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# THE LUBRIZOL CORPORATION

Lubrizol  
ANNUAL REPORT 1970

### **GENERAL OFFICES**

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Common Shares of The Lubrizol Corporation are listed on the New York Stock Exchange under the symbol LZ.

### **ANNUAL MEETING**

The annual meeting of shareholders will be held in the Lewis Room of the Sheraton-Cleveland Hotel, Public Square and Superior Avenue, Cleveland, Ohio at 2:30 p.m. on Monday, April 5, 1971.



## THE COMPANY

Lubrizol is a leading developer and manufacturer of chemical additives for use in lubricants and fuels. These chemicals improve petroleum products by contributing properties not otherwise present or by enhancing properties already existing in such products. They are supplied to petroleum refiners and marketers throughout the world to be formulated with their lubricants and fuels for use in passenger cars, trucks, buses, off-the-road equipment and railroad and marine diesels. They are also important components of industrial lubricants.

These chemicals have made possible advances in the design and engineering of automotive engines, tools and mechanical equipment that could not otherwise have been achieved. They have contributed to the development of more efficient engines for passenger cars, trucks and heavy equipment, permitted longer periods between oil changes and helped reduce maintenance costs. They have been essential in the development of fluids needed for the operation of automatic transmissions. They also have been important in the development of gears for rear axles which are able to transmit the high speed and high torque generated by modern passenger car and truck engines.

To the motorist and to the truck operator alike, use of additives in motor oils, automatic transmission fluids, gear oils, gasoline and diesel fuel has meant extended equipment life and improved, low-cost, efficient service.

Lubrizol also makes unique chemical products for other industries. These include coating chemicals used in the appliance and metal working industries to provide paint-adherent, rust-resistant surfaces for metal as well as polymer chemicals to improve the processing, handling and performance of plastics.

There are 13 Lubrizol plants throughout the world. The company's chemical research and polymer research laboratories are located at Wickliffe, Ohio. It has a mechanical testing laboratory at that location as well as at Hazelwood, England. One of every four of Lubrizol's 2,900 employees is engaged in research, development or product testing and the company has nearly 7,000 shareholders.

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## MESSAGE TO SHAREHOLDERS

The past year marks the completion of an outstanding decade in the history of Lubrizol. For the tenth consecutive year, gains were made in both revenues and income. The growth in 1970 was particularly gratifying because of its magnitude and because it was achieved in the face of relatively poor conditions in the economy.

The performance demonstrated again that there are factors having greater effect on Lubrizol's growth than general business conditions. These are mainly new requirements of the automotive industry brought about by technological advances in equipment design or by new standards of lubricant and fuel quality developed through the combined efforts of the automotive and petroleum industries.

Many factors contributed to the year's success. First, sales were increased in all major product lines. This was achieved by expanding markets for established products and through the successful introduction of several new products.

Lubrizol continued to benefit from its broad coverage of important market areas throughout the world. While sales in the United States continued to increase, the rate of growth was greater overseas. For the year, the portion of sales outside the United States and Canada amounted to 58%. The European area, which accounts for approximately 30% of total sales, experienced favorable business conditions, and the trend to increased use of additives to improve petroleum products continued. Japan continued its dynamic growth and India started to emerge as an important consumer of additives.

New, more efficient plant facilities which have been added in recent years contributed to improved profit margins. The plants in India, Mexico and Spain passed the threshold of start-up problems and came into full operation.

The results of 1970 and the past decade support continued adherence to the following policies:

A strong commitment to research with major emphasis on increasing competitive strength in current product lines, developing new products in closely related areas and diversifying through research on specialty chemicals for applications outside the petroleum field.

A marketing philosophy which places highest priority on customer service.

An active capital improvement program to upgrade manufacturing plants and provide lower cost operations with adequate reserve capacity.

A willingness to expand into new geographical areas with manufacturing units and sales and technical service facilities.

A dedication to motivating employees through recognition of individual dignity and rewards based upon individual achievement.

In executive changes made during the year, Paul L. Carll was elected Vice President - Manufacturing following the retirement of M. M. McGrew.

In April, 1970, F. Alex Nason, a founder of the company and a Director since 1928, retired from the Board. Mr. Nason, former President and former Chairman of the Board, made many valuable contributions during his distinguished career of more than 40 years of service, most notably in directing the marketing effort for many years and in developing the company's international operations.

*M. Roger Clapp*      *F. Alex Nason*  
President                      Chairman of the Board

March 1, 1971



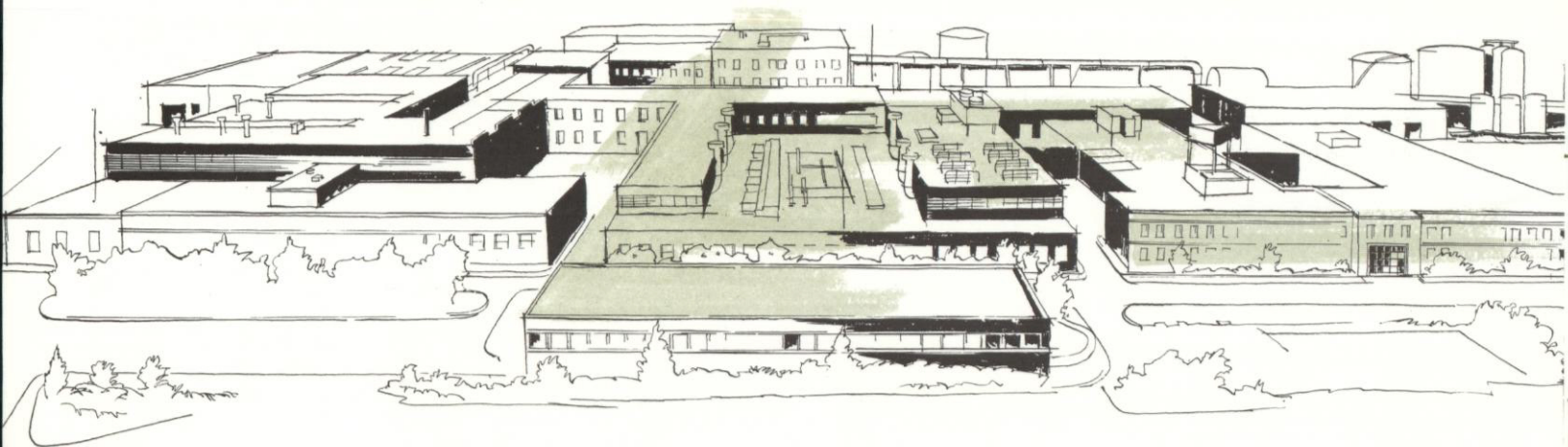
## FINANCIAL HIGHLIGHTS

	<u>1970</u>	<u>1969</u>	<u>% Increase</u>
Total revenues .....	\$186,842,376	\$165,661,635	12.8
Net income .....	21,849,992	17,858,732	22.3
Net income per share .....	2.17	1.79	21.2
Dividends per share .....	.65	.57½	13.0
Capital expenditures .....	14,006,802	13,172,709	6.3
Depreciation .....	7,316,742	6,150,700	19.0
Research and development expenditures .....	9,021,404	8,334,504	8.2
Shareholders' equity .....	108,963,801	93,232,110	16.9



M. ROGER CLAPP      RALPH S. TYLER, JR.





WICKLIFFE, OHIO — GENERAL OFFICES AND PLANT

## REVIEW OF OPERATIONS

Lubrizol, for 42 years, has been serving the petroleum and automotive industries through its continuing development of new chemicals to fulfill changing requirements in the field of fuels and lubricants. An important factor, giving the direction and lead time needed for this research, has been the close liaison the company has maintained with automobile, truck and construction equipment manufacturers around the world. Changes in equipment design create new opportunities for Lubrizol to apply its extensive chemical knowledge and research strength.

In recent years, there have been a number of advances in the automotive industry aimed at reducing undesirable emissions. These have included new engines, new auxiliary devices, new fuels and more sensitive engine adjustments. Many of these changes have required new additive developments, and, as steps are taken to further reduce emissions from the internal combustion engine, new challenges are presented for Lubrizol.

### New Road Simulator Facilities

Mechanical testing to prove the effectiveness of new products under conditions as nearly representative of actual service as possible has always been an important part of product development work at Lubrizol. Its mechanical testing laboratory at Wickliffe, Ohio is one of the largest and finest in the world devoted to fuel and lubricant testing.

An important addition to mechanical testing facilities was completed in 1970. This equipment, known as a road simulator, consists of rolls or tracks on which vehicles are mounted to simulate road conditions by permitting the engine, power train and rear wheels to operate while the vehicle remains stationary. Precise load and speed conditions from actual

road operations are reproduced through magnetic tapes which actuate a system of electro-mechanical controls. The initial four lanes of the road simulator went into operation in March and, in the first nine months, over 300,000 test miles were logged. During a test, each vehicle accumulates 15,000 to 20,000 miles per month.

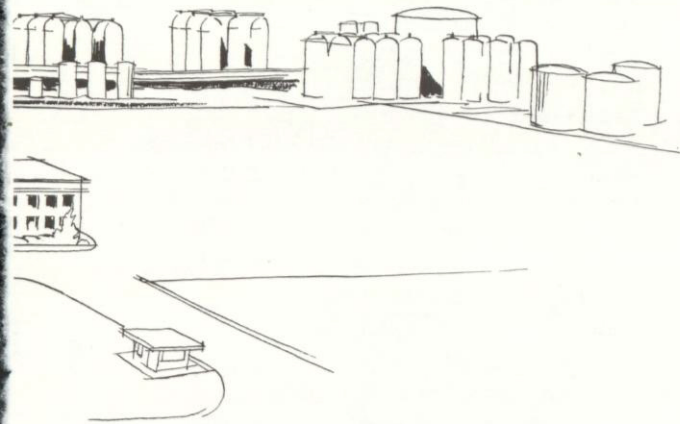
The road simulator has proven to be an effective tool in evaluating the performance of additives in all components of a vehicle. Long duration tests can be conducted without the setbacks due to adverse weather, road hazards or individual driver variables. Since each vehicle runs 24 hours per day under automatic control, minimum attendance is required. The experience with this facility has been so successful that four additional lanes are being added and will be in operation early in 1971.

During 1970, construction of a building to house additional engine test stands was completed at Lubrizol International Laboratories, Hazelwood, England. This mechanical laboratory, situated on 97 acres of picturesque English countryside, some three hours north of London by car, specializes in evaluating additive performance in automotive equipment of European manufacture. The laboratory is located on the grounds of a former estate called "The Knowle", and that name is still frequently used in identifying it.

### Product Developments

A portion of the research effort over the past few years has been allocated to the development of a broad line of viscosity index improvers. All oils tend to thicken and cause harder starting at lower temperature and to thin out at higher temperature, thereby providing less effective lubrication. Viscosity





*The road simulator, which is being expanded from four to eight lanes, is an effective tool for evaluating additive performance.*

index improvers are added to lubricants to reduce the viscosity change for a given temperature change.

The manufacturing unit at the Bayport, Texas plant for producing a new viscosity index improver is in operation. This material is an entirely new product and is being widely used as a component in automatic transmission fluid additives. The material is unique since it is compatible in concentrated form with other chemicals, thus making possible a single additive to provide viscosity control as well as oxidation inhibition, friction modification and other properties.



*Operation of the road simulator is controlled remotely by instruments housed in this building.*



A major factor for the future expansion of sales of viscosity index improvers is the growth in the use of multigrade oils and the trend to even wider ranges in such oils. Where oil companies once offered 10W-30 oils, they are now featuring 10W-40, 20W-50 and even 10W-50.

Since its early days, Lubrizol has been a leader in the development and manufacture of additives for rear axle gear lubricants. The motorist usually has little acquaintance with these products since the

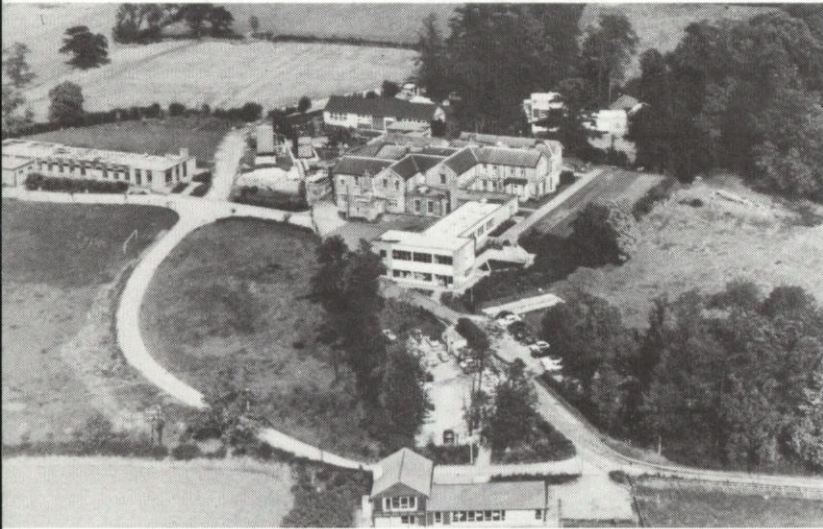
lubricant is added at the factory, and, in passenger cars, is rarely touched except for occasional make-up of losses due to leakage. Proper additives are essential in these lubricants to prevent serious damage to the gear contact surfaces under both high-speed passenger car and heavy-load truck or bus operations. Gear oil additives are also extensively used in industrial applications. Lubrizol continued to maintain its leadership in gear oil additives in 1970 with the acceptance of several recently developed products.

During 1970, chemical additives for motor oils, gear oils, automatic transmission fluids and other automotive lubricants accounted for approximately 80% of the company's sales. Lubrizol's wide range of products in this area is illustrated by the fact that nearly 600 different additives of this type were sold during the past year.

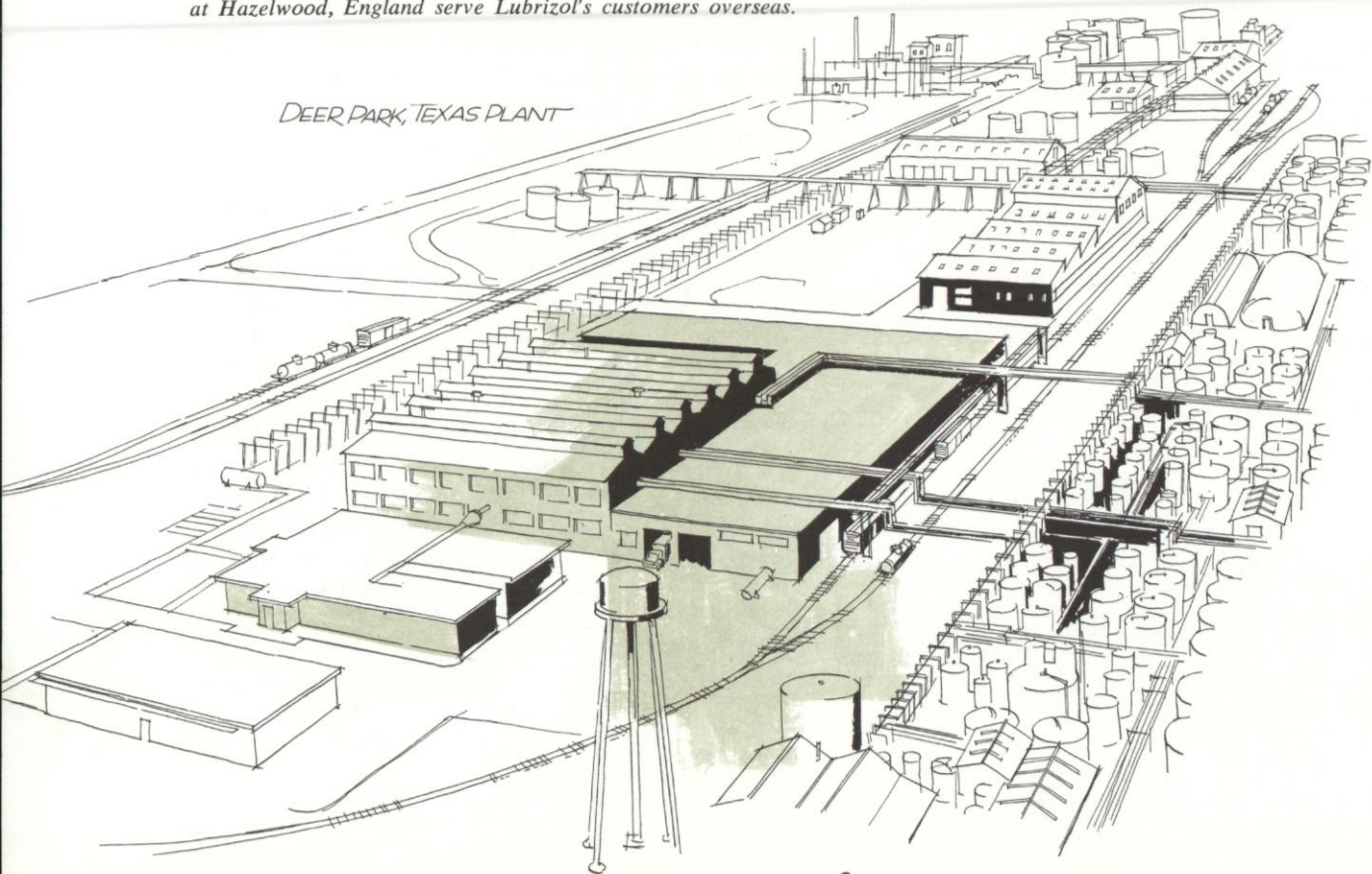
In recent years, emphasis has been given to the related field of lubricants used for industrial purposes, such as hydraulic fluids, cutting oils, turbine oils and similar products. Sales in this area also continued to improve in 1970.

#### Expansion of Domestic Plants

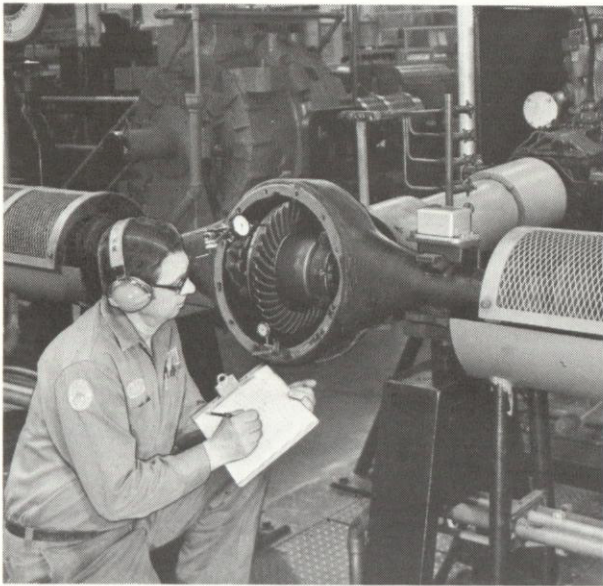
Increased sale of Lubrizol products, the desire for greater operating efficiency and preparation for



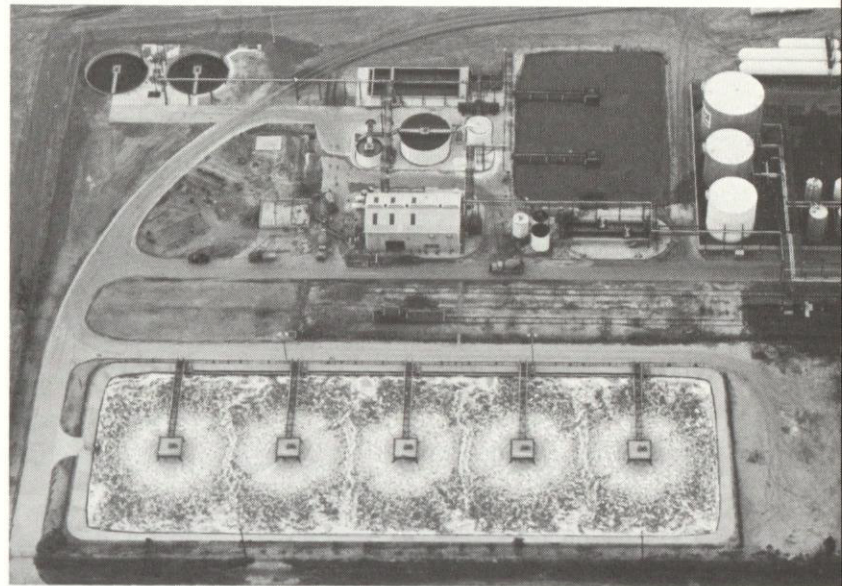
*Mechanical test facilities at Lubrizol International Laboratories at Hazelwood, England serve Lubrizol's customers overseas.*







*New gear oil additives contributed to Lubrizol's continued leadership in this area.*



*Water leaving the new effluent water-treating system at the Deer Park, Texas plant is well within required limits.*

future growth resulted in major capital additions and modernization of facilities at most of the company's 13 plants during the past year. Capital expenditures for 1970 were \$14 million.

At Deer Park, Texas, location of Lubrizol's largest manufacturing plant, a \$2.5 million effluent water treatment plant went into operation in the fall of 1970. This project, which is inherently of a non-productive nature, represents part of the company's continuing and substantial investment in control of waste and potential pollution sources from its facilities. The facility, which covers approximately 7.5 acres, provides both primary and secondary treatment for used water emanating from the plant's manufacturing operations. The water leaving the unit meets or exceeds the standards for water quality set by the State of Texas and plans are under way to recirculate and use a substantial quantity of the treated effluent in the plant's manufacturing operations. The treatment plant is designed to meet the plant's requirements for a number of years.

Capacity of several additive manufacturing units was increased at Deer Park during the year and a new unit for production of dispersant additives for motor oils was completed.

The Deer Park plant property, including additional land acquired in 1969, comprises a total of 91 acres.

Development of the 25-acre site acquired in 1969 began with installation of a rail siding. These additional facilities, scheduled for completion early this year, are necessitated by the plant's steadily increasing rail traffic.

At the nearby Bayport, Texas plant, approximately eight miles from the Deer Park plant, facilities for the manufacture of additive components for motor oils were completed during 1970. At that location also, facilities were completed for the manufacture of diacetone acrylamide (DAA), the company's vinyl monomer, first announced in 1966.

At the Painesville, Ohio plant, production facilities were generally upgraded and a new unit was added to produce high-temperature oxidation inhibitors. In further work connected with controlling possible sources of pollution, a second fume incinerator was added. These incinerators — part of a system of specially designed odor-control equipment at Painesville as well as at other plants — convert gaseous byproducts from plant processes into harmless steam and carbon dioxide. The new unit supplements the present one when needed and also serves as a standby when repair or maintenance is required. For this reason, it is constructed to operate on utility systems independent of those which serve the initial unit.



## Computers Aid Production

Installation of computer equipment began in 1964 in the Finance Division at Wickliffe. This equipment, which is periodically upgraded, has been utilized for several years to perform various mathematical functions and print out results with remarkable speed and efficiency. Payrolls are computed and checks printed, sales are recorded by customer, by product, by month, and by plant and country. Company expenses are tabulated under various classifications.

During 1970, new computer equipment was installed at the Deer Park plant to facilitate order scheduling and inventory control. Orders for finished products are fed into the Wickliffe computer which

breaks them down into raw materials and intermediates required. This information is immediately forwarded to the Deer Park computer by phone-wire hookup so that the plant will have current information as to its production requirements and inventory position. The system is a major aid in filling orders promptly and in controlling inventory levels.

## Expansion of Plants Overseas

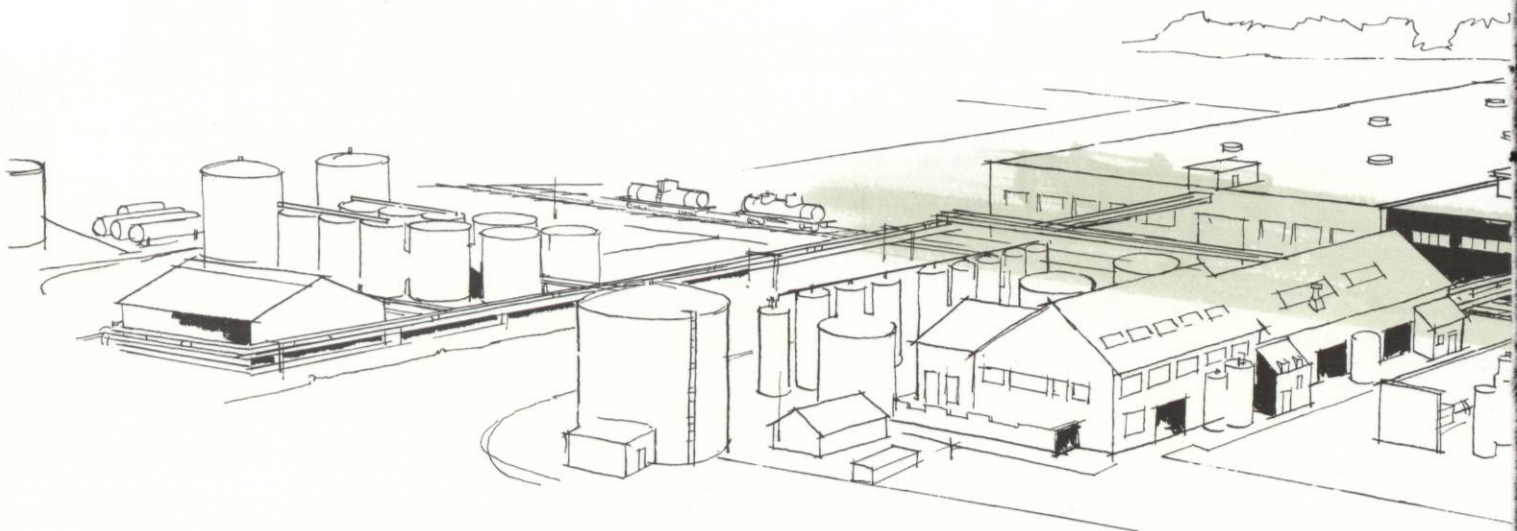
At the Rouen plant of Lubrizol France, a new facility for manufacturing additives for diesel engine oil went on-stream and additional bulk storage facilities for raw materials were constructed in 1970. At Lubrizol France's LeHavre plant, work began on facilities for production of components for gear lubricants and on construction of a plant maintenance building, with both projects scheduled for completion early in 1971. The LeHavre plant, which began operations in 1969, supplements production of the Rouen plant, started in 1955, in supplying additives to the Common Market and Europe.

Three projects were finished in 1970 at the Bromborough, England plant of Lubrizol Limited: modernization and additions to the dispersant manufacturing unit, installation of equipment for bulk handling of raw materials and construction of an additional manufacturing building.

At the Taketoyo, Japan plant of Nippon-Lubrizol Industries, Inc., manufacturing facilities for processing sulfonates were completed. The plant has been in continuous expansion since start-up in 1965 and



*Lubrizol's computer program contributes to manufacturing efficiency.*







*Bulk shipments of Lubrizol additives are made throughout the world.*

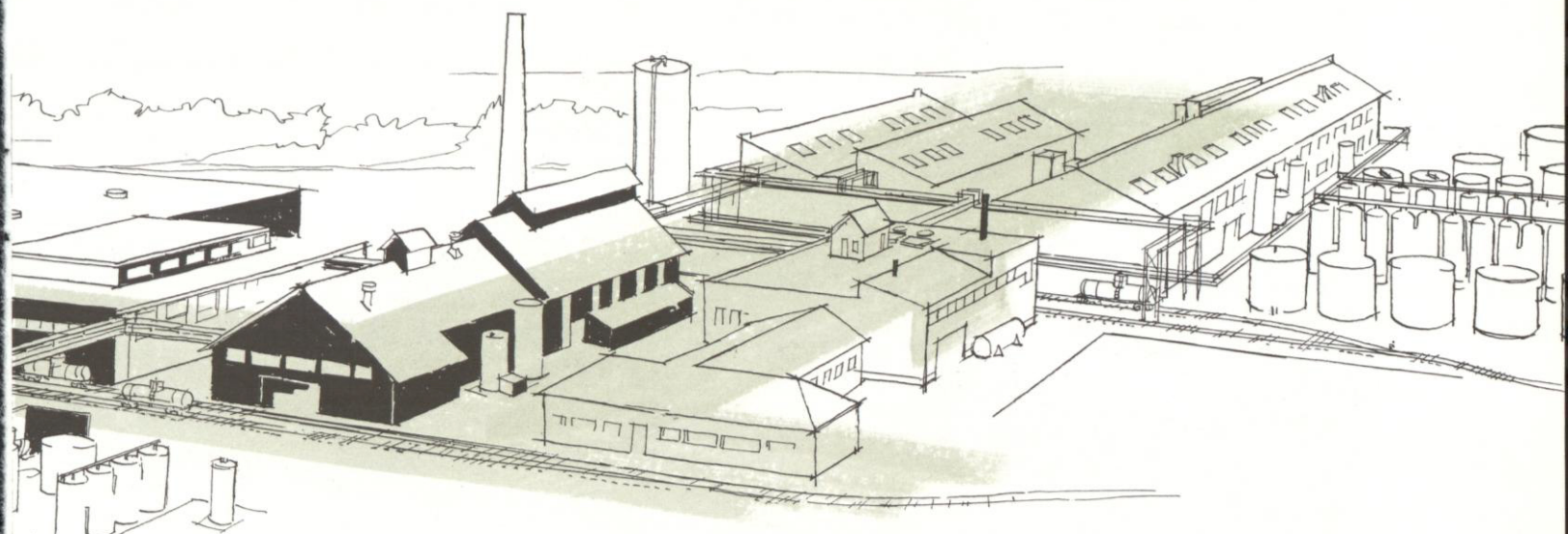
the latest project was built on the last available land at the present site. To provide for future growth, an additional 17 acres has been acquired, approximately one mile from the present plant.

### **Worldwide Distribution**

In 1970, Lubrizol products were supplied to customers in 76 countries. To provide optimum service, the company has a network of plants and supply points around the world. Since each of these plants is supplied in part with intermediates from the United States, distribution of these materials has become a rapidly growing activity. Most of this movement is in bulk through public storage and shipping terminals. Products are accumulated at these locations and, once a ship is available, the materials being shipped are pumped from storage to

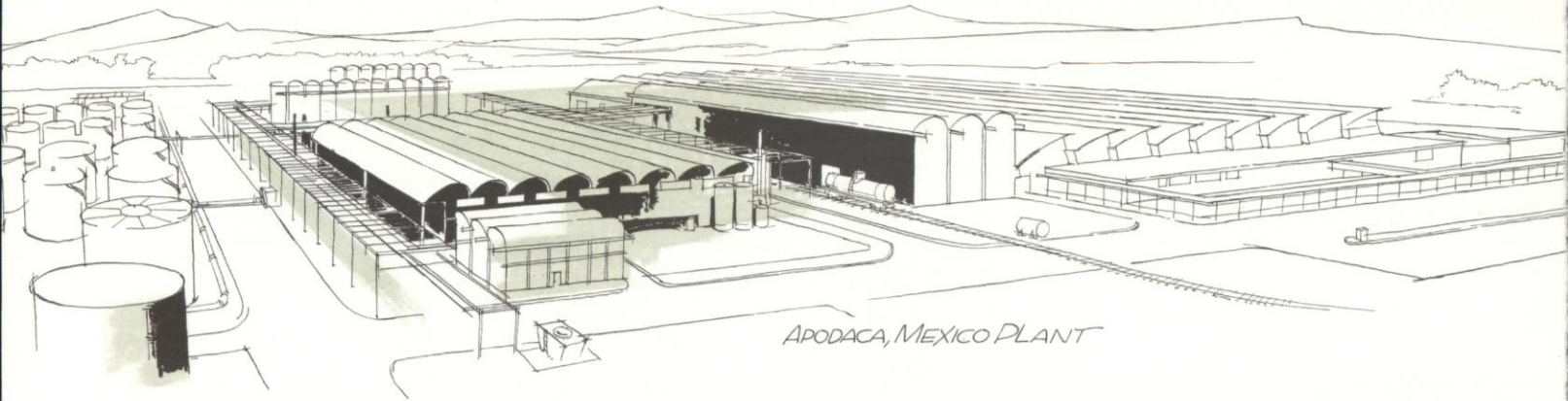
deep tanks located in the ship's hold or to tanks temporarily mounted on the deck. Recently, as more chemical tankers have become available, they are being used in these operations. These tankers are made with many compartments and are specially constructed to minimize contamination. This is an important feature since additives have a high degree of purity and are easily contaminated by a small amount of sea water or by residue from foreign material remaining from prior shipments.

Drum shipment of additives is also utilized in the company's distribution system to overseas plants, but the major growth in recent years has been in bulk delivery. Lubrizol's principal distribution center is Houston, Texas, where more than 10 million gallons of additives were exported in bulk during the past year.



*PAINESVILLE, OHIO PLANT*





APODACA, MEXICO PLANT

## FINANCIAL

Revenues for the year 1970 were \$186,842,376, an increase of 12.8% over the preceding year. Net income was \$21,849,992, an increase of 22.3% over 1969 and represents \$2.17 per share compared with \$1.79 per share for the prior year.

Dividends paid during the year were 65 cents per share, a total of \$6,536,531, as compared with 57½ cents per share, a total of \$5,741,426 for the preceding year. The quarterly dividend rate, commencing with the September payment, was increased 16⅔%, from 15 cents to 17½ cents per share. The dividend paid December 10, 1970, was the company's 101st consecutive quarterly dividend.

Capital expenditures for the year were \$14 million, an increase of 6% over 1969, with about three-quarters of the expenditures in each year spent for facilities in the United States. Depreciation charged to income was \$7.3 million compared with \$6.2 million in 1969. Anticipated capital expenditures for 1971 are estimated at about \$14 million.

Working capital on December 31, 1970 was \$43,563,374, an increase of \$6,341,327 for the year.

During the year, the company reduced its bank term loans by 50% and the balance of \$3,000,000 will mature between August 1, 1973 and February 1, 1975. At December 31, 1970, the overseas subsidiaries had current bank loans of \$1,272,947.

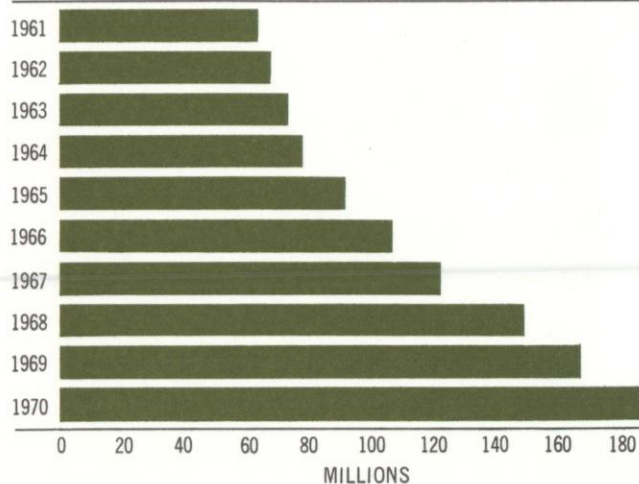
The United States income tax surcharge, at an annual effective rate of 2½%, was about \$400,000 or 4 cents per share, compared with the 10% surcharge for 1969, totaling about \$1,200,000 or 12 cents per share.

Shareholders' equity passed the \$100 million mark and at December 31 amounted to \$108,963,801, an increase of 16.9% for the year.

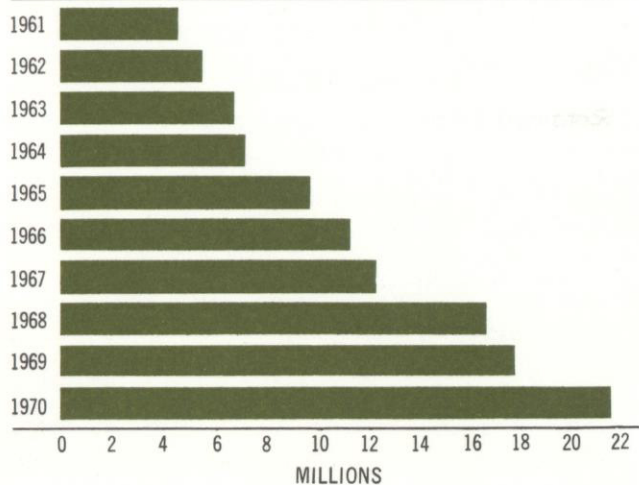
For a number of years, including 1970, the company has incurred no material losses from changes in valuation of foreign currencies. During the past year, the Canadian dollar increased about 6% and, as a result of a series of devaluations during the year, the Brazilian cruzeiro decreased 12%.

Lubrizol's 1970 favorable contribution to the U. S. balance of payments was the largest in the company's history. For six years, the United States Government has had controls over direct investments by U. S. companies in other countries. These controls complicate and, in some cases, interfere with the conduct of international business. Lubrizol has fully complied with these controls without any material adverse effect on its business.

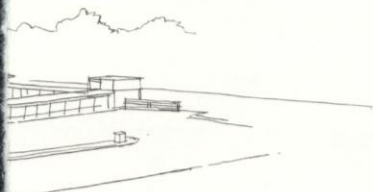
### TOTAL REVENUES



### NET INCOME







## CONSOLIDATED STATEMENT OF INCOME AND RETAINED EARNINGS

Year ended December 31

	1970	1969
<b>Revenues:</b>		
Net sales .....	\$183,639,824	\$162,530,305
Royalties and fees .....	3,202,552	3,131,330
Total .....	<u>186,842,376</u>	<u>165,661,635</u>
<b>Cost and expenses:</b>		
Cost of sales .....	121,089,265	107,591,028
Selling, administrative and research expenses .....	26,053,363	24,368,450
Total .....	<u>147,142,628</u>	<u>131,959,478</u>
Income from operations .....	39,699,748	33,702,157
<b>Other income (expense):</b>		
Equity in earnings of affiliated companies .....	919,897	834,851
<b>Interest:</b>		
Income .....	693,560	265,414
Expense .....	(622,117)	(667,250)
Other items — net .....	331,904	44,560
Income before taxes on income .....	<u>41,022,992</u>	<u>34,179,732</u>
Provision for taxes on income .....	19,173,000	16,321,000
Net income .....	21,849,992	17,858,732
Retained earnings, January 1 .....	72,271,963	60,154,657
Total .....	94,121,955	78,013,389
Less dividends (per share: 1970—\$.65; 1969—\$.57½) .....	6,536,531	5,741,426
Retained earnings, December 31 .....	<u>\$ 87,585,424</u>	<u>\$ 72,271,963</u>
Net income per share .....	<u>\$2.17</u>	<u>\$1.79</u>

The accompanying notes to financial statements are an integral part of this statement.



## CONSOLIDATED BALANCE SHEET

December 31

### ASSETS

#### Current assets:

Cash .....	\$ 9,393,289	\$ 7,296,848
Receivables:		
Customers .....	26,925,266	23,033,148
Affiliated companies .....	3,044,602	3,452,939
Other .....	2,587,116	2,582,718
Inventories — at cost (first-in first-out method) not in excess of market:		
Finished products .....	7,222,985	6,123,430
Products in process .....	10,729,009	8,268,591
Raw material and supplies .....	9,684,104	8,001,863
Prepaid expenses .....	2,459,539	2,132,128
Total current assets .....	<u>72,045,910</u>	<u>60,891,665</u>

#### Plant property — at cost:

Land and improvements .....	9,627,751	8,128,439
Buildings and improvements .....	21,786,022	20,739,386
Machinery and equipment .....	70,876,271	62,250,520
Construction in progress .....	4,243,270	3,455,358
Total .....	<u>106,533,314</u>	<u>94,573,703</u>
Less accumulated depreciation .....	39,852,127	34,270,858
Plant property — net .....	<u>66,681,187</u>	<u>60,302,845</u>

#### Patents and trademarks — at cost less accumulated amortization

	<u>579,034</u>	<u>640,693</u>
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#### Other assets:

Investments in affiliated companies — at equity .....	3,212,895	2,157,074
Loan to affiliated company .....	660,000	880,000
Miscellaneous .....	257,097	269,676
Total other assets .....	<u>4,129,992</u>	<u>3,306,750</u>

TOTAL .....	<u>\$143,436,123</u>	<u>\$125,141,953</u>
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December 31

**LIABILITIES AND SHAREHOLDERS' EQUITY**

Current liabilities:

	<u>1970</u>	<u>1969</u>
Current portion of long-term debt .....		\$ 600,000
Loans payable by overseas subsidiaries to banks .....	\$ 1,272,947	1,149,945
Accounts payable:		
Trade .....	9,106,657	6,430,911
Affiliated companies .....	4,633,331	4,281,812
Other .....	1,172,495	964,083
Accrued expenses:		
Income taxes .....	6,889,159	5,990,575
Other taxes .....	1,125,461	836,351
Employee compensation .....	3,333,652	2,571,522
Other .....	948,834	844,419
Total current liabilities .....	<u>28,482,536</u>	<u>23,669,618</u>
Long-term debt — Note 2 .....	<u>3,000,000</u>	<u>5,400,000</u>
Deferred cash grants from a foreign government (being amortized over the lives of the related assets acquired) . . .	<u>1,453,477</u>	<u>1,471,228</u>
Deferred foreign income taxes — Note 3 .....	<u>1,536,309</u>	<u>1,368,997</u>
Shareholders' equity — Note 4 .....		
Serial preferred stock without par value— Authorized and unissued — 2,000,000 shares		
Common shares without par value:		
Authorized — 25,000,000 shares		
Outstanding — 10,073,412 shares in 1970 and 10,040,052 shares in 1969 (after deducting 22,863 treasury shares in both years) .....	21,378,377	20,960,147
Retained earnings .....	87,585,424	72,271,963
Total shareholders' equity .....	<u>108,963,801</u>	<u>93,232,110</u>
TOTAL .....	<u>\$143,436,123</u>	<u>\$125,141,953</u>

The accompanying notes to financial statements are an integral part of this statement.



## NOTES TO FINANCIAL STATEMENTS—1970

### 1. Consolidation

All subsidiaries are wholly-owned and consolidated.

The accounts of the subsidiaries located outside the United States have been translated into United States dollars as follows: Property, related depreciation and inventories at rates in effect at the time of acquisition; other assets and liabilities at rates in effect at year-end; other income accounts at average rates for the year. No significant gains or losses resulted from translation of foreign currencies.

A summary of net assets of subsidiaries located outside the United States and Canada at December 31, 1970 follows:

	(In thousands of dollars)				
	England and Europe	Central and South America	Asia and Australia	Other	Total
Current assets . . . . .	\$21,595	\$ 5,802	\$ 5,272	\$ 7,025	\$39,694
Current liabilities . . . . .	9,333	2,995	2,436	882	15,646
Working capital . . . . .	12,262	2,807	2,836	6,143	24,048
Fixed assets . . . . .	16,320	219	845	333	17,717
Other assets . . . . .	71	8	43	660	782
Deferred foreign income and income taxes	(2,990)	—	—	—	(2,990)
Net assets . . . . .	<u>\$25,663</u>	<u>\$ 3,034</u>	<u>\$ 3,724</u>	<u>\$ 7,136</u>	<u>\$39,557</u>

### 2. Long-term Debt

Under a credit agreement with three banks, Lubrizol has \$3,000,000 of notes outstanding which bear interest at  $\frac{1}{4}\%$  over the prime rate in effect from time to time and mature in four semi-annual installments of \$750,000, beginning August 1, 1973 and ending February 1, 1975.

### 3. Depreciation

Depreciation of \$7,316,742 was computed using the straight-line, sum of the years-digits and declining-balance methods, at rates based on the useful lives of the assets. The same methods were used for financial reporting and income taxes except in the case of some foreign subsidiaries. As to those subsidiaries, the income taxes related to the differences have been deferred to future years.

### 4. Employee Stock Options

At the beginning of the year options were outstanding to purchase 73,736 shares. During the year no options were granted, options for 2,900 shares were surrendered, and options for 33,360 shares were exercised for a total consideration of \$418,230 which was credited to the common shares capital account. At December 31, 1970, options were outstanding for 37,476 shares and options for 390,350 shares were available for grant. The option price is the fair market value at the date of grant.

### 5. Retirement Plans

The company and certain subsidiaries have retirement plans for hourly and salaried employees. The cost of these plans charged to 1970 operations was \$2,110,954. The practice is to fund accrued costs of the plans. There was no unfunded past service cost and pension fund assets exceeded the actuarially computed value of vested benefits.



# CONSOLIDATED STATEMENT OF SOURCE AND APPLICATION OF FUNDS

Year ended December 31

## SOURCE OF FUNDS

### Operations:

	<u>1970</u>	<u>1969</u>
Net income .....	\$21,849,992	\$17,858,732
Charges to operations not requiring funds:		
Depreciation .....	7,316,742	6,150,700
Other — net .....	76,222	(18,884)
Total .....	<u>29,242,956</u>	<u>23,990,548</u>
Increase in accounts payable .....	3,235,677	1,292,566
Increase (decrease) in accrued expenses .....	2,054,239	(2,858,242)
Proceeds from stock options exercised .....	418,230	1,290,172
Cash grants from foreign governments .....	134,998	198,648
Other — net .....	216,886	378,745
Total .....	<u>\$35,302,986</u>	<u>\$24,292,437</u>

## APPLICATION OF FUNDS

Capital expenditures .....	\$14,006,802	\$13,172,709
Dividends on common shares .....	6,536,531	5,741,426
Repayment of bank borrowings .....	2,876,998	1,812,805
Increase in receivables .....	3,488,179	4,091,200
Increase (decrease) in inventories .....	5,242,214	(1,355,708)
Increase in investments in affiliated companies .....	1,055,821	803,229
Increase in cash .....	2,096,441	26,776
Total .....	<u>\$35,302,986</u>	<u>\$24,292,437</u>

## ACCOUNTANTS' OPINION

To the Shareholders and Board of Directors of The Lubrizol Corporation:

We have examined the consolidated balance sheet of The Lubrizol Corporation and its subsidiaries as of December 31, 1970 and the related consolidated statements of income and retained earnings and of source and application of funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying consolidated statements present fairly the financial position of the companies at December 31, 1970 and the results of their operations and the source and application of their funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Cleveland, Ohio  
February 18, 1971

*Haskins & Sells*



## TEN YEAR SUMMARY

### CONSOLIDATED STATEMENT OF INCOME

	1970	1969	1968
Revenues:			
Net sales .....	\$183,639,824	\$162,530,305	\$149,391,177
Royalties and fees .....	3,202,552	3,131,330	1,173,896
Total .....	<u>186,842,376</u>	<u>165,661,635</u>	<u>150,565,073</u>
Costs and expenses less other income .....	145,819,384	131,481,903	117,705,376
Income before taxes on income .....	41,022,992	34,179,732	32,859,697
Provision for taxes on income .....	19,173,000	16,321,000	16,307,000
Income before deduction of minority interest .....	21,849,992	17,858,732	16,552,697
Less minority interest .....	—	—	—
Net income .....	<u>\$ 21,849,992</u>	<u>\$ 17,858,732</u>	<u>\$ 16,552,697</u>

### CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Current assets .....	\$ 72,045,910	\$ 60,891,665	\$ 58,003,826
Current liabilities .....	28,482,536	23,669,618	24,498,099
Working capital .....	<u>43,563,374</u>	<u>37,222,047</u>	<u>33,505,727</u>
Plant property — at cost .....	106,533,314	94,573,703	82,431,043
Accumulated depreciation .....	(39,852,127)	(34,270,858)	(28,949,686)
Other assets .....	4,709,026	3,947,443	3,509,785
Total .....	<u>114,953,587</u>	<u>101,472,335</u>	<u>90,496,869</u>
Less:			
Long-term debt .....	3,000,000	5,400,000	7,950,000
Deferred cash grants .....	1,453,477	1,471,228	1,441,262
Deferred foreign income taxes .....	1,536,309	1,368,997	1,280,975
Net assets — Shareholders' equity .....	<u>\$108,963,801</u>	<u>\$ 93,232,110</u>	<u>\$ 79,824,632</u>

### OTHER DATA

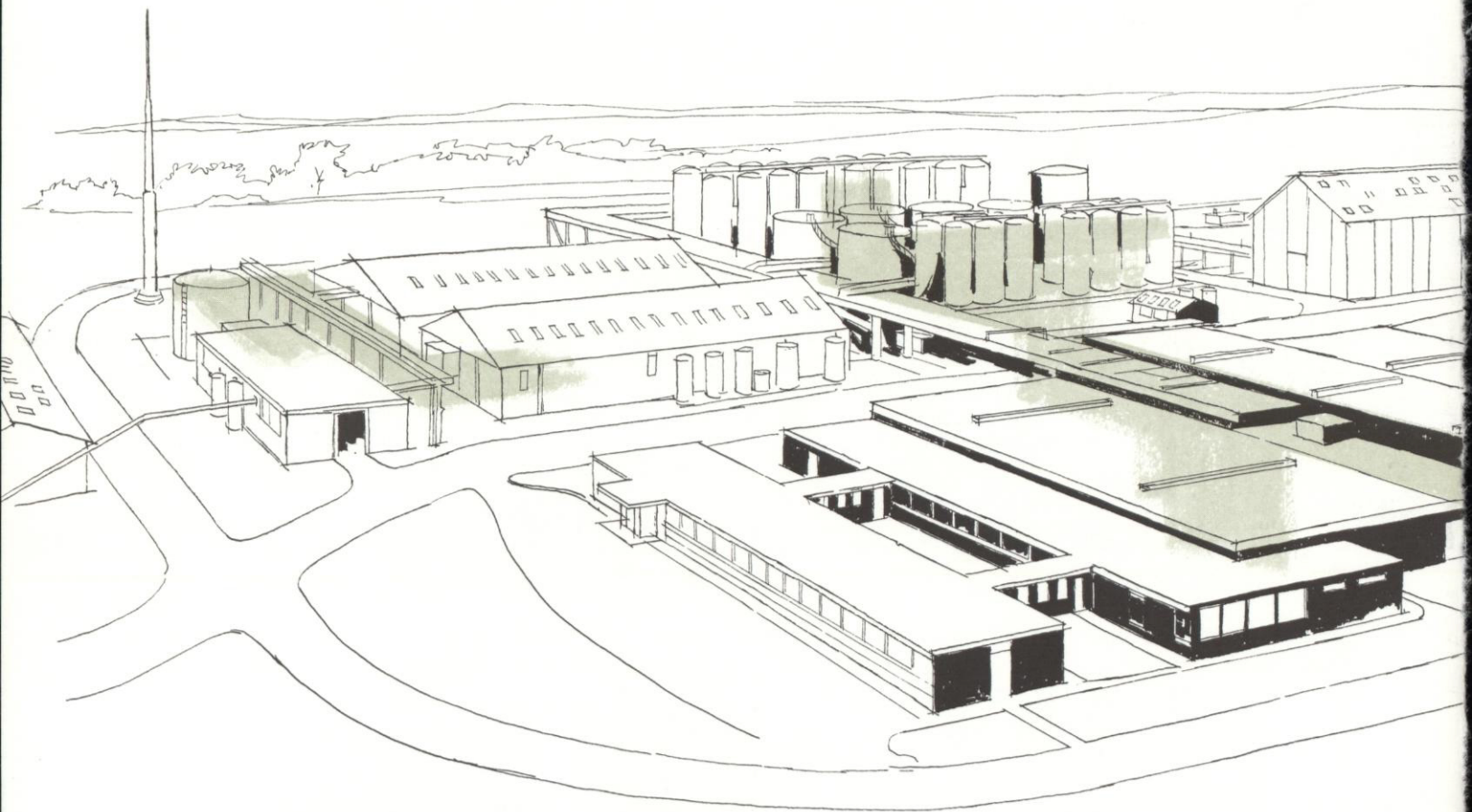
Capital expenditures .....	\$ 14,006,802	\$ 13,172,709	\$ 12,289,764
Depreciation .....	7,316,742	6,150,700	5,193,074
Number of employees at end of year .....	2,906	2,799	2,646
Number of shareholders at end of year .....	6,995	6,752	6,230
Common shares outstanding at end of year .....	10,073,412	10,040,052	9,916,022
Shareholders' equity per share at end of year .....	\$10.82	\$9.29	\$8.05
Return on average shareholders' equity .....	22%	21%	22%
Net income per share .....	\$2.17	\$1.79	\$1.67
Dividends per share .....	.65	.57½	.47½

NOTE: The number of shares and per share amounts have been adjusted to give retroactive effect to stock splits, 6 for 1 in 1964, 3 for 2 in 1966 and 2 for 1 in 1968.



<u>1967</u>	<u>1966</u>	<u>1965</u>	<u>1964</u>	<u>1963</u>	<u>1962</u>	<u>1961</u>
\$119,223,314	\$106,101,731	\$92,019,801	\$78,713,525	\$71,687,103	\$65,601,605	\$61,373,492
958,125	1,096,329	490,458	27,483	7,740	—	—
120,181,439	107,198,060	92,510,259	78,741,008	71,694,843	65,601,605	61,373,492
98,713,259	87,867,164	75,890,016	65,883,799	59,763,071	55,343,159	52,643,400
21,468,180	19,330,896	16,620,243	12,857,209	11,931,772	10,258,446	8,730,092
9,077,000	8,185,000	7,020,000	5,795,765	5,291,559	4,518,584	3,992,421
12,391,180	11,145,896	9,600,243	7,061,444	6,640,213	5,739,862	4,737,671
—	—	—	—	55,982	243,524	284,797
<u>\$ 12,391,180</u>	<u>\$ 11,145,896</u>	<u>\$ 9,600,243</u>	<u>\$ 7,061,444</u>	<u>\$ 6,584,231</u>	<u>\$ 5,496,338</u>	<u>\$ 4,452,874</u>
\$ 45,897,012	\$ 39,447,590	\$37,791,020	\$33,362,430	\$29,592,317	\$25,011,148	\$20,780,139
17,187,161	15,775,499	13,392,247	10,910,607	10,554,765	8,047,575	5,952,525
28,709,851	23,672,091	24,398,773	22,451,823	19,037,552	16,963,573	14,827,614
71,404,651	55,989,722	44,684,728	39,079,092	34,174,913	30,328,143	27,820,065
(24,589,551)	(21,050,299)	(18,625,433)	(16,788,472)	(14,720,247)	(12,864,755)	(10,954,575)
2,631,815	1,687,236	1,521,698	2,027,329	2,230,218	1,786,317	925,809
78,156,766	60,298,750	51,979,766	46,769,772	40,722,436	36,213,278	32,618,913
8,250,000	750,000	1,000,000	2,000,000	—	—	—
1,398,625	—	—	—	—	—	—
1,128,968	978,341	—	—	—	—	—
<u>\$ 67,379,173</u>	<u>\$ 58,570,409</u>	<u>\$50,979,766</u>	<u>\$44,769,772</u>	<u>\$40,722,436</u>	<u>\$36,213,278</u>	<u>\$32,618,913</u>
\$ 16,118,287	\$ 12,134,232	\$ 6,712,924	\$ 5,301,575	\$ 4,399,363	\$ 2,887,310	\$ 2,483,831
4,149,871	3,133,510	2,717,407	2,391,836	2,333,629	2,249,923	1,936,145
2,472	2,252	2,066	1,899	1,730	1,628	1,546
5,469	5,228	4,385	3,968	1,014	718	637
9,845,966	9,768,092	9,715,196	9,692,036	9,701,640	9,701,640	9,730,440
\$6.84	\$6.00	\$5.25	\$4.62	\$4.20	\$3.73	\$3.35
20%	20%	20%	17%	17%	16%	14%
\$1.26	\$1.14	\$ .99	\$ .73	\$ .68	\$ .57	\$ .46
.42½	.40	.35	.27¾	.21½	.18	.18





## DIRECTORS

RAYMOND Q. ARMINGTON  
Chairman of the Board  
The TRIAX Company

M. ROGER CLAPP  
President and  
Chief Executive Officer

HENRI P. JUNOD  
Former Vice Chairman  
Pickands Mather & Company

THOMAS W. MASTIN  
Executive Vice President

JOHN L. PALMER  
Vice President - Engineering

KARL H. RUDOLPH  
President  
The Cleveland Electric  
Illuminating Company

HUBERT H. SCHNEIDER  
Partner  
Schneider, Smeltz,  
Huston & Bissell

KELVIN SMITH  
Founder of the Company  
Honorary Chairman of  
the Board

RENOLD D. THOMPSON  
Vice President  
Oglebay Norton Company

RALPH S. TYLER, JR.  
Chairman of the Board

A. O. WILEY  
Consultant to the Company  
Former Chairman of the Board

J. M. ZLATOPER  
Vice President - Finance

F. ALEX NASON  
Honorary Director  
Founder of the Company

KENT H. SMITH  
Honorary Director  
Founder of the Company

VINCENT K. SMITH  
Honorary Director  
Founder of the Company

## OFFICERS

RALPH S. TYLER, JR.  
Chairman of the Board

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President and  
Chief Executive Officer

THOMAS W. MASTIN  
Executive Vice President

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Vice President - Manufacturing

JAMES B. IRWIN  
Vice President - Marketing

W. M. LESUER  
Vice President - Research  
and Development

JOHN L. PALMER  
Vice President - Engineering

J. R. STITT  
Vice President - Sales

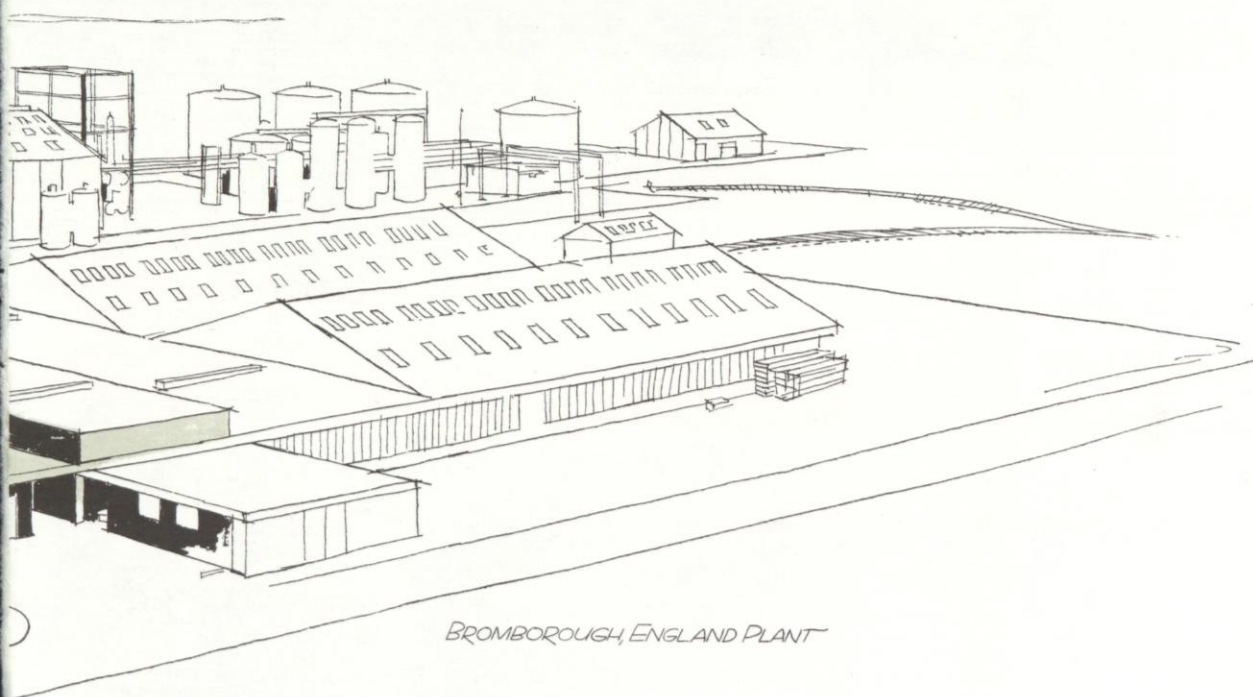
ROBERT K. WILLIAMS  
Vice President - Corporate  
Planning and Development

J. M. ZLATOPER  
Vice President - Finance

DOUGLAS W. RICHARDSON  
Secretary

HARRY KAYE  
Treasurer





*BROMBOROUGH, ENGLAND PLANT*

## **SUBSIDIARIES**

Lubrizol Management, Inc.  
 Lubrizol A.G. - (Switzerland)  
 Lubrizol do Brasil, Limitada  
 Lubrizol of Canada, Ltd.  
 Lubrizol Espanola S.A.  
 Lubrizol Far East, Inc. - (Philippines)  
 Lubrizol France  
 Lubrizol G.m.b.H. - (West Germany)  
 Lubrizol Great Britain Limited  
 Lubrizol International S.A. - (Bahamas)  
 Lubrizol Australia (a branch)  
 Lubrizol Italiana S.p.A.  
 Lubrizol Japan, Ltd.  
 Lubrizol Limited - (England)  
 Lubrizol de Mexico, S. de R. L.  
 Lubrizol Scandinavia AB  
 Lubrizol Servicios Tecnicos, S. de R. L.  
 Lubrizol South Africa (Pty.) Limited

## **AFFILIATES**

Industrias Lubrizol, S.A. de C.V. -  
 (Mexico)  
 Lubrizol India Limited  
 Nippon-Lubrizol Industries, Inc. -  
 (Japan)

## **TRANSFER AGENTS**

THE NATIONAL CITY BANK OF CLEVELAND  
 623 Euclid Avenue  
 Cleveland, Ohio 44114

FIRST NATIONAL CITY BANK  
 111 Wall Street  
 New York, New York 10015

## **REGISTRARS**

THE CLEVELAND TRUST COMPANY  
 916 Euclid Avenue  
 Cleveland, Ohio 44101

CHEMICAL BANK  
 20 Pine Street  
 New York, New York 10015

## **DIVIDEND DISBURSING AGENT**

THE NATIONAL CITY BANK OF CLEVELAND  
 623 Euclid Avenue  
 Cleveland, Ohio 44114

#### GENERAL OFFICES

Wickliffe, Ohio

#### LABORATORIES

Wickliffe, Ohio

Chemical Research  
Polymer Research  
Mechanical Testing

Hazelwood, England

Mechanical Testing

#### MANUFACTURING PLANTS

Wickliffe, Ohio

Painesville, Ohio

Bayport, Texas

Deer Park, Texas

Apodaca, Mexico

Bombay, India

Bromborough, England

Huelva, Spain

LeHavre, France

Niagara Falls, Canada

Rouen, France

Sydney, Australia

Taketoyo, Japan

#### SALES OFFICES AND SALES AGENTS

Chicago (Naperville, Illinois)

Cleveland, Ohio

Detroit, Michigan

Houston, Texas

Los Angeles (Whittier, California)

New York (Ridgewood, New Jersey)

Tulsa, Oklahoma

Wilmington, Delaware

Athens, Greece

Bombay, India

Brussels, Belgium

Buenos Aires, Argentina

Cham-Zug, Switzerland

Copenhagen, Denmark

Durban, South Africa

Hamburg, West Germany

Helsinki, Finland

La Paz, Bolivia

Lima, Peru

London, England

Madrid, Spain

Manila, Philippines

Melbourne, Australia

Mexico City, Mexico

Milan, Italy

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Santiago, Chile

Seoul, South Korea

Stockholm, Sweden

Sydney, Australia

Taipei, Taiwan

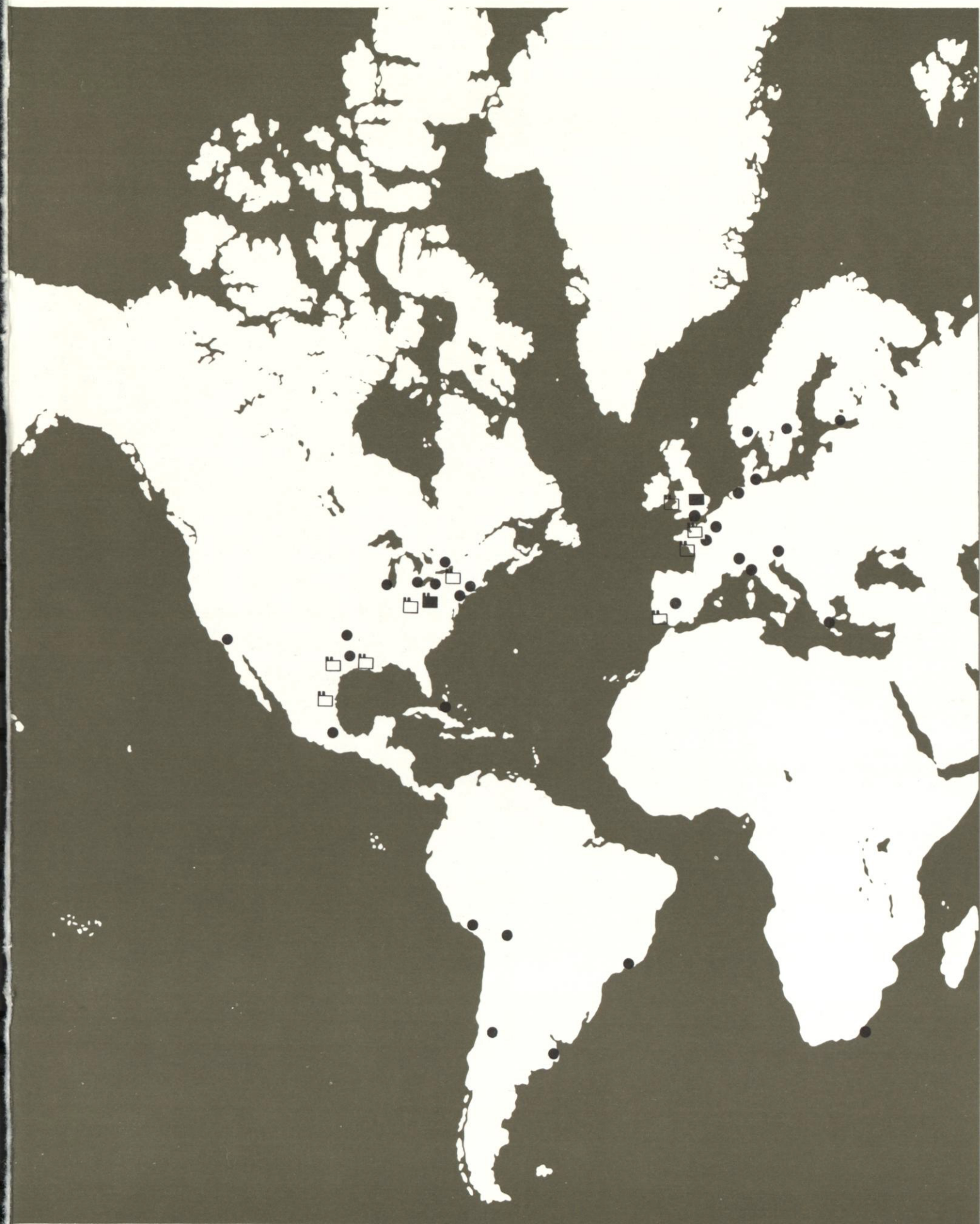
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Toronto, Canada

Vienna, Austria









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