound Barriers Theme Of Industry Exhibit This Week

NEW YORK — Noise control with lead sound barriers will be the theme of The Lead Industries Association, Inc. exhibit at the 25th Annual Construction Specifications Institute meeting this week at the Sheraton Park Hotel, Washington, D.C.

The exhibit, in space No. 238-239, will feature samples of lead and lead-containing noise control products and will contain a portable sound-survey booth.

This enclosure, which has a sheet lead sound barrier in the walls and ceiling, is designed to measure the power of hearing or the audibility or intensity of sounds.

According to Philip E. Robinson, Association executive vice-president, the decision to feature noise control at the exhibit is based on the fact that an increasing number of federal, state and local noise control regulations are creating major sound transmission problems that can be best solved by lead sound barriers.

Of particular importance is the Occupational Safety and Health Act, which now places Federal limits on noise levels in about 4 million industrial plants that employ nearly 56 million workers.

Publicity announcing LIA booth at 25th Annual Construction Specification Institute Meeting in Washington, D. C.

Sheet lead's advantages for noise barriers

A publication on the practical application of sheet lead for sound barriers is intended to help both professional and do-it-yourselfers. Lead's mass, limpness and internal damping make it ideal for such use. It can be used in a number of ways to block noise—sheets in wall panels, curtains, laminated to plastics for enclosures or attached directly to noisy machinery. Language and definitions in the booklet are non-technical to help the layman. (Lead Industries Assn.)

Circle [illegible] — IRON AGE, September 6, 1973

41-25 INDUSTRY
[illegible]

AUG 1973

Lead sound barriers

The Lead Industries Association has announced the availability of a new publication, "Practical Application of Sheet Lead for Sound Barriers". The eight-page brochure is intended to help the professional as well as the do-it-yourselfer and the remodeler.

The book points out that lead is an effective sound barrier material because of three properties — mass, limpness, and internal damping. It can be used in a number of ways to block the path of sound — as sheets in wall panels, as curtains in a sound path, laminated to plastics for enclosures, attached directly to noisy machinery.

Copies of the booklet can be obtained without charge from the Lead Industries Association, Inc., 292 Madison Avenue, New York, N.Y. 10017

FOUNDRY
CLEVELAND, OHIO
[illegible]

AUG 1973

Sheet Lead Noise Barriers

"Practical Application of Sheet Lead for Sound Barriers" contains a series of sketches of lead-bearing partitions or laminates in various applications. Test curves show sound-barrier capabilities. —Lead Industries Association Inc.

Circle [illegible] on Card

Air Quality Monitor

[illegible]

Circle [illegible] on Card

41-77 MACHINE
DESIGN
[illegible]

AUG 9 1973

Lead Barriers

Brochure helps the professional, the do-it yourselfer, and the remodeler in applying lead as a sound barrier. Details include a series of sketches of lead-bearing partitions or laminates accompanied by

PLANT ENGINEERING
BARRINGTON, ILL.
[illegible]

AUG 9 1973

The natural superiority of lead as a sound barrier material is pointed up in a booklet on the practical application of sheet lead for this purpose. Prepared by the Lead Industries Ass'n, the practical brochure contains sketches of lead-bearing partitions or laminates accompanied by test curves showing sound barrier capabilities of each type of construction. The sketches help you choose a barrier to fit your acoustic and economic needs. No charge. (Circle [illegible] on Post Card)

41-75 DESIGN NEWS
[illegible]

AUG 20 1973

Sheet Lead for Noise Barriers

Brochure contains a series of sketches of lead bearing partitions or laminates accompanied by test curves showing sound barrier capabilities of each type of construction. The architectural sketches will facilitate [illegible] and enable users to choose a sound barrier to fit their needs. Lead Industries Assn., Inc., 292 Madison Ave., New York, NY 10017

For copy, circle.................[illegible]

PRODUCT ENGINEERING
NEW YORK, N.Y.
[illegible]

AUG 1973

Lead sound barriers. Brochure, 8 pp, from the Lead Industries Assn. outlines uses and design details for lead sound barriers. Includes performance data.

Circle 282

[illegible] INDUSTRIAL
EQUIPMENT NEWS
[illegible]

SEP 1973

Application brochure shows how to use sheet lead for sound barriers

Eight-page booklet describes how lead can be used to block sound passage. Sketches show applications, and test curves illustrate effect of different kinds of construction using lead. List of materials needed for each type facilitates making cost estimates. Lead Industries Association, 292 Madison Ave, New York, NY 10017

[illegible]

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41 [illegible] NOISE/NEWS
[illegible]

JUN 1973

Use of Lead in Sound Control

The Lead Industries Association, Inc. has published several items concerning applications of lead in sound control in the Spring 1973 issue of LEAD Magazine. Copies of the magazine can be obtained from the Lead Industries Association, Inc., 292 Madison Ave., New York, NY 10017

Literature Availability Announcement:

"Practical Applications of Sheet Lead for Sound Barriers"

Published in: NOISE/NEWS, DESIGN NEWS, IRON AGE, MACHINE DESIGN, INDUSTRIAL EQUIPMENT NEWS, FOUNDRY, AND PLANT ENGINEERING

LIA15111

JUL 1973

Publications and Films

Publications distributed free of charge are listed in a 13-page booklet.

Categories include soldering and welding, chemical construction and corrosion protection and cable sheathing.

Lead Industries Association

BUILDING DESIGN & CONSTRUCTION
CHICAGO, ILL.

JUL 15 1973

Information material

JUN 1973

Publications and Films. This 13-page booklet has more than 60 current publications distributed free of charge by the Lead Industries Association. The publications are listed by code numbers under specific categories of lead and lead-containing products and applications. Literature Service Dept., Lead Industries Association, Inc., 292 Madison Ave., New York, N.Y. 10017.

Annual Review of Lead Industry

The Lead Industries Association, Inc., 292 Madison Ave., New York, N.Y. 10017 has announced publication of the 1973 Annual Review of the U.S. Lead Industry. ... research and development projects conducted by the International Lead Zinc Research Organization, Inc.

American Paint Journal

CONSTRUCTION SPECIFIER
WASHINGTON, D.C.

JUN 1973

Building applications

Applications of lead clad steel include louvres and wall covering. Design applications include roof coverings, ventilating ducts and related equipment, gutters, ... pipes, downspouts, and parapet coverings. Formerly it was often impractical to use lead for such applications because the lead normally requires structural support which the steel now supplies.

For additional information write to Lead Industries Association, Inc., 292 Madison Avenue, New York, N.Y. 10017.

INDUSTRY
BOSTON, MASS.

AUG 1973

Lead sound barriers

The Lead Industries Association has announced the availability of a new publication, "Practical Application of Sheet Lead for Sound Barriers". The eight-page brochure is intended to help the professional as well as the do-it-yourselfer and the remodeler.

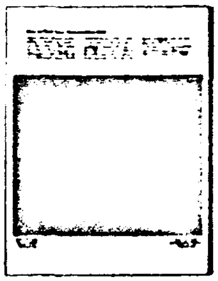
The book points out that lead is an effective sound barrier material because of three properties — mass, limpness, and internal damping. It can be used in a number of ways to block the path of sound — as sheets in wall panels, as curtains in a sound path, laminated to plastics for enclosures, attached directly to noisy machinery.

Copies of the booklet can be obtained without charge from the Lead Industries Association, Inc., 292 Madison Avenue, New York, N.Y. 10017.

PLANT ENGINEERING

JUN 28 1973

Economics of Electric Trucks



"Lift Profits Electrically" points up benefits of operating lead acid battery-powered industrial trucks and contains performance reports from users of both electric and internal combustion powered trucks. Topics discussed include operation and maintenance costs, environmental advantages, safety, efficiency. (Booklet L-14, 16 pp) Lead Industries Ass'n, Inc.

Circle 100 on Post Card

COMMERCIAL CONSTRUCTION NEWS
MORRISTOWN, N.J.

JUL 1973

LEAD MAGAZINE

Lead magazine reviews 12 problem-solving applications involving lead. Among these is the use of sheet lead to solve noise problems at a huge electrical power plant. The contributions of sheet lead in safety applications are pointed up in two articles. Other articles discuss a unique training school for lead sheathed cable splicers, and a house that may help overcome the world-wide shortage of lumber by utilizing a design concept involving the extensive use of lead and zinc construction products. The magazine also lists technical literature that is currently available. Lead Industries Assn., Inc.

Four examples of published literature availability announcements:

"Publications and Films"

"Lead" magazine

"Annual Review of Lead Industry"

"Lift Profits Electrically"

[illegible] ENGINEERING & MINING JOURNAL [illegible]

JUN 1973 [illegible] BACON'S

D. B. Craig has been re-elected president and chairman of the board of the Lead Industries Association, Inc. Craig is executive vice president of St. Joe Minerals Corp. LIA has also elected two new members to its board of directors: J. A. Mardick, vice president, Metals Div., NL Industries, and R. H. Ramsey, vice president, Newmont Mining Corp.

[illegible] PAINT & VARNISH PRODUCTION [illegible]

JUL 1973 [illegible] BACON'S

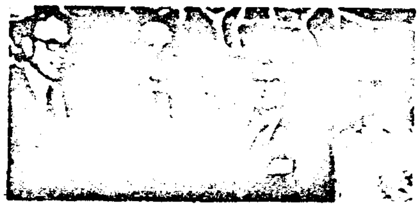
Craig Re-Elected

D. B. Craig, executive vice-president of St. Joe Minerals Corp., New York, N.Y., has been re-elected president and chairman of the board of directors of the Lead Industries Association, Inc.

At its 45th annual meeting held recently in Detroit, Mich., T. M. Swyler (Ethyl Corp.), J. F. Rittenhouse (Eltra Corp.) and J. G. McCullough (Amax Lead & Zinc) were re-elected vice-presidents of the Association. L. E. Gage, director of communications for LIA, was elected to the additional post of assistant secretary. Other officers re-elected by LIA were P. E. Robinson, executive vice-president; J. F. Smith, secretary and general manager; R. J. O'Hara, treasurer; and D. L. Moore, comptroller and assistant treasurer.

[illegible] MATERIAL HANDLING ENGINEERING [illegible]

JUN 1973 [illegible] BACON'S



Hammond Ramsden Shepard Traylor

Association officers . . .

Conveyor Equipment Manufacturers Association, president J. M. Shepard, Jr. (operations manager, Link Belt Material Handling Equipment Div., FMC Corp.), vice president George Ramsden (vice president, Jervis B. Webb Co.), secretary Joseph M. Hammond (president, Logan Co.), treasurer F. Roy Traylor (general manager, Aggregate Equipment and Conveyor Division, Nordberg Machinery Group, Rexnord Inc.).

Lead Industries Association, Inc., new directors J. A. Mardick (vice president, Metals Div., NL Industries), R. H. Ramsey (vice president, Newmont Mining Corp.)

[illegible] BATTERY MAN [illegible]

JUN 1973 [illegible] BACON'S

LEAD INDUSTRIES ASSOCIATION

D. B. Craig, executive vice-president, St. Joe Minerals Corp., has been re-elected president and chairman of the Board of Directors of the Lead Industries Association, Inc. At their 45th Annual Meeting T. M. Swyler (Ethyl Corp.), J. F. Rittenhouse (Eltra Corp.), and J. G. McCullough (Amax Lead & Zinc, Inc.) were re-elected vice-presidents. L. E. Gage, director of Communications for LIA, was elected to the additional post of assistant secretary.

It was also announced that J. A. Mardick, vice-president, Metals Div., NL Industries and R. H. Ramsey, vice-president, Newmont Mining Corp., were added as new members to the Board of Directors of LIA.

[illegible] MINING ENGINEERING [illegible]

JUN 1973 [illegible] BACON'S

John T. Boyd has been elected chairman and chief executive officer of John T. Boyd Co. Robert L. Frantz, formerly vice president, succeeded Boyd as president, and James W. Boyd has been named assistant to the president.

D. B. Craig, executive vice president, St. Joe Minerals Corp., has been re-elected president and chairman of the board of directors of the Lead Industries Association, Inc.

THE BATTERY MAN June, 1973

WHO WHAT WHERE

LEAD INDUSTRIES ASSOCIATION

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It was also announced that J. A. Mardick, vice-president, Metals Div., NL Industries and R. H. Ramsey, vice-president, Newmont Mining Corp., were added as new members to the Board of Directors of LIA.

[illegible] WELDING ENGINEER [illegible]

JUL 1973 [illegible] BACON'S

LEAD INDUSTRIES ASSOCIATION, INC. — The Board of Directors of this corporation added the following to their membership: J. A. Mardick, vice president, Metals Division, NL Industries and R. H. Ramsey, vice president, Newmont Mining Corp., both of New York.

Lead Industries Personnel Announcements...

Craig, Mardick, Ramsey, Robinson, Gage, Swylie, Rittenhouse, McCullough, Smith, O'Hara, and Moore

ENGINEERING & MINING JOURNAL, PAINT & VARNISH PRODUCTION, MATERIAL HANDLING ENGINEERING, BATTERY MAN, MINING ENGINEERING AND WELDING ENGINEERING