FILE NAME: Abex (ABX)

DATE: 1948

DOC#: ABX142

DOCUMENT DESCRIPTION: American Brakeblok Division - 1948 Annual Report

ANNUAL REPORTS
American Brakeblok Division
1948

AMERICAN BRAKEBLOK DIVISION

1948

ANNUAL REPORT

AMERICAN BRAKEBLOK DIVISION

ANNUAL REPORT

1948

C O N T E N T S

PREFACE

In 1948 the American Brakeblok Division had the largest dollar sales volume in its history. Net sales were more than $8,700,000; however, the profit realized, while an improvement over 1947, was not as large as it should have been, particularly when compared with pre-war years.

	1948	1947	1946	1940	1939
Net Sales	$8,704,500	$7,959,500	$8,226,900	$2,924,300	$2,458,300
Net Profit Before Taxes	539,800	175,800	1,322,600	564,300	455,300
Percent of Net Sales	6.2%	2.2%	16.2%	19.3%	18.5%

This condition was attributable to brake lining selling prices not having been increased in proportion to the increases in costs and also to a reduction in the relative sales volume in the profitable replacement field as compared to the original equipment volume.

Original equipment selling prices were increased 10% in 1946, 3% in 1947 and 13.5% in 1948. Replacement selling prices for brake lining were increased 6% in 1946, 6% in 1947 and 10% in 1948. At year-end, original equipment prices were up 28.6% and replacement prices 23.5% over O.P.A. prices.

Replacement sales improved considerably over 1947, but the relative replacement volume is still not large enough to compensate for the low-profit original equipment volume.

Brake lining sales break down as follows for 1948:

	Percent of Total Brake Lining Sales	Percent Profit Before Taxes (Includes LIFO)
Pressed Materials		
Original Equipment	11%	15.5%
Replacement	17%	7.4%
Total	28%	10.5%

	Percent of Total Brake Lining Sales	Percent Profit Before Taxes (Includes LIFO)
Rolled Materials		
Original Equipment	46%	3.7% loss
Replacement	26%	19.1%
Total	72%	4.6%
Total Brake Lining	100%	6.2%

Current production costs for our rolled materials have increased roughly 60% above a 1938-40 average. Costs for pressed materials have increased about 25% above the same 1938-40 average. One reason for the 60% increase for rolled materials is that a very large part of our rolled original equipment is now hand-rolled instead of automatic-rolled material. This means higher material waste and higher labor costs. These hand-rolled materials are of dimensions that exceed the limits of our automatic rolling equipment and represented a small part of our production back in 1938-40. However, demand for material of these larger dimensions has increased so that now it is a large part of our production and has a great effect upon our costs. Our engineering department has been studying this problem and has made considerable progress in improving the hand rolling equipment and in increasing the limits of our automatic rolling equipment. Costs for pressed materials will be somewhat reduced by the installation of new type preforming presses.

Production costs will be further reduced by utilizing the full capacity of the Winchester plant where labor rates are 40¢ an hour lower than Detroit and compounding operations are more efficient. Some material which will be produced at Winchester has previously been produced at Detroit on 5% and 10% premium second and third shifts. It is our intention to operate Winchester at full capacity and thereby reduce costs.

In addition to reducing costs to improve profits, there are two other courses of action. One is to increase prices for the original equipment rolled materials which comprised 46% of our sales volume and showed a 3.7% net loss. During 1948, however, severe competition and strong customer resistance to price increases were encountered in both the original equipment and replacement fields.

The second course of action is to increase sales volume, particularly where the profit condition is better. Specifically, this is the replacement rolled materials which comprised 26% of our sales volume and showed a 19.1% net profit.

The profit on sales of A-B-K laminated fabric bearings and caster wheels is very satisfactory. In 1948, the net profit before taxes was $103,244 on net sales of $420,812, or 25%.

In October, 1948, a settlement of the action taken by the Department of Justice against the Brake Lining Manufacturers' Association and member companies was accomplished. The American Brakeblok Division along with the rest of the industry plead "nolo contendere" and paid fines aggregating $20,000. The Brake Lining Manufacturers' Association was dissolved and the American Brakeblok Division has declined to join the new association.

SALES

Total net sales in 1948 were approximately $8,704,500 as compared to $7,959,500 in 1947, an increase of $745,000, or 9%. A breakdown follows:

	1948	1947	Increase or Decrease	Percent
Original Equipment	$4,116,878	$4,092,550	+ $24,328	+ .6%
Replacement				
NAPA	$3,532,956	$2,743,764	+ $789,192	+ 29. %
Direct Accounts	296,423	244,878	+ 51,545	+ 21. %
Export Div.	244,409	316,195	- 71,786	- 23. %
To Canada	93,018	131,004	- 37,986	- 29. %
	$4,166,806	$3,435,841	+ 730,965	+ 21. %
A-B-K Bearings and Wheels	$ 420,812	$ 430.519	- 9,707	- 2. %

ORIGINAL EQUIPMENT

Our position in the original equipment field shifted to some extent during the year in that the Chrysler Corporation split their business between American Brakeblok and Johns-Manville. This split resulted in a substantial reduction in the volume of business obtained from the Chrysler Corporation. At year-end, the lack of a satisfactory material for the new brake designs further jeopardized Chrysler business. Our engineers are working with Chrysler engineers to overcome this problem. Other accounts showed reasonable increases.

Major projects that we have on hand include the development of brake linings for the Ford, Mercury, Chevrolet and Studebaker passenger cars. The development of linings for these applications has been under study by our laboratory, and we hope to be able to supply materials to these customers that will meet with their approval. We also have been working with the Oldsmobile and Pontiac Divisions of General Motors.

Our position in the truck field is good. We are original equipment on Ford, Chevrolet, Diamond T, GMC Truck & Coach, Mack, International Harvester and Studebaker trucks, and we supply Wagner, Bendix, Timken Axle, Shuler Axle, Kay-Brunner, Clark Equipment and Eaton Manufacturing, who are the leaders in the brake and axle manufacturing fields. During the past year, we have been asked by our truck customers to improve some of the characteristics of our current production formulae. Certain fundamentals of this problem have been assigned to our Mahwah Laboratory and we hope that during 1949 we will be able to achieve the improvements.

Our position is improving in the heavy-duty truck and bus field, wherein thick blocks are used as a friction material. Such accounts as General Motors Truck & Coach, Mack Manufacturing, Timken-Detroit Axle, Eaton Manufacturing, Clark Equipment and Shuler Axle are progressively giving us a bigger percentage of their business. We had hoped during the year to substitute a cheaper dry-mix formula for the wet-mix formula in all thick block production. However, we found this formula not heat resistant enough when introduced to the field and we had to backtrack on this plan. Currently, both formulae are in production because some customers prefer the dry-mix formula.

It might be noted that our position in the aircraft industry is improving. Our materials are used as original equipment on the Bendix disc-type brake, manufactured by the Bendix Aviation Corporation. The Bendix aircraft brakes are used on B-36 bombers and Constellation type airliners, as well as other types of commercial aircraft. In this connection, the engineering department of Bendix has requested an improvement in the heat resistance of our material.

During the year we raised prices to original equipment manufacturers 13.5%. We experienced considerable resistance from our customers in raising these prices.

REPLACEMENT SALES

Sales to N.A.P.A.

	1948	1947	Increase or Decrease	Percent
Brake Lining	$2,576,662	$1,728,074	+ $848,588	+ 49%
Purchased Clutch Facings	38,995	80,027	- 41,032	- 51%
Purchased Woven Lining	63,268	69,522	- 6,254	- 9%
Purchased Belts & Hose	796,217	826,752	- 30,535	- 4%
Misc. (Bolts, Rivets, etc.)	57,814	39,389	+ 18,425	+ 47%
Total	$3,532,956	$2,743,764	+ $789,192	+ 29%

Sales of brake lining of our manufacture to N.A.P.A. in 1948 quite closely paralleled the demand for our products placed upon them by the jobber and the dealer. To a slight degree in the early part of 1948, we still labored under some of the same conditions which prevailed in 1947, wherein excess and out-of-balance inventories prevailed on certain items and with certain customers. It is felt that this situation completely corrected itself during 1948. The large new-car production in 1948 affected the replacement sales demand to a certain extent as new cars made available to the driving public did not need relining during the year.

Brake lining prices were increased 10% throughout our line on March 15, 1948.

Our selling prices for purchased rubber items were increased from 7% to 12% on October 15, 1948, with the weighted increase being approximately 9%.

Listed below are the changes in the number of wholesale outlets through N.A.P.A. for the years 1941, 1946, 1947 and 1948:

	1948	1947	1946	1941
No. of Warehouses	39	39	39	37
No. of Warehouse Branches	88	87	69	47
No. of Contract Jobbers	1,557	1,504	1,305	900

While we had some cancellations of contract jobbers, the number of new contract jobbers signed exceeded by 53 the number of cancellations. The N.A.P.A. program for acquiring new jobber outlets was disappointing.

On December 31, 1948, we discontinued our Division's participation in the volume rebate paid to jobbers. The cost of this rebate was shared equally by the National Automotive Parts Association and us. The cost of our participation for 1948 has not as yet been determined, but will approximate $65,000 to $70,000.

It is our understanding now that practically all N.A.P.A. Warehouses propose to continue to pay a volume rebate to our contract jobbers comparable to that paid by competitive manufacturers.

Consistent with our policy to sell those large fleet accounts direct which could not be sold by the N.A.P.A. warehouses, we added the Transcontinental Bus System, whose potential annual requirements we estimate at $75,000, and the Philadelphia Transportation Company, estimated at $30,000 per year. A great deal of credit is due the Brake Shoe and Castings Division Sales Department in obtaining the latter account.

On the other hand, we lost - temporarily, we hope - the Greyhound Motors and Supply business due to our price increase in November of approximately 9%. This account has amounted to over $150,000 annually in recent years. Even with this price increase, this account receives the lowest price of any replacement customer.

DIRECT ACCOUNTS

	1948	1947
Greyhound Motors & Supply	$153,104	$161,442
Capitol Transit	34,409	28,999
Transcontinental Bus System	27,681	--

Direct Accounts, continued..

	1948	1947
St. Louis Public Service	$26,575	$14,518
Surface Transportation, N.Y.	16,253	1,757
Chicago Transit Authority	11,253	--
Chicago Motor Coach	9,972	10,160
Baltimore Transit	7,342	7,939
Great Lakes Supply	3,518	2,034
Motor Coach of New York	2,484	1,080
Philadelphia Transportation Co.	1,338	--
City of New York	1,301	14,854
Public Service of New Jersey	800	894
County Transportation Co.	17	866
Other	376	335
Total Net Sales	$296,423	$244,878
Increase	21%	

A-B-K SALES

A-B-K sales were as follows:

	1948	1947	Increase or Decrease	Percent
Steel Mill Bearings	$314,793	$345,284	- $30,491	- 9%
Marine Bearings	27,798	14,788	+ 13,010	+ 88%
A-B-K Caster Wheels	49,151	34,674	+ 14,477	+ 42%
Misc. (Impregnated paper for Briggs Mfg. & Chrysler Corp., flat stock, bushings, discs, rings, gibs, safety tile, etc.)	29,070	35,773	- 6,703	- 19%
Total Net Sales	$420,812	$430,519	- $ 9,707	- 2%

The type of bearing that we sell to the steel mills is very profitable. Our 1948 sales of these bearings decreased approximately $30,000 from 1947. An analysis of the Carnegie-Illinois account discloses that 1948 bearing sales at the Gary, South Chicago and Irvin mills decreased from 1947 sales approximately $52,000 which more than accounts for the total decrease in 1948 steel mill bearing sales. The reason seems to be that the Pittsburgh office of Carnegie-Illinois has put pressure on the mills to split the replacement bearing business among five suppliers. We are currently receiving our full 20% of the business, but we obviously need help with this account and plan to ask for it.

Our Marine sales increased $13,000 during the year due to a replacement order from the Navy. As stated last year, the profit derived from sales of marine type bearings is not satisfactory, and we are very careful about quoting on this type of business so as to insure a satisfactory profit.

Our sales of A-B-K caster wheels increased $14,000 in 1948 due in part to the addition of a new outlet, the Service Caster and Truck Manufacturing Company. Heretofore, we have had an exclusive distribution agreement with the Rapids-Standard Company which we cancelled in September so as to add the Service Caster and Truck Manufacturing Company to our distribution.

Prices for A-B-K bearings were raised 10% in 1946, 22% in 1947 and were not raised in 1948. Prices for A-B-K caster wheels were raised on an average of 25% in 1948 for the first time since the war.

SPNY 003772

OPERATING

WINCHESTER

Production was commenced at Winchester on February 3rd, 1948. Net shipments from Winchester amounted to $2,164,119 for the year.

Being a new plant, the biggest problem was to train and organize a working force. A large majority of the people were inexperienced and unfamiliar with our type of manufacturing. Much was accomplished along these lines, but there is still considerable work to be done to develop a smooth working organization. In April a gross profit on shipments was realized, and this continued for the year.

The new compounding methods at Winchester developed by the Division Engineering Department, Construction and Maintenance Department, and Scott Fraula have proven very successful and efficient. Material handling in the Rolling and Finishing Departments has been greatly improved through the use of conveyors and hoppers. In the Press Department, the A-B-K Safety Tile presses have been converted for pressing brake blocks as well as tile. In the Shipping Department a new system of conveyors has proven efficient, but the lack of storage space in Shipping is a great problem.

Operation at Winchester during the last three quarters was about 50% of one shift capacity.

A photograph of the Winchester Plant is included in this report.

DETROIT

With the bulk of our replacement lining business being produced at Winchester, the Detroit plant has been able to concentrate on improved methods for original equipment production. Conveyors have been installed in the Finishing Department for sawing operations.

All shipments between the Detroit Plant and the Wayne Warehouse have been converted to the use of pallets, and all shipments to the larger manufacturers in the Detroit area have been palletized. In some cases shipping cartons have been eliminated, and the material is strapped to pallets and handled by power fork trucks.

Modern semi-automatic carton sealing and imprinting equipment was installed in 1948 for packaging brake lining in replacement car sets sold to automobile manufacturers. As far as can be learned, our packaging methods are the most modern in the brake lining industry. Similar equipment will be installed at Winchester for packaging replacement car sets sold to the N.A.P.A. Estimated annual labor and material savings approximate $10,000.

The installation of Do-All saws in the Finishing Department was completed in 1948 at a total cost of approximately $60,000. Saw-cut ends rather than sheared ends were made necessary by tolerance requirements and the development of cementing lining to shoes. Product improvement and cost reduction have been realized through improved rolling processes, premixing solvents and resins, and the extended use of carbide drilling tools. Cost estimating has been further refined by the

Standards Department, and this Department has developed process cards for all part numbers. These cards provide a ready reference for sequence of operations, tooling, shop costs, and a faster method for computing cost estimates. The Standards Department is developing a Job Evaluation plan to cover all shop jobs. The plan will be completed in 1949.

The Accounting and Payroll Departments for the Detroit Plant were moved nearer the plant operating offices to provide better organization and to eliminate duplication of records.

PERSONNEL

The peak shop employment occurred in April with 686 hourly rated people at Detroit and 97 at Winchester. Substantial layoffs were made in December at both plants, as well as a small layoff in May at Detroit. At year-end there were 529 hourly rated employees at Detroit and 74 at Winchester. The average monthly labor turnover was 3% for Detroit and 1.7% for Winchester. The percentages are somewhat distorted by the layoffs. Excluding the layoffs, the turnover was 1.6% for Detroit and 1.3% for Winchester.

The average employment for the year for the Division was 712 hourly rate people and 200 salaried people, making a total of 912 employees. At year-end, 80% of the eligible employees were participating in the Comprehensive Insurance Plan; 70% carried Group Life Insurance; and 85% belonged to the Retirement System.

The added capacity gained by the Winchester plant permitted the elimination of the expensive night shift operations at Detroit except for the necessary plant protection, around-the-clock processes and temporary bottle-necks. Large increases in production schedules can now be absorbed by the two plants without necessitating night shift operations. Combined operation of the two plants, based on employment figures, was about 3% higher than in 1947.

A wage increase of 11¢ was given at Detroit in May, and an increase of 7¢ was given at Winchester in July. No strike or labor disturbance occurred at either plant during the year.

The N.L.R.B. conducted an election at Winchester in September at which 65% of the employees voted for union representation by U.A.W.-(C.I.O). Contract negotiations during November and December resulted in a tentative labor agreement satisfactory to the Company and the Union in all respects except wage rates and pay for bargaining time. Current hourly wage rates at Winchester are about 40¢ below the Detroit scale, but they are above the going rates in the area. The Company has refused to pay Union representatives for bargaining time, and, except under certain circumstances, for the time spent in grievance meetings. Consequently, no contract has been signed to date.

SPNY 003775

Supervisory personnel at Detroit averaged 34 people for the year, and 9 at Winchester. Several of our foremen attended the Information Center at the Otis Cutler Club during the year. The reports and enthusiasm resulting from these meetings indicate the Information Center to be highly successful in achieving its purpose. During 1948 regular meetings were held for general foremen to inaugurate scrap reduction programs, C.I.P. solicitation, reports from the Information Center meetings, introduction and education on handling appraisal forms, and such other information necessary to operate the plant and develop a good management team. Management dinners were held for social and informative meetings during the year.

Payment for overtime has been eliminated except for employees under the Wage and Hour regulations. Free coffee is available in the lunch room for all employees during the regular lunch hours.

INVENTORIES

	12/31/48	12/31/47	Increase or Decrease	Increase Due to Prices or Cost	Physical Increase or Decrease
Raw Materials	$ 854,346	$ 857,133	$- 2,787	$+60,126	$- 62,913
LIFO Res.	158,222	129,919	+ 28,303		
Net	696,124	727,214	- 31,090		
Mfg'd. Stock					
Pressed Mat.	335,254	222,130	+113,124	+24,157	+ 88,967
Rolled Mat.	714,790	589,080	+125,710	+12,851	+112,859
Purchased Stock	308,283	474,686	-166,403	+12,994	-179,397
Work in process, Caster Wheels, Salvage, etc.	149,987	140,433	+ 9,554		
Total	1,508,314	1,426,329	+ 81,985		
LIFO Res.	242,660	200,047	+ 42,613		
Net	1,265,654	1,226,282	+ 39,372		
Total Inventory	2,362,660	2,283,462	+ 79,198		
LIFO Reserve	400,882	329,966	+ 70,916		
Net Total Inventory	$1,961,778	$1,953,496	$+ 8,282		

Our inventories in 1948 continued to be too high, but they will be reduced to a 30-day supply except for certain critical items such as asbestos.

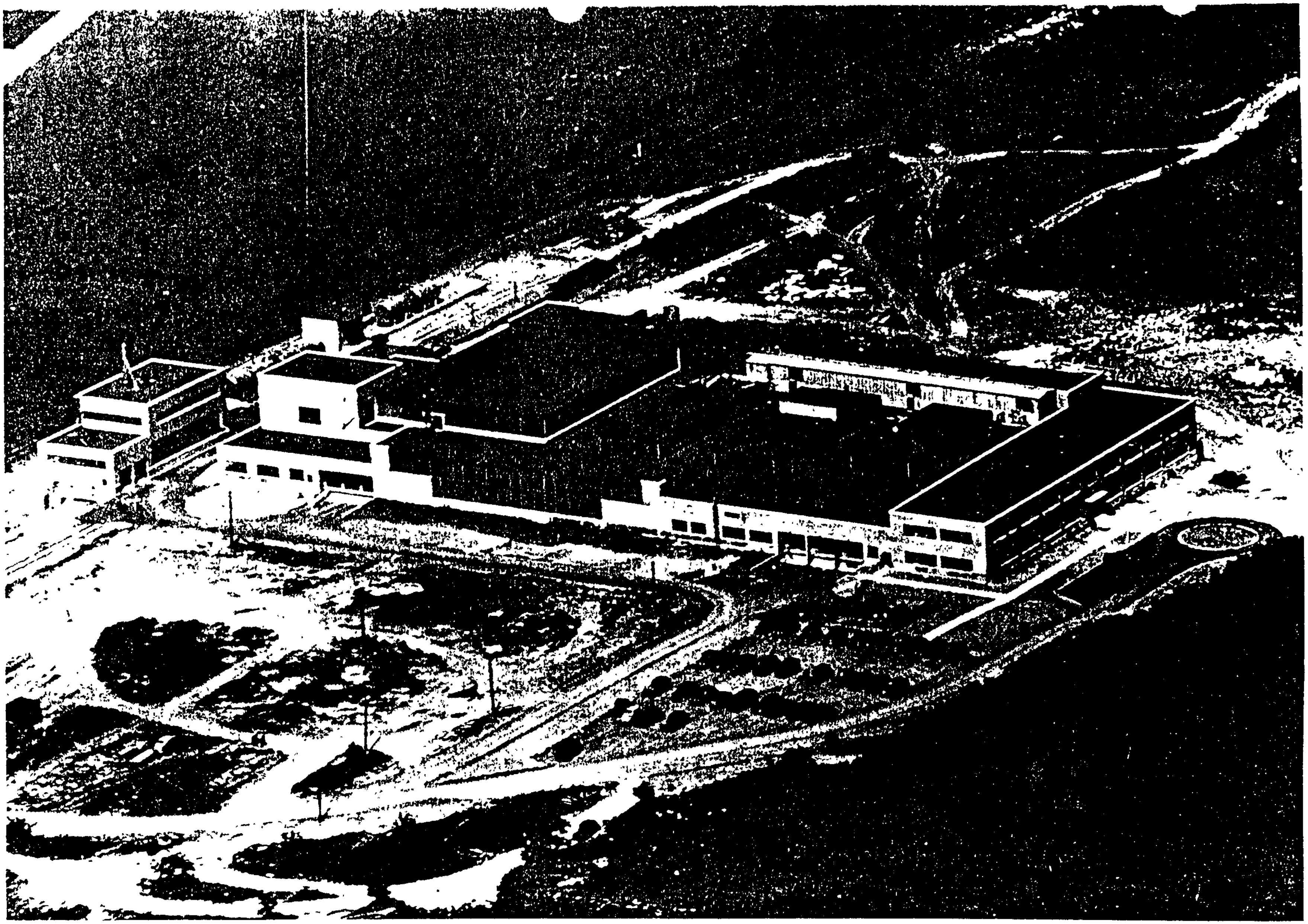
By May 1, 1949, it is estimated that the raw materials and manufactured stock inventories will be reduced by 30%, which will be a total reduction of about $700,000 bringing the $2,362,660 total of December 31, 1948 down to $1,662,660 before the LIFO adjustment. It is also estimated that the LIFO reserve will be reduced about $68,000 by May 1st, which will be an addition to earnings.

Our pressed material inventory increased in 1948 largely due to a demand on the part of some customers for our dry-mix thick block formula to supplement our standard wet-mix formula. This resulted in our having to carry a double inventory on some part numbers to make both formulae available. By May 1st, the pressed material inventory will be reduced by $75,000.

Our rolled material inventory is too high, and by May 1st we hope to reduce it by $245,000.

Contained in the purchased stock inventory is $50,000 worth of clutch facings which are obsolete. These will be removed from the inventory during 1949, and a monthly reserve has been set up to take care of this loss. This will further reduce our inventory by $50,000 at the end of 1949.

A table showing our inventories since 1938, excluding the war years, is included in the Statements and Statistics section of the report.



WINCHESTER VA., PLANT

MEDICAL AND HEALTH

The joint safety committee met regularly three times each month. Labor and Management members were most cooperative and sincere and have made many worth-while contributions to promote safety. A Maryland Casualty representative attended one meeting each month. He usually showed a film on a safety topic. The Detroit plant gave each employee a specially designed bronze token (with key chain) as an award for the "no lost time" record compiled in 1946-47.

Ten projects, designed to improve ventilation systems to reduce exposure to dust and fumes, were completed. The program to convert all plant lighting in work areas to fluorescent type is virtually completed. An extensive repainting program is well under way which will further improve lighting and sanitation conditions. Major improvements have been made in the method and facilities for handling and storing asbestos and in the heating of the area to avoid unnecessary exposure. Modernization and increase of toilet and shower facilities are almost complete.

Six lost-time accidents were recorded, one at Winchester and five at Detroit. A total of 44 days of actual time was lost, and 300 days was assessed for specific loss of a finger. In the Brake Shoe Company-wide safety competition (year ending August 1) the Division had the lowest "accident factor", a figure that takes into account both frequency and severity of accidents resulting from 1,459,307 man hours worked. In their groups: Detroit ranked first; Winchester ranked 3rd; Lindsay ranked 9th.

Nurses at Detroit and Winchester cared for approximately 2400 plant injuries of all kinds. The cases averaged 1.5 calls for care of each case. Only 36 cases required professional medical care. Nurses made 150 calls at hospitals or employees' homes with some very helpful and interesting results, such as the case of an employee whose attendance became progressively worse until he was not working at all. The nurse saw him several times and discussed his symptoms with the plant physician. They concluded that his illness was probably due to extreme mental depression and induced him to see a phychiatrist, which he did. Failing to respond to other treatment, shock therapy was advised, but the patient balked. After much persuasion by our nurse, he consented to undergo the treatment, and his recovery was prompt and remarkable. He returned to work, and his attendance and attitude have been excellent.

Occupational dermatitis has been controlled by prompt first-aid and hygiene measures. Only one case developed to a degree requiring medical care. Many employees have minor discomfort, but few cases persist or become chronic. All are carefully followed.

Strict control of venereal disease cases has been maintained. Our eye protection program (safety glasses) has continued unchanged with good results and at a nominal cost.

One case of active tuberculosis was discovered and the employee hospitalized as a result of our survey examinations and health follow-up. Two of the four previously hospitalized were discharged and returned to work during the year. The other two are making satisfactory progress.

The matter of lead exposure has been carefully watched during the year. Dust counts taken by Brake Shoe Medical Department show our exposure to be negligible. Analysis of 75 urine samples taken at intervals during the year confirmed the conclusions made from dust counts. No employee showed significant lead excretion.

ENGINEERING

In March, Plant and Tool Engineering were combined into one General Engineering Department, and with the completion of the new quarters in July the two groups were combined in fact. This consolidation resulted in some increased efficiency, permitting the force to be reduced from 14 to 12.

Several engineering developments resulted in improved product, reduced cost, or a saving in labor.

1. A new type stripper press was developed to increase production and to reduce labor and operating costs. We are planning to install these presses at all block-preform-press stations, which will increase our total preforming output from 264 to 400 per hour.

2. We have been successful in replacing the old style, self-contained, high speed, hydraulic preform press with an inexpensive platen press. This was accomplished by installing special controls and by drawing power from the existing hydraulic system used on the block and A-B-K curing presses. Units have been installed at Detroit and Winchester with a third press on the way to Lindsay. An estimated saving of $4,000 per unit resulted.

3. A refrigerated-air cooling system was engineered into the coolers in the Compounding Department, replacing the old water jacket cooling churns. This reduced the cooling time from 16 minutes to 4 minutes per batch.

4. An improved method of controlling the length of material rolled on the automatic rolling machines permits 15 foot rolls to be cut to accuracies of a fraction of an inch. This reduces the scrap when the roll is subsequently cut into pieces.

5. A return conveyor system developed late in 1948 is now being installed on an automatic chamfer grinding machine. The successful use of this conveyor will reduce the number of men per machine from 2 to 1 or a total of 4 men for the 4 machines at Detroit. Winchester will likewise benefit, having one such machine.

6. A successful automatic cycle control was developed for the block curing presses at Winchester eliminating the need for press attendants for the 3-1/2 to 4-1/2 hours curing and cooling cycles after the press is loaded. The Winchester installation has set the pattern for similar equipment for all Detroit presses with the added feature that blow-down, steam and water will also be automatically controlled. The installation at Detroit will eliminate 2 men per shift or a total of 6 men with present operating schedules in the Pressing Department.

7. To date we have been unable to procure satisfactory hydraulic pressure regulating valves for our curing presses. In spite of their high cost, their performance is poor. Recent experiments utilizing some of the special control devices on the new preform press (item 2) appear to have the matter solved, eliminating the hydraulic regulating valve completely.

8. The installation of a roller conveyor system at Winchester is complete - the first system installed to handle all regular runs of blocks and production material. It should set the pattern for Detroit. Such a system will reduce handling, trucking, and space requirements, and will force the completion of a job once started.

9. A small but important addition to our double-end automatic DO-ALL saws in the form of a hydraulic operated disappearing saw "back-up" block has greatly reduced scrap from broken corners on rolled strip material.

10. Considerable has been done on Cycleweld cement application to brake lining. An experimental machine has been operating for some time, and preliminary drawings are completed on a fully automatic system of application and oven drying. Further work is being withheld pending future developments.

11. A great deal was developed in thermalizing equipment. Drawings are nearly complete on two fully automatic machines with pre-heating equipment, press, and cooling tunnel. These designs have also been held up pending future developments.

1949 will see the completion of the following work begun in 1948:

1. Drawings are 50% complete on converting the present "labor-costly" hand rolling machines into a semi-automatic machine for strip rolling.

2. Parallelling this development, experiments have begun on the regular automatic rolling machines. To date we have been able to increase the useful range of these machines by taking over some sizes heretofore handled on the hand rolling machines, which also will help to improve the product. Further experimental work on the basic design and principles of these machines will continue throughout 1949.

3. Engineering work has begun on new methods of cut-off control which we hope will make all automatic rolling machines successful at strip production as well as roll production. This will reduce material now rolled on the hand rolling machines to a minimum.

4. A new Compounding Department layout for Detroit incorporating new principles of handling, batching, and processing is being developed by the Division Engineering and Construction and Maintenance Departments.

<u>RESEARCH</u>

Continuous study has been given to improvements in manufacturing processes. Keeping in mind the high cost of materials and competitive times ahead, changes of wide scope in tooling and formulation have been under study. These were necessitated by extensive revival of research in brake improvement by our customers, which got under way this past year at a greater pace than at any time since the beginning of the war. The widespread interest in cementing lining to metal shoes rather than riveting has necessitated studies in our laboratory leading to the development of improved physical properties by the use of new materials. Improvements in brake lining testing technique throughout the automotive industry and a tightening up of performance requirements have necessitated development of better compounding and processing, in which progress can be reported with retention of the essential steps of our current processing and with a minimum addition of new steps. There has been improvement in the processing and evaluation of products of Mahwah chemical research. A considerable portion of dynamometer operation time has been consumed successfully in testing technique research in an effort to attain better correlation between road testing and laboratory testing.

A new project has been started this past year in the development of the railroad tie-pad. While work to date has been largely exploratory in an effort to crystallize the many varying ideas among the railroad maintenance-of-way men on the preservation of ties, we feel that considerable should be accomplished in the use of a suitable tie-pad in conjunction with proper hold-down spikes, such as the Ramapo spike. This has developed into a cooperative project with Ramapo and Brake Shoe and Castings.

The development staff will continue its effort to improve pressed products from both the functioning and cost standpoint as well as to develop new ones. We will continue to gauge our research on the basis of superior quality as it is believed that as normal competitive conditions return to this industry, quality will remain the main factor in maintaining and improving our relative position.

Production facilities for safety tile have been available at Winchester since the first part of 1948. However, large scale field test installations have been withheld due to lack of a satisfactory adhesive. The solution of this problem should be reached in the near future.

Recent progress in our V-Belt research has caused us to delay a decision regarding the advisability of our continuing or withdrawing from this field.

FOREIGN

CANADA

The report for the American Brakeblok Division of Lindsay, Ontario will be contained in the annual report of the Dominion Brake Shoe Company, Limited. However, some brief remarks concerning our Canadian activities may be of interest in this report.

The plant operated with reduced forces during the year because our production schedules for Canada were insufficient to utilize plant capacity. In addition to our Canadian replacement business, orders were received for original equipment and service materials for Ford Motor and Studebaker of Canada. Prices were increased approximately 10% on brake lining with the exception of thick blocks, for which prices were increased and then reduced to the former level.

The Canadian operation due to lack of sales volume has continued to show a loss throughout the year. The expenditure for the installation of equipment at Lindsay for the manufacture of Heat and Pressure materials was approved by the Board of Directors, and the equipment has been ordered.

Hourly rated employees were granted two wage increases of 5 cents an hour each and six paid holidays. The average hourly rate is now 81.4¢. Plant and office working hours were reduced from 44 to 40 hours per week.

FRANCE

FADIL had the largest sales in 1948 of its history. Sales in France and French Colonies through Ducellier increased 74% over 1947 in French Francs. The contract with Ducellier has until 1950 to run. FADIL'S export sales increased 93% over 1947 in French Francs. The facilities of FADIL were used by the Export Division to reach those countries that were impossible to reach from either the U. S. or Canada. In 1948 this amounted to 31,850,642 Frs. ($134,500), or 39% of total net sales in Francs.

FADIL'S net sales increased from 45,534,407 Frs. in 1947 to 82,363,086 Frs. in 1948, which is 80.9%. The rate of exchange for French Francs has gone from 120 Frs./Dollar in 1947 to 263.5 Frs./Dollar at the end of 1948 with the result that net sales expressed in U. S. Dollars actually show a decrease. The cubic inch shipments for brake linings increased 8.9%, and the weight of clutch facings shipped increased 118.4%. The 80.9% net sales increase in Francs was largely due to inflationary price increases. The gross profit on sales of brake lining and clutch facings for the year was 32,731,077 Frs. ($125,000), or 40% of total net sales. Net profit after taxes, royalties, and administration expenses for the year was 10,858,196 Frs. ($41,500), or 13% of net sales. Royalties payable to the American Brake Shoe Company amounted to 7,345,941 Frs. ($28,000) for the year. At December 31st total assets amounted to 87,699,530.95 Frs. ($333,000).

In the early part of 1948 Mr. Andre' Belin was made President of FADIL, and Mr. Given became Honorary President. Mr. Marcel Poulain continued as General Manager. One of Mr. Poulain's sons, Mr. Jacques Poulain, spent eight months in Detroit with our brake engineers and technicians, and upon his return to France was hired by Ducellier as a brake engineer in their American Brakeblok department.

FADIL operated during 1948 with a staff of 17 people in the Paris office. The manufacturing company, FABRIQUE de GIF, employed 45 people in the plant at Gif-sur-Yvette.

ENGLAND

In 1948 an agreement was made with Small and Parkes, Limited, of Manchester, England by which we would give them our formulae, machine designs, and manufacturing methods for producing rolled and pressed brake lining, A-B-K bearings, and A-B-K Safety Tile in return for 5% of their total net sales of these products with no deductions allowed for taxes. This agreement will continue for 15 years.

Small and Parkes' Chief Chemist and Chief Engineer spent a month visiting our Detroit, Winchester, and Lindsay Plants. Their Sales Manager for laminated fabric bearings spent a month in Detroit, New York and Pittsburgh with our A-B-K Salesmen.

The General Purchasing Department is acting as their agent in the U. S. for purchasing equipment. A standard duty rolling machine of our design will be shipped to them in March, 1949. It is estimated that they will be able to commence production of our products by 1950. Minimum quarterly royalty payments of £ 625 commence in September, 1950; however, payments will be due on any sales made prior to this date.

DENMARK

An agreement similar to the Small and Parkes agreement was made with Roulunds Fabriker, Limited, of Odense, Denmark. This agreement pertained only to wire back, air cured brake lining. Our royalty is 5% of total net sales before taxes with minimum quarterly payments of $2500 (U.S.) commencing in February 1950. The agreement will continue for 15 years.

The General Purchasing Department is also acting as their agent for purchasing equipment and materials in the U. S. Approximately $50,000 worth of machinery and materials was shipped to them during 1948. They also should be in production by 1950.

EXPORT

Our export sales to countries other than Canada and France decreased from $316,195 in 1947 to $244,409 in 1948, which is a decrease of 23%.

One reason for this decrease is that we diverted part of our export business to our French and Canadian Plants. Another reason is the shortage of American dollars in various markets. However, a fuller explanation of our export business will be contained in the report from the Export Division, who have continued to handle our exports other than to Canada and France. Sales to Canada decreased from $131,004 in 1947 to $93,018 in 1948, which is a decrease of 29%. The reason for this decrease is that our Canadian Plant is taking over this business. $76,134 of the 1948 total represents sales to Dominion Brake Shoe Company, Limited, for items which our Canadian Plant cannot produce. The installation of equipment for manufacturing Heat and Pressure material in our Canadian Plant will practically eliminate these items.

APPOINTMENTS AND PROMOTIONS

During 1948 the following appointments and promotions took place:

EXECUTIVE:

W. T. Kelly, Jr. appointed Executive Vice-President

SALES:

M. B. Terry promoted to General Sales Manager from Manager - Equipment Sales, and at the end of the year was appointed Vice-President, Sales.

U. B. Grannis, Jr. was hired as Manager - Equipment Sales. He was formerly a Representative, Brake Shoe and Castings Division.

G. A. Weller promoted to Assistant Manager - Replacement Sales from Representative.

F. A. Colosimo promoted to Chief Service Engineer from Assistant to Vice-President, Research Department.

R. G. Robison promoted to Head of Belt Sales from Special Representative, Belts.

RESEARCH AND TEST:

B. W. Wortelboer was hired as Assistant Technical Director. He formerly was with Marshall-Eclipse Division of Bendix Products.

J. H. Troester promoted to Assistant to Vice-President from Research Engineer.

R. R. Swanberg promoted to Chief Road Test Engineer from Test Engineer.

ENGINEERING:

F. E. Tayler promoted to Chief Engineer from Plant Engineer.

ACCOUNTING:

W. B. Jordan promoted to Accounting Assistant to Vice-President from Apprentice, Accounting.

APPRENTICES:

G. E. Kenworthy hired as Apprentice, Research.

R. I. Keyes hired as Apprentice, Sales.

William Fraula hired as Apprentice, Production.

K. S. Lyle transferred from Apprentice, Chemical Department (Mahwah) to Apprentice, Production (Detroit).

J. W. Green transferred from Apprentice, Production to Apprentice, Quality Control.

J. Emery continued as Acting Head of Dynamometer Room.

K. Colombo continued as Apprentice, Accounting.

STATEMENTS AND STATISTICS

AMERICAN BRAKEBLOK DIVISION
STATEMENT OF PROFIT AND LOSS

	1948		1947	
	Year	% of Sales	Year	% of Sales
Net Sales	$8,704,497.67	100.00 %	$7,863,749.66**	100.00 %
Other Income	9,405.65*	.1	2,805.50	.04
Total Income	$8,695,092.02	99.9 %	$7,866,555.16	100.04 %
Variable Costs				
Direct Material	3,339,733.47	38.3 %	3,265,802.73	41.5 %
Plant Wages	2,034,845.88	23.4	1,850,484.75	23.5
Power	108,714.06	1.2	78,774.70	1.0
Plant Ind. Mat. and Exp.	570,103.71	6.6	440,225.36	5.6
Total Va'ble Costs	$6,053,397.12	69.5 %	$5,635,287.54	71.7 %
Margin for Fixed Costs and Profit	$2,641,694.90	30.4 %	$2,231,267.62	28.4 %
Fixed Costs				
Salaries	$1,004,203.46	11.6 %	$ 954,709.38	12.1 %
Commissions	--	-	27,661.75	.4 %
Depreciation	191,440.97	2.2	126,163.89	1.6
Local Taxes, Rent, Fire Ins. etc.	237,014.72	2.7	175,658.16	2.2
Authority Expense	61,409.11	.7	50,582.04	.6
Adm., Gen'l. Opt'g., Gen'l. Engr'ng., except Salaries	273,996.77	3.1	343,304.92	4.4
Advertising	179,888.15	2.1	227,268.90	2.9
Research, except Sal.	48,327.21	.6	44,546.18	.6
N.Y. Alloc'n Expense	105,600.00	1.2	105,600.00	1.3
Other Misc. Costs	--	-	--	-
Total Fixed Costs	$2,101,880.39	24.2 %	$2,055,495.22	26.1 %
Net Profit before Federal Taxes, etc.	539,814.51	6.2 %	175,772.40	2.2 %
Federal Taxes, etc.	221,000.00	2.5 %	72,000.00	.9 %
Net Profit after Taxes	$ 318,814.51	3.7 %	$ 103,772.40	1.3 %
Gross Profit on Sales	$1,597,721.31	18.4 %	$1,239,884.40	15.8 %
General Overhead	863,626.32	9.9 %	900,584.13	11.5 %
Unfilled Orders End Yr.	1,089,067.21	12.5 %	1,309,790.77	16.6 %
Inventories End Yr.	1,961,777.98	22.5 %	1,953,495.75	24.8 %
LIFO Adj. for Year	70,915.29	.8 %	198,653.46	2.5 %
Capital Exp'rs.for Yr.	451,811.36	5.2 %	1,733,103.51	22.0 %
Average No. Employees	912		880	
Total Payroll for Yr.	3,039,049.34	35.0 %	2,805,194.13	35.7 %

* - Indicates Red Figure; ** - Discount allowed deducted from sales as done in 1948.

AMERICAN BRAKEBLOK DIVISION

Brake Lining Sales to Principal Equipment Customers

Customer	1948 Net Sales	% of Total	1947 Net Sales	% of Total
1 Chrysler Corp.	$ 922,883.38	22.42%	$1,565,915.87	38.26%
2 Wagner Elec. Corp.	916,665.89	22.27	670,288.16	16.38
3 Chevrolet Gear & Axle	653,983.30	15.89	524,542.42	12.82
4 Ford Motor Co.	449,347.59	10.91	546,853.82	13.36
5 Timken Axle Brake Div.	296,228.79	7.20	141,750.09	3.46
6 Bendix Products Div.	156,780.32	3.81	89,158.09	2.18
7 Warner Electric Brake Mfg.	75,780.36	1.84	17,488.68	.43
8 Fawick-Airflex Co.,Inc.	62,320.25	1.51	25,166.47	.61
9 Bucyrus-Erie Co.	61,256.31	1.49	37,251.27	.91
10 Gen. Mtrs. Truck & Coach	58,860.21	1.43	48,884.17	1.19
11 Mack Manufacturing Co.	56,642.79	1.38	26,204.69	.64
12 Utility Trailer Mfg. Co.	55,466.36	1.35	6,778.44	.17
13 Clark Equipment Co.	48,186.34	1.17	70,065.55	1.71
14 Amer. Chain & Cable Co.	40,455.57	.98	45,553.79	1.11
15 Eaton Mfg. Co.	39,638.16	.96	47,688.21	1.17
16 Fruehauf Trailer Co.	30,606.88	.74	21,616.17	.53
17 Kay-Brunner Steel Prod.	18,541.70	.45	29,630.80	.73
18 Shuler Axle Co.	18,129.92	.44	15,514.25	.38
19 Elec. Controller & Mfg.	17,510.18	.43	23,224.78	.57
20 Northwest Engineering Co.	17,507.37	.43	12,831.45	.31
21 Thew Shovel Co.	15,662.56	.38	8,942.48	.22
22 International Harvester	15,557.10	.38	19,163.27	.47
23 Federal Motor Truck Co.	13,839.46	.34	15,161.50	.37
24 Page & Page Co.	13,301.23	.32	18,490.66	.45
25 Autocar Company	10,558.51	.25	6,246.10	.15
Others	51,167.94	1.23	58,139.31	1.42
Total	$4,116,878.47	100.00%	$4,092,550.49	100.00%

AMERICAN BRAKEBLOK DIVISION

A-B-K Sales to Principal Customers

Customer		1948 Net Sales	% of Total	1947 Net Sales	% of Total
1	Republic Steel Corp.	$ 73,079.07	17.37%	$ 72,557.61	16.85%
2	Carnegie-Illinois	49,679.46	11.81	89,864.50	20.88
3	Rapids-Standard Co.	47,422.79	11.27	35,620.21	8.27
4	Bethlehem Steel Co.	27,259.55	6.48	20,330.90	4.72
5	U. S. Navy	26,614.00	6.32	19,231.05	4.47
6	Superior Sheet Steel	21,778.29	5.18	6,223.40	1.45
7	Briggs Mfg. Co.	18,140.14	4.31	13,959.02	3.24
8	National Tube Co.	16,355.64	3.89	16,241.27	3.77
9	Youngstown Sheet-Tube	10,787.31	2.56	10,094.27	2.34
10	Amer. Steel & Wire	9,006.55	2.14	8,439.22	1.96
11	Sharon Steel Co.	8,914.88	2.12	3,717.17	.86
12	Int'l. Harvester	7,681.74	1.83	9,080.67	2.11
13	Granite City Steel Co.	7,648.00	1.82	3,084.54	.72
14	Acme Steel Corp.	7,259.83	1.73	7,445.34	1.73
15	Niles Rolling Mill Co.	6,546.55	1.56	5,949.62	1.38
16	Copperweld Steel Co.	6,271.00	1.49	8,074.26	1.88
17	Weirton Steel Co.	5,396.60	1.28	4,030.72	.94
18	Chrysler Corp.	5,388.36	1.28	2,098.95	.49
19	Jones & Laughlin Steel	5,369.76	1.28	9,033.08	2.10
20	Tennessee Coal,Iron, RR	5,270.56	1.25	1,496.28	.35
21	Mahoning Valley Steel	4,937.50	1.17	3,790.06	.88
22	Great Lakes Steel	4,090.26	.97	7,628.04	1.77
23	Buffalo Steel	3,904.56	.93	2,466.91	.57
24	Fruehauf Trailer-Calif.	3,854.48	.91	15,291.00	3.55
25	Laclede Steel Co.	3,161.22	.74	3,564.52	.83
	Other	34,994.87	8.31	51,206.47	11.89
	Total	$ 420,812.97	100.00%	$ 430,519.08	100.00%

SPNY 003797

AMERICAN BRAKEBLOK DIVISION

Net Sales by Industries

Classification	1948	1947	1946
1 Automotive	$7,422,073.28	$6,712,139.13	$7,615,774.38
2 Amer. Brake Shoe Co.*	320,890.02	430,330.51	793.38
3 Steel	303,622.41	328,800.67	164,354.92
4 Bus Transportation	296,423.86	244,878.96	218,053.69
5 Crane, Hoist, & Shovel Mfg.	129,923.80	88,969.15	12,534.18
6 Machinery Mfg.	104,447.85	55,419.03	93,958.76
7 Industrial Truck Mfg.	50,274.44	36,046.15	35,513.04
8 Aircraft Mfg.	31,398.90	26,807.43	--
9 U. S. Government	29,370.66	21,679.47	35,065.66
10 Railroad	10,687.36	5,611.66	526.68
11 Marine	1,800.18	4,981.29	2,907.82
12 Petroleum	1,462.00	2,093.62	2,088.49
13 Paper Mills	745.45	1,079.42	313.89
14 Cement	516.65	307.16	313.44
15 Elevator Mfg.	371.19	18.07	406.85
16 Electric Power	270.92	-	500.00
17 Chemical	218.70	-	-
18 Mining	-	303.00	43,751.61
Total	$8,704,497.67	$7,959,464.72	$8,226,856.79

* - includes sales to Export Division, Dominion Brake Shoe, and Canadian Ramapo.

FADIL, FRANCE

NET SALES - BRAKE LINING

	Cubic Inches		French Francs		U. S. Dollars *	
	1948	1947	1948	1947	1948	1947
France	4,697,478	4,183,679	50,512,444	29,048,300	$226,485.82	$242,069.17
Czecho-Slovakia	1,224,047	1,548,173	14,977,477	10,791,355	61,281.52	89,927.96
Belgium	98,199	86,743	1,037,009	551,665	4,760.59	4,597.21
Norway	345,328	115,233	3,890,603	718,188	16,403.50	5,984.90
Yugo-slovia	--	272,467	--	1,752,840	--	14,607.00
Morocco	184,418	53,896	1,901,729	353,838	8,634.02	2,948.65
Switzer-land	--	2,019	--	12,582	--	104.85
Austria	77,268	--	823,026	--	3,845.92	--
Finland	13,407	--	150,065	--	701.24	--
Greece	128,863	--	1,419,048	--	6,263.22	--
Holland	48,612	--	494,923	--	2,317.72	--
Totals	6,817,620	6,262,210	75,206,324	43,228,768	$330,693.55	$360,239.74
% Increase or Decrease	+8.9%		+74.0%		-8.2%	

NET SALES - CLUTCH FACINGS

	(Weight- Lbs.)					
Czecho-Slovakia	18,138	7,906	6,476,177	2,007,558	$ 27,132.31	$ 16,729.66
Yugo-slovia	1,178	1,302	316,710	298,080	1,480.00	2,484.00
Austria	766	--	349,830	--	1,634.72	--
Finland	27	--	14,045	--	65.63	--
Totals	20,109	9,208	7,156,762	2,305,638	$ 30,312.66	$ 19,213.66
% Increase or Decrease	+118.4%		+210.4%		+ 57.8%	
Total Net Sales			82,363,086	45,534,406	$361,006.21	$379,453.40
% Increase or Decrease			+80.9%		- 4.9%	

* - 1947 Francs exchanged at 120 Frs./Dollar
1948 Francs exchanged at 214 Frs./Dollar from Jan. 1 - Sept. 30.
1948 Francs exchanged at 263.50 Frs,/Dollar from Oct. 1 - Dec. 31.

AMERICAN BRAKEBLOK DIVISION

Comparison of Gross Profit by Product

Year	Cubic Inches Shipped	Net Sales	Average Net Sales Price Per M.Cu.In.	% Gross Profit of Net Sales
	Original Equipment - Rolled Brake Lining			
1939	41,690,435	$ 979,725.15	$ 23.50	27.88 %
1940	55,630,237	1,299,711.22	23.36	26.05
1946	90,347,777	2,362,197.87	26.15	11.10
1947	126,730,239	3,571,395.15	28.18	4.35 *
1948	110,135,822	3,358,438.27	30.49	4.91 *
	Replacement - Rolled Brake Lining			
1939	17,654,152	$ 842,075.04	$ 47.70	61.36 %
1940	18,329,841	875,592.51	47.77	60.40
1946	64,983,637	3,328,872.63	51.23	46.96
1947	26,030,634	1,361,732.16	52.31	32.45 *
1948	34,282,202	1,919,952.14	56.00	34.87 *
	Original Equipment - Pressed Brake Lining			
1939	1,850,524	$ 75,762.27	$ 40.94	27.12 %
1940	2,914,741	114,452.66	39.27	25.70
1946	6,047,785	268,898.88	44.46	20.86
1947	10,276,303	521,155.34	50.71	24.43 *
1948	14,408,370	758,440.20	52.64	24.24 *
	Replacement - Pressed Brake Lining			
1939	3,265,630	$ 157,401.39	$ 48.20	34.87 %
1940	3,774,590	179,217.81	47.48	34.13
1946	17,286,447	881,032.12	50.97	26.83
1947	17,399,207	978,128.42	56.22	21.95 *
1948	21,140,009	1,242,416.90	58.77	23.24 *

* - includes LIFO adjustment

COMPARISON OF PROFIT BY PRODUCT (continued)

Year	Net Sales	% Gross Profit
	Replacement Woven Lining and Clutch Facings	
1939	$ 135,859.03	15.94 %
1940	137,600.28	15.27
1946	340,387.81	23.09
1947	229,841.42	25.74
1948	150,408.27	30.45
	Replacement Fan Belts and Radiator Hose	
1939	$ 259,121.83	15.86 %
1940	301,208.76	17.92
1946	788,608.75	16.11
1947	826,750.49	14.34
1948	796,216.50	9.99
	Replacement Miscellaneous (Bolts, Rivets, Plugs, Castings, etc.)	
1939	$ 8,339.47	14.41 %
1940	34,827.77	34.77
1946	29,899.69	27.59
1947	39,388.75	31.89
1948	57,812.42	30.07
	A-B-K Products	
1939	75,608.57	36.42 %
1940	96,781.58	44.34
1946	258,411.68	30.11
1947	430,519.08	38.50
1948	420,812.97	35.19

AMERICAN BRAKEBLOK DIVISION

ORDERS RECEIVED AND SHIPMENTS

Year	Net Orders Received	Net Shipments	Back log at Year End
1938	$1,724,313.41	$1,712,631.17	--
1939	2,580,387.10	2,458,284.24	--
1940	3,121,705.17	2,924,347.56	$ 307,751.15
1946	9,381,900.78	8,226,856.79	2,554,036.75
1947	7,569,249.18	7,959,464.72	1,309,790.77
1948	8,590,962.40	8,704,497.67	1,089,067.21

Back log figures were not recorded prior to 1940. The apparent discrepancy between back log and orders received compared to shipments is due to the method of not reporting original equipment orders as received until shipped.

****

COST OF PRODUCTION

Average cost per thousand cubic inches

Year	Rolled Material Cubic Inches	Rolled Material Cost/M.	Pressed Material Cubic Inches	Pressed Material Cost/M.
1938	36,586,663	$ 17.90	4,261,336	$ 38.03
1939	68,433,896	16.64	5,673,893	28.08
1940	75,593,795	17.43	7,707,188	30.28
1946	150,626,009	22.60	22,981,163	33.13
1947	158,298,158	25.98	29,553,242	36.22
1948	150,208,597	28.02	38,667,641	37.91

AMERICAN BRAKEBLOK DIVISION

CAPITAL ADDITIONS

Detroit	Cost		
Land & Garage Bldg.Jennerstown	$ 7,700.00		
Secondary Power Switchboard	12,052.29		
Office Additions to Bldg. #5	17,294.73		
Three Do-All Special Twin Saws	34,378.39		
Two Compound Cooling Units	7,738.91		
One Hand Rolling Machine	5,292.35		
Three Automobiles for Testing	6,655.97		
One Special Hydraulic Press	8,160.86		
One Aldrich 2500# Press.Pump	3,375.13		
One Burroughs Acct'g. Machine	2,742.65		
Office Furniture	2,025.76		
Office Equipment	2,672.59		
Other Machinery & Equipment	16,002.63		
Total		$ 126,092.26	
Winchester			
Bldgs., Machinery & Equipm't.		325,719.10	
Total Additions, 1948			$ 451,811.36

DEPRECIATION 1948

Detroit	$ 80,517.48	
Winchester	82,457.49	
Total Depreciation, 1948		$ 162,974.97

AMERICAN BRAKEBLOK DIVISION
INVENTORIES

	Dec. 31 1948	Dec. 31 1947	Dec. 31 1946	Dec. 31 1940	Dec. 31 1939	Dec. 31 1938
Raw Materials	$ 854,345.58	857,133.17	560,766.54	207,664.04	217,391.00	104,183.01
LIFO Reserve	158,221.74	129,919.27	83,399.26	--	--	--
Net	696,123.84	727,213.90	477,367.28	207,664.04	217,391.00	104,183.01
*Mfg'd. Stock	1,508,313.66	1,426,328.55	933,101.56	372,900.45	393,810.20	276,237.50
LIFO Reserve	242,659.52	200,046.70	47,913.25	--	--	--
Net	1,265,654.14	1,226,281.85	885,188.31	372,900.45	393,810.20	276,237.50
Total	2,362,659.24	2,283,461.72	1,493,868.10	580,564.49	611,201.20	380,420.51
LIFO Reserve	400,881.26	329,965.97	131,312.51	--	--	--
Net	$1,961,777.98	1,953,495.75	1,362,555.59	580,564.49	611,201.20	380,420.51
Net Sales	$8,704,497.67	7,959,464.72	8,226,856.79	2,924,347.56	2,458,284.24	1,712,631.17
Total Net Invent'ry. As % of Net Sales	22.5%	24.5%	16.5%	19.9%	24.8%	22.2%

* - Non-controllable costs eliminated from Manufactured Stock inventory commencing in 1946.

AM[illegible]CAN BRAKEBLOK DIVISION

BALANCE SHEET

December - 1948

ASSETS	Balance 1-1-48	Debits	Credits	Balance
Cash	$ 332,654.92			$ 233,874.43
Notes and Accounts Receivable				
Customer Accounts	542,438.34			693,908.28
Inter-Division	-			19,333.11
Inter-Company	-			16,649.39
	542,438.34			729,890.78
Inventories				
Raw Materials	857,133.17			854,345.58
Lifo	129,919.27*			158,221.74*
	727,213.90			696,123.84
Manufactured Stock	1,426,328.55			1,508,313.66
Lifo	200,046.70*			242,659.52*
	1,226,281.85			1,265,654.14
Total Inventories	1,953,495.75			1,961,777.98
Loans & Advances to Employees				
Loans and Advances	1,223.00	21,665.45	12,101.08	10,787.37
Travel Advances	10,575.00	7,505.00	7,080.87	10,999.13
Group Life - Traveler's	42.04	117.78	117.78	42.04
	11,840.04			21,828.54
Deferred Assets				
Fire & Misc. Insurance	27,293.81	7,927.47	4,909.72	30,311.56
Comp. & Liability Insurance	14,130.84*			-
Total Unexpired Insurance	13,162.97			30,311.56
Group Life - Equitable	934.25*			
Group Life - C.I.P.	-			
Reserve Sales Promotion	-	184,497.37	180,000.00	4,497.37
Miscellaneous	2,177.94	45,493.20	38,777.02	8,894.12
Total Other Deferred Assets	1,243.69			13,391.49
Total Deferred Assets	14,406.66			43,703.05
Fixed Assets (Regular)				
Land	58,033.35	1,000.00	2,250.00	56,783.35
Bldgs., Machy. & Equip.	3,627,991.92	454,603.28	47,255.54	4,035,339.66
	3,686,025.27			4,092,123.01
Reserve for Depreciation	876,329.96*	31,994.70	163,711.23	1,008,046.49*
Depn. Value, Land, Bldgs., Machy. and Equip.	2,809,695.31			3,084,076.52
Special Fixed Assets				
Land, Bldgs., Machy., etc.	1,056,228.43			1,056,228.43
Reserve	508,534.75*		28,866.00	537,400.75*
Net	547,693.68			518,827.68
Total Fixed Assets	3,357,388.99			3,602,904.20
	$6,212,224.70			$ 6,593,978.98

LIABILITIES	Balance 1-1-48	Debits	Credits	Balance
Accounts Payable				
Vouchers Payable	$ 344,353.93			$ 211,930.14
Inter-Division	-			16,812.60
Inter-Company	-			-
F.O.A.B. Employees' Current Year	-	25,942.18	25,942.18	-
Unemp. Ins. Employees' " "	-	165.57	165.57	-
Withholding Tax " " "	-	242,136.73	242,136.73	-
Employees' Funds- War Bonds	1,285.75	62,156.25	63,290.00	2,419.50
R.S.Contributions- Employees	-	57,784.43	57,784.43	-
R.S.Contributions- Company	-	71,116.85	71,116.85	-
Unclaimed Wages	197.17	196.30	.91	1.78
Employees' Funds- Pref.Stock	1,177.80	2,359.20	5,238.60	4,057.20
Total Accounts Payable	347,014.65			235,221.22
Accrued Payrolls & Bonuses				
Accrued Payrolls	16,466.45			26,744.79
Reserve Shop Profit Particip'n.	-	14,700.00	14,700.00	-
Reserve for Vacations	24,851.50	101,900.49	109,789.99	32,741.00
Reserve for Christmas Bonus	-	4,400.00	4,400.00	-
Total Acc. Payrolls & Bonuses	41,317.95			59,485.79
Accrued Local Taxes				
Reserve Plant Taxes, Current Yr.	-	82,371.34	82,371.34	-
Reserve Excise Taxes " "	5,393.70	131,309.07	131,636.34	5,720.97
F.O.A.B. Company " "	-	25,942.18	25,942.18	-
Unemp. Insurance " "	-	33,724.88	33,724.88	-
Federal Income Taxes,Etc." "	-	221,000.00	221,000.00	
Virginia Tax on Income		3,090.00	3,090.00	
Total Accrued Local Taxes	5,393.70			5,720.97
Sundry Accrued Current Liabilities				
Rebate on Jobber Sales	62,275.00	62,275.00	78,440.06	78,440.06
Comp. & Liability Insurance	14,130.84	21,562.78	13,443.55	6,011.61
Group Life - Equitable	934.25	14,464.51	14,724.26	1,194.00
" " C.I.P.		21,390.47	22,030.60	640.13
				86,285.80
Reserves				
Authority Expense	-	69,000.00	69,000.00	-
General Adjustments	-			-
Total Reserves				
Earnings - Year to Date				
Division Control	5,756,223.40			6,207,265.20
	$6,212,224.70			$ 6,593,978.98

* Denotes Red Figures