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ESTABLISHED 1867

# MALLINCKRODT CHEMICAL WORKS



MANUFACTURERS OF  
FINE CHEMICALS FOR MEDICINAL, PHOTOGRAPHIC  
ANALYTICAL AND INDUSTRIAL PURPOSES

FACTORIES ST. LOUIS, JERSEY CITY, MONTREAL  
SALES OFFICES ST. LOU S, NEW YORK, CHICAGO, CINCINNATI, CLEVELAND,  
LOS ANGELES, PHILADELPHIA, SAN FRANCISCO, MONTREAL, TORONTO

CABLE ADDRESSES  
MALLINCKRODT ST. LOU S  
DESAIRE CO. NEW YORK  
CODES  
A B C FIFTH 12  
BENTLEYS COMPLETE PARADE  
BENTLEY'S SECOND PARADE

SECOND AND  
MALLINCKRODT STS ST. LOUIS 7, MO.

May 31, 1957

Mr. Lyall Johnson, Chief  
Licensing Branch  
Division of Civilian Application  
U. S. Atomic Energy Commission  
1901 Constitution Avenue, N. W.  
Washington 25, D. C.

Dear Lyall:

In accordance with our discussion in Washington on May 29, I am enclosing four copies of our annual report for 1956. I believe it will give you the information necessary to determine our financial responsibility in connection with leases of special nuclear material.

Regards,

MALLINCKRODT CHEMICAL WORKS

Victor H. Knoop  
Secretary

VictorH.Knoop/wb

DOCKETED  
U.S.A.E.C.

JUN 7 1957

DATE

DOCKET OFFICER

Annual Report  
1956 sent Mrs. E. H. G.

REOSS

*Mallinckrodt*  
*Chemical Works*

**ANNUAL REPORT  
1956**

ANNUAL REPORT *Mallinckrodt* CHEMICAL WORKS

December 31, 1956

**D I R E C T O R S**

Edward Mallinckrodt, Jr.

William D. Barry

Charlton MacVeagh

David R. Calhoun, Jr.

John R. Ruhoff

Henry V. Farr

Harold E. Thayer

Joseph Fistere

Vernon H. Wallingford

August H. Homeyer

Shields Warren

**O F F I C E R S**

Edward Mallinckrodt, Jr....Chairman of the Board

Norman P. Knowlton.....Vice-President

Charlton MacVeagh...Vice-Chairman of the Board  
and Treasurer

John G. Moore.....Vice-President  
and Assistant Treasurer

Joseph Fistere.....President

John R. Ruhoff.....Vice-President

William D. Barry.....Vice-President

Harold E. Thayer.....Vice-President

Francis J. Carr.....Vice-President

Victor H. Knoop.....Secretary

Henry V. Farr.....Vice-President

Oliver M. Langenberg.....Assistant Secretary

John E. Gaston.....Vice-President

Russell F. Ritschy.....Assistant Secretary

Harold A. Brinner.....Controller

*Counsel:* Shepley, Kroeger, Fisse & Shepley, St. Louis

*Certified Public Accountants:* Price Waterhouse & Co.

*Dividend Disbursing Agent:* St. Louis Union Trust Co., St. Louis

*Transfer Agents:* St. Louis Union Trust Co., St. Louis; J. P. Morgan & Co., Inc., N. Y.

*Registrars:* The Boatmen's National Bank of St. Louis; The Bank of New York, N. Y.

# Comparative Financial Summary

	1956	1955
Net Sales.....	\$30,101,540*	\$38,865,556
Cost of Goods Sold.....	23,050,829*	30,232,762
Selling, General and Administrative Expenses.....	5,002,559*	6,417,254
Research and Development Expenses.....	1,309,808	1,153,595
Income from Operations.....	738,344	1,061,945
Income Before Federal Income Taxes.....	735,182	1,023,604
Net Income.....	367,182	497,604
Dividends—Preferred Stock.....	119,932	91,432
Dividends—Common Stock—\$.60 and \$.80 per share.....	225,000	300,000
Earnings per share—Common Stock.....	\$.66	\$1.08
Current Assets.....	\$18,377,773	\$21,713,242
Current Liabilities.....	2,570,132	3,477,048
Net Working Capital.....	15,807,641	18,236,194
Property, Plant and Equipment—Net.....	12,158,489	9,960,568
Long-Term Debt.....	4,125,000	4,375,000
Preferred Stock—par value.....	2,582,200	2,582,200
Common Shares Outstanding—\$10 par		
Common Stock Class A.....	255,000 shs.	255,000 shs.
Common Stock Class B.....	120,000 shs.	120,000 shs.
Capital Surplus.....	\$ 1,083,390	\$ 1,083,390
Accumulated Income Reinvested.....	17,131,392	17,109,142
Book Value per Share—Common.....	\$58.57	\$58.51

\*The 1956 results reflect the change on January 1, 1956 in the Company's contract with the Atomic Energy Commission, described in the Financial Review section of this report. Also see note to Statement of Income on page 12.

## TO THE STOCKHOLDERS

The annual report for 1956 has been considerably expanded to deal adequately with the many new developments that have taken place during the past year. This letter is designed to highlight the principal matters of interest which are covered in greater detail in subsequent sections.

**Sales**

Sales for 1956 do not include processing charges accruing to the Company for its operation of facilities owned by the Atomic Energy Commission, other than the net compensation for such operation under the new cost-plus-fixed-fee contract effective January 1, 1956, while 1955 sales do include such charges in accordance with the methods of operation under the then existent unit price contract. Modification of this contractual arrangement explains all but a small percentage of the apparent decline in sales volume.

The Company in 1956 carried out a planned reduction of approximately \$1,000,000 in sales of certain submarginal items. This reduction in volume was in considerable part offset by net increases in sales of other products.

In addition, the Company's net sales included for the first time the revenues accruing from its new euxenite and nuclear fuel plants.

**Earnings**

Earnings per share of common stock were \$0.66 in 1956, compared with \$1.08 in 1955. Dividends of \$0.60 per share were declared in 1956, compared with \$0.80 per share in the preceding year.

Income from operations in 1956 was \$738,344 compared with \$1,061,945 in 1955. The decline of \$323,601 reflects the effect of the amendment of the Company's contract with the Atomic Energy Commission and the costs of bringing on stream the Company's new plants mentioned below, to the extent that these decreased earnings and increased expenses were not offset by the improvement in income from the Company's general line commercial business.

Regular commercial activities were operated on a more satisfactory basis than in 1955 due to considerable economies and improvements in operations and sales effort, which absorbed higher wage and salary rates, increased depreciation charges, and a high level of research and development expenditures, as well as price reductions in certain items especially vulnerable to foreign competition. Assuming a general level of business for the current year similar to that of 1956, it is expected that this trend will be maintained.

Conditions of intense competition which affect earnings from the Company's commercial products are expected to continue. It is believed, however, that the Company's position has been bettered in this regard through capital expenditures for better facilities, larger appropriations for research and the integration of its functions and organization.

The Company's plant for the extraction of columbium-tantalum and uranium values from euxenite concentrates commenced operations in March of 1956. Although heavier than anticipated start-up costs were absorbed in the following nine months and the accelerated amortization charges are high, it is expected that this plant should operate on a break-even basis or better in 1957.

In March 1956, the Company also initiated construction of the first privately-owned plant designed to manufacture both normal and enriched uranium compounds for nuclear reactor fuel element use; production to meet orders was under way by early September. Current operations and backlog of future business are considered satisfactory.

*Directors*

At the annual stockholders' meeting in April 1956, three new directors were elected to the Board. They were Dr. Shields Warren, professor of pathology at Harvard University and a distinguished authority on radiation effects, and Mr. William D. Barry and Mr. Harold E. Thayer, vice-presidents of the Company.

On November 25, 1956, Mr. Erwin H. Doht, vice-president in charge of purchasing, died suddenly. The Company lost a most valued and esteemed executive who had 47 years of service with the Company, and his associates lost a warm and loyal friend.

On February 14, 1957, a new subsidiary of the Company, Mallinckrodt Metals Company, was incorporated under the laws of the State of Missouri. It is expected that among the activities of this subsidiary will be the commercial development of products related to the Company's euxenite operations.

The Company continues to strive for the best possible relationship with its personnel, stockholders, customers and suppliers. For the support and cooperation during the past year of each interested individual in all of these groups, the directors and officers of Mallinckrodt Chemical Works wish to express their sincere appreciation.

*Joseph Fister*  
President

March 5, 1957

## Financial Review

### AEC Contract

Effective January 1, 1956, the Company's previous unit price contract with the Atomic Energy Commission was amended and converted to a cost-plus-fixed-fee basis.

The new contract, which will terminate on December 31, 1959, unless earlier cancelled or extended by the Government, provides for operation by the Company of both the Commission's existing uranium processing facilities in St. Louis and the new facilities being constructed by it at Weldon Spring, Missouri, now expected to be completed in the spring of 1958. The total cost of the Commission-owned plants that will be operated by the Company at that time is estimated at approximately \$60,000,000.

In 1955, when its contract with the Commission was still on a unit price basis, the Company's accounts reflected both the processing charges to the Commission (including compensation to the Company) and the costs of processing. When the new cost-plus-fixed-fee contract became effective on January 1, 1956, only the Company's compensation continued to be included in its accounts while both the Commission's reimbursement for reimbursable costs and such costs themselves were excluded.

The appropriate adjustment of accounts to reflect this modification of contractual arrangement is the primary explanation for the discrepancy that is apparent in the Company's income statement between the amounts reported for 1956 and 1955 as sales and costs of goods sold.

Also as the result of the new cost-plus-fixed-fee contract, certain administration expenses previously carried by the Company were excluded from the Company's accounts for 1956.

Compensation to the Company in 1956 under the new contract with the Atomic Energy Commission was less than was received in 1955. While operating under unit price contracts in prior years, the Company had been entitled to retain as earnings some portion of the savings resulting from operational efficiency and economies. A fixed-fee contract, of course, precludes any such arrangement. The contract provides that the Company's compensation will increase as major production sections of the new plant at Weldon Spring are turned over to it for operation. The original dates of such transfers have been postponed due to construction delays; they are now due to take place in successive stages from June 1957 to April 1958. In the interim, the Company has been taking over various utility and non-production facilities as they are completed.

A further change, and one favorably affecting the Company's financial position, resulted from the amendment of its contract with the Commission. This was the release to the Company in 1956 of more than \$1,500,000 in working capital, being the amount provided by the Company from its own resources for operations under the then effective unit price contract, and no longer required under the new arrangement. The potential earning power of this capital, now available to the

Company for its commercial business, may be considered a partial offset to the decline sustained in 1956 from the level of compensation received from the Commission in the preceding year.

#### **Commercial Business**

Sales of the Company's general line of medicinal, industrial and other chemicals were off 2.1% from 1955. However, considerably more than the decline in sales volume represented by this percentage was due to a planned reduction of approximately \$1,000,000 sales volume of certain submarginal items. Otherwise, commercial sales of the Company's standard products showed an increase, net, over 1955, in spite of substantial declines in some product lines due to increased competition, foreign and domestic.

A combination of increased sales in this division of the Company's business and substantial operating economies resulted in a contribution to net earnings considerably greater than in 1955, after absorption of higher wage and salary rates and increased depreciation charges. This improvement in earning power of the Company's general commercial business did not, however, prove sufficient to offset both the decline in compensation received under the Company's new contract with the Atomic Energy Commission and certain expenditures related to new business. Among the latter were the research and net start-up costs of bringing on stream the Company's new plants for processing euxenite concentrates and for the production of nuclear reactor fuel elements. Additional costs were incurred in preparing for submission to the Atomic Energy Commission, jointly with Climax Molybdenum Company, a bid proposal (unsuccessful, as it turned out) for the operation of new, privately constructed uranium processing facilities.

Regular quarterly dividends were declared on the Series B and Series C preferred stocks throughout the year. A dividend of \$0.40 per share was declared on June 5, 1956, on the Class A and Class B common stock and paid July 2, 1956. A second dividend of \$0.20 per share was declared on such stock on December 21, 1956 and paid January 10, 1957 to stockholders of record December 31, 1956. The Board of Directors will continue to take action on dividends on the common stock semi-annually until further notice. First action on such dividends for 1957 will be taken at the Directors' meeting to be held in June 1957.

The 3 $\frac{3}{8}$ % unsecured note payable to The Prudential Insurance Company of America requires prepayments of \$250,000 in 1957 and in each year thereafter to maturity, April 1, 1971, when the balance of the note is payable. The note contains various restrictions as to the payment of cash dividends on common stock. Of the amount of accumulated income reinvested in the business on December 31, 1956, \$4,633,338 is free from such restrictions.

#### **Stock Options and Additional Compensation Plan**

Of the 105,000 authorized but unissued shares of Class A common stock, there were reserved on December 31, 1956, 46,800 shares against conversion of then outstanding shares of Series C cumulative preferred stock, and 25,000 shares were reserved against exercise of stock options, granted and to be granted.

On March 26, 1956, options to purchase 18,500 of the authorized but unissued shares of the Class A common stock were granted to 57 key employees (not including the Chairman, Vice-Chairman and President) in accordance with the Stock Option Plan adopted by the stockholders on January 18, 1955. The

option price was \$33.25, representing 95% of the fair market value at the time the options were granted. None of the options were exercised during the year.

Effective January 1, 1956, the Board of Directors rescinded certain resolutions under which a limited number of executives had been entitled to additional compensation in the form of a percentage of profits. To replace the informal profit-sharing plan set forth in those resolutions, the stockholders at the annual meeting held on April 3, 1956, approved an Additional Compensation Plan under which key officers and employees may receive additional compensation. The total amount available for payment as additional compensation pursuant to this Plan shall be not more than twenty percent of the net income of the Company for any fiscal year after deducting: (a) the accrued and accrueable dividends on the shares of all classes of preferred stock outstanding during the fiscal year; (b) an amount equal to 6% of the monthly average aggregate par value of the common stock outstanding during the fiscal year; and (c) an amount equal to 6% of the aggregate of the earned surplus, whether appropriated or unappropriated, and of the monthly average of any paid-in or other capital surplus of the Company during the fiscal year. The net income of the Company is defined for the purpose of the Plan as the income before provision for estimated Federal Income Taxes and before any deduction for additional compensation, but after deducting all costs and expenses otherwise deductible in accordance with generally accepted accounting principles. The participants for any year are to be selected, on the basis of their contribution to the success of the Company for the year, by a Board of Directors' committee on which only members ineligible to receive compensation under the Plan may

serve. No earnings were available for distribution as additional compensation under this Plan in 1956.

Allowance for depreciation and amortization in 1956 was \$948,811 compared with \$711,927 in 1955 and \$629,057 in 1954. The amount of this allowance for 1957 is currently running at the annual rate of approximately \$1,200,000.

Working capital (the excess of current assets over current liabilities) amounted to \$15,807,641 at the end of 1956, a decrease of \$2,428,553 from the 1955 year-end figure. This decrease reflected the increased investment in new plant and equipment mentioned below. The ratio of current assets to current liabilities was higher at 7.15 to 1 on December 31, 1956, than on December 31, 1955, when this ratio was 6.24 to 1.

#### **Canadian Subsidiary**

Investment in the Company's wholly-owned Canadian subsidiary, Mallinckrodt Chemical Works Limited, is carried on the books at a cost of \$387,473. Losses of \$39,871 and \$11,729 (Canadian) were sustained by this subsidiary in 1956 and 1955 respectively, and no dividends were declared during this period. The Company's net equity in Mallinckrodt Chemical Works Limited amounted on December 31, 1956, to \$924,500 (Canadian).

#### **Plant and Equipment**

Investment in plant and equipment increased \$2,980,811 during 1956. The major portion of this increase was accounted for by the new euxenite and nuclear reactor fuel plants, by replacements or capacity increase of existing plants, and by the installation of

a central air-conditioning system for the laboratories and offices in St. Louis.

On February 14, 1957, a new subsidiary, Mallinckrodt Metals Company, was incorporated under the laws of the State of Missouri. Mallinckrodt Chemical Works will own all of the common stock of the new company.

The new company's authorized capital will consist of one hundred shares of voting common stock of the par value of \$10 per share and 30,000 shares of non-voting preferred stock, par value of \$50 per share. An initial issue of 15,000 shares of 4½% non-cumulative and non-convertible preferred stock was subscribed for privately.

## Plants and Operations

New and improved facilities in St. Louis for the warehousing and shipping of the Company's general line products were in operation for the full twelve months of 1956. Economies realized from the investment were at least equal to what had been estimated. New methods and procedures in manufacturing and in the handling of orders also resulted in reduction of costs. Large-scale modernization of some portions of the Company's older plant and equipment progressed on schedule. Pilot plant facilities for use in connection with the Company's silicon program were completed.

### Euxenite Plant

Operations began in the Company's new euxenite plant in the early spring of 1956. This is, so far as is known, the only plant which is now separating, on a commercial scale, the columbium-tantalum and uranium values from euxenite concentrates. Its products are deliverable under a subcontract, extending to June 1960, with Porter Bros. Corporation of Boise, Idaho, which company mines and concentrates the euxenite ore and holds prime contracts with the General Services Administration for the delivery of mixed columbium-tantalum pentoxides and with the Atomic Energy Commission for the delivery of uranium concentrates.

The needed funds for the construction

of the euxenite plant were provided through the sale in April 1955 of \$2,000,000 par value of the Company's 4¼% cumulative preferred stock, Series C. Amortization is being accelerated under an 80% certificate of necessity authorized by the Office of Defense Mobilization. Profitable operation in the past year has been affected by heavy start-up expenses resulting in part from smaller than anticipated receipts of feed material in the earlier months. It is now expected that if adequate supplies of euxenite concentrates meeting specifications are available on schedule in the coming year, this plant should operate on a break-even basis or better in 1957.

Among the activities now planned for the Company's new subsidiary, Mallinckrodt Metals Company, is the commercial development of products related to present euxenite operations.

### New Plant at Hematite, Mo.

Production of nuclear reactor fuel by private industry was first authorized in 1954 by the Atomic Energy Act that became law on August 30th of that year.

In accordance with regulations and licensing procedures by which the Atomic Energy Commission subsequently implemented the Act, Mallinckrodt Chemical Works began in March 1956 to construct

the first privately-owned and operated plant designed to produce, from Government-owned uranium hexafluoride, enriched uranium compounds for nuclear reactor fuel element use.

This plant was constructed on a part of a newly acquired 150-acre site in Hematite, Missouri, about 30 miles distant from St. Louis. Production to meet orders was under way by early September of last year. Operations are considered satisfactory and some expansion required for future business is currently going forward.

#### **Uranium Processing Plants**

The Company's Uranium Division is charged with the responsibility for operating the Government-owned uranium processing facilities under the Company's contract with the Atomic Energy Commission. The vice-

president in charge of this division is Mr. Harold E. Thayer and Dr. Charles D. Harrington is division manager. During the past year this division successfully handled the many problems involved in conversion of the contract with the Commission and the expansion required for taking over the new facilities at Weldon Spring.

Production in existing plants was in accordance with schedules, and quality and yield were unchanged to improved. At the year's end, the division payroll numbered 1007 of whom 100 were located at the new plant site where the Company has taken over operations of the water plant, boiler house and other utilities and service-type buildings as they were completed. During the first two months of 1957 an additional 50 of the Company's employees were at work at the new site.

#### **Research and Development**

During 1956 the Company maintained a level of research and development activity comparable to that of 1955. Somewhat more than half of the expenditures were made in connection with the development of new products and processes and the balance on the development of existing products. Expenditures for chemical control are included in general costs of operations.

Research and development activities of the Company other than those conducted by

the Uranium Division are carried on by the Technical Division under the general supervision of Dr. John R. Ruhoff, vice-president and technical director, and Dr. Albert Q. Butler, manager. This division includes the five departments of organic research, inorganic research, process development, product development and chemical control. The Technical Division cooperates with the Uranium Division in the recruitment of technical personnel.

#### **Organization and Employee Relations**

Operations of the Company's commercial plants in St. Louis and Jersey City are under the general supervision of Mr. John G. Moore, vice-president. Operations managers in St. Louis and Jersey City are, respectively, Mr. Charles W. Swartout and Mr. William W. Fuchs.

The Eastern Sales Division operates from headquarters at 72 Gold Street, New York City, under the supervision of Mr. William D. Barry, vice-president, and Mr. Dudley Dunlop, manager. At the main plant in St. Louis, Mr. John E. Gaston, vice-president, has general charge of merchandis-

ing activities and Mr. Walter S. Keutzer is manager for Western Division sales.

Activities of the Company's Special Metals Division, which is responsible for operation of the new plant at Hematite, are directed by Mr. Frederick M. Belmore, special assistant to the president and manager of the new division.

In 1956 Dr. Vernon H. Wallingsford, for many years director of organic research, was appointed Senior Scientist of the Company. Two staff departments were established for market research in medicinal and industrial chemicals, under the direction respectively of Dr. August H. Homeyer and Dr. Paul A. Krueger.

On December 31, 1956, the number of all employees on the Company's payroll totaled 2,845. Of this total, 10% were professional chemists or chemical engineers.

Relations between the Company and its employees continued harmonious throughout the year. At the beginning of 1956, one-year contracts were successfully negotiated between the Company and the five unions representing different groups of its wage payroll personnel. The wage separation rate for the Company was in the past year approximately one-fourth of the general average of the chemical industry.

Improved communications were developed through meetings and training programs instituted and carried on during the past year, and by the issuance of two new house organs —the Expansion News, a mimeographed letter of especial interest to employees of the Uranium Division, and the MCW News, a printed magazine for general distribution to Mallinckrodt personnel in all divisions, plants and offices.

Mallinckrodt Quarter Century Clubs in St. Louis, Jersey City and New York met simultaneously in November 1956 for the third annual dinners to be held since their organization, at which new members of the Clubs were welcomed and presented with appropriate souvenirs. The Company has at present 177 active employees with 25 or more years of service with the Company to their credit.

Among other public relations activities during the year, the Company sponsored a large exhibit by the Atomic Energy Commission—"Atoms for Peace"—at the St. Louis Mid-America Jubilee last September.

Continued full support for the United Funds in St. Louis and Jersey City, coordinated by energetic labor-management committees in the two plants, resulted in record contributions to those drives in 1956.

# Mallinckrodt

## COMPARATIVE BALANCE SHEET

### Assets

	1956	1955
<b>CURRENT ASSETS:</b>		
Cash.....	\$ 2,277,190	\$ 4,505,398
U. S. Government securities, at cost (which approximates market)....	900,927	1,049,862
Accounts receivable, less allowance of \$100,000 for doubtful accounts, cash discounts, and other allowances.....	2,864,164	3,603,484
Inventories, at the lower of cost (principally on the first-in first-out basis) or market—		
Raw materials and packaging supplies.....	2,243,647	2,108,704
Work in process.....	2,314,409	1,781,250
Finished products.....	7,040,692	7,391,315
Mechanical, laboratory, and other supplies, at cost.....	461,336	943,415
Prepaid insurance, taxes, and other expenses.....	275,408	329,814
	<u>\$18,377,773</u>	<u>\$21,713,242</u>
 <b>INVESTMENTS AND ADVANCES, including investment in Canadian subsidiary carried at cost of \$387,473.....</b>	 <u>\$ 705,852</u>	 <u>\$ 702,970</u>
 <b>PROPERTIES, at cost:</b>		
Buildings, machinery, and equipment.....	\$17,789,302	\$14,667,354
Less—Depreciation and amortization.....	7,186,090	6,403,200
	<u>\$10,603,212</u>	<u>\$ 8,264,154</u>
Land.....	675,459	644,105
Construction in progress.....	879,818	1,052,309
	<u>\$12,158,489</u>	<u>\$ 9,960,568</u>
	<u><u>\$31,242,114</u></u>	<u><u>\$32,376,780</u></u>

The above statement should be read in conjunction with pages 4 to 7 of this report.

# Chemical Works

**DECEMBER 31, 1956 AND 1955**

## *Liabilities and Stockholders' Investment*

	<b>1956</b>	<b>1955</b>
<b>CURRENT LIABILITIES:</b>		
Note payable--amount due within one year.....	\$ 250,000	\$ 125,000
Accounts payable.....	1,458,779	2,165,843
Salaries and wages.....	218,327	325,075
Estimated federal income taxes.....	316,551	541,095
Dividends payable.....	104,983	104,983
Other current and accrued liabilities.....	221,492	215,052
	<u>\$ 2,570,132</u>	<u>\$ 3,477,048</u>
<b>NOTE PAYABLE TO THE PRUDENTIAL INSURANCE COMPANY of AMERICA, 3½%, unsecured, excluding amount due within one year</b>	<u>\$ 4,125,000</u>	<u>\$ 4,375,000</u>
<b>STOCKHOLDERS' INVESTMENT:</b>		
Preferred stock, cumulative \$50 par value—		
Authorized 100,000 shares		
Issued—11,644 shares of Series B, 6%.....	\$ 582,200	\$ 582,200
40,000 shares of Series C, 4¼%.....	2,000,000	2,000,000
Common stock, \$10 par value—		
Class A, authorized 360,000 shares, issued 255,000 shares.....	2,550,000	2,550,000
Class B, authorized 240,000 shares, issued 120,000 shares.....	1,200,000	1,200,000
Amount paid in for capital stock in excess of par value.....	1,083,390	1,083,390
Accumulated income reinvested in the business (see accompanying statement).....	17,131,392	17,109,142
	<u>\$24,546,982</u>	<u>\$24,524,732</u>
	<u>\$31,242,114</u>	<u>\$32,376,780</u>

**STATEMENTS OF INCOME AND ACCUMULATED INCOME  
REINVESTED IN THE BUSINESS FOR THE TWO YEARS ENDED  
DECEMBER 31, 1956**

	<b>1956</b>	<b>1955</b>
Sales, net.....	\$30,101,540	\$38,865,556
Cost of goods sold.....	23,050,829	30,232,762
Gross profit.....	<u>\$ 7,050,711</u>	<u>\$ 8,632,794</u>
Selling, general, and administrative expenses.....	<u>\$ 5,002,559</u>	<u>\$ 6,417,254</u>
Research and development expenses.....	<u>1,309,808</u>	<u>1,153,595</u>
	<u>\$ 6,312,367</u>	<u>\$ 7,570,849</u>
Income from operations.....	<u>\$ 738,344</u>	<u>\$ 1,061,945</u>
Other income and (deductions):		
Interest on unsecured note.....	<u>\$ (148,710)</u>	<u>\$ (152,930)</u>
Discount on purchases and miscellaneous, net.....	<u>145,548</u>	<u>114,589</u>
	<u>\$ (3,162)</u>	<u>\$ (38,341)</u>
Income before estimated federal income taxes.....	<u>\$ 735,182</u>	<u>\$ 1,023,604</u>
Estimated federal income taxes.....	<u>368,000</u>	<u>526,000</u>
Net income for the year.....	<u>\$ 367,182</u>	<u>\$ 497,604</u>
Accumulated income reinvested in the business:		
Balance at beginning of the year.....	<u>17,109,142</u>	<u>17,002,970</u>
	<u>\$17,476,324</u>	<u>\$17,500,574</u>
Dividends declared—		
Preferred stock—		
Series B, 6%.....	<u>\$ 34,932</u>	<u>\$ 34,932</u>
Series C, 4½% (at annual rate of \$2.125 from date of issue).....	<u>85,000</u>	<u>56,500</u>
Common stock—		
Class A.....	<u>153,000</u>	<u>204,000</u>
Class B.....	<u>72,000</u>	<u>96,000</u>
	<u>\$ 344,932</u>	<u>\$ 391,432</u>
Balance at end of the year (\$12,498,054 restricted under agreement relating to note payable).....	<u>\$17,131,392</u>	<u>\$17,109,142</u>

Prior to January 1, 1956, the Company's contract with the Atomic Energy Commission was on a unit price basis and the accounts reflected the processing charges to the Commission and the costs of processing. Effective January 1, 1956, the Company's contract was converted to a cost-plus-fixed-fee basis and the reimbursable costs thereunder, together with the reimbursement therefor by the Commission, have been excluded from the Company's accounts, thereby reducing, on a comparable basis, both the recorded operating costs and the recorded sales volume. At that date the Company also revised its methods of distributing certain other expenses which had the effect generally of reducing amounts classified as administrative expenses and increasing production, selling, and research expenses.

The above statement should be read in conjunction with pages 4 to 7 of this report.

**AUDITORS'  
REPORT**

To the Board of Directors of  
Mallinckrodt Chemical Works

In our opinion, the accompanying financial statements present fairly the financial position of Mallinckrodt Chemical Works at December 31, 1956, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of such statements 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.

Price Waterhouse & Co.

Saint Louis, Mo.  
February 15, 1957