

KMT - 18

1956

ANNUAL REPORT

For the year ended June 30, 1956



INDUSTRY AND
KENNAMETAL
...Partners in Progress

KENNAMETAL Inc. LATROBE, PENNSYLVANIA

1956 in brief
Fiscal year ended June 30

KENNAMETAL ANNUAL REPORT 1956
For the year ended June 30, 1956

	<u>1956</u>	<u>1955</u>	<u>Increase</u>
Sales and other income.....	\$21,669,208	\$19,915,335	\$1,753,873
Net income before taxes (other than payroll taxes)	4,992,391	3,542,042	1,450,349
Taxes (other than payroll).....	2,524,968	1,738,304	786,664
Net income for the year.....	2,467,423	1,803,738	663,685
Return on sales.....	11.4%	9.1%	
Per common share.....	\$ 4.12	\$ 3.01	\$ 1.11
Dividends paid per share.....	1.00	.833	.167
No. of employees at June 30.....	1,654	1,516	138
Total assets	\$17,251,980	\$16,382,476	\$ 869,504
Working capital	8,888,368	7,339,271	1,549,097
Capital expenditures	978,458	524,495	453,963
Net worth	13,323,631	11,480,239	1,843,392
Per common share.....	22.23	19.15	3.08



General Offices—LATROBE, PA.

Directors and Principal Executives

Philip M. McKenna, *President and Director*

Alex G. McKenna..... <i>Executive Vice President and Director</i>	Gilbert A. Bunn..... <i>Executive Assistant</i>
Donald C. McKenna..... <i>Vice President and Director</i>	Bennett Burgoon, Jr..... <i>Sales Manager</i>
Andrew Gahagan..... <i>Director</i>	Edwin H. Johnson..... <i>Manager, Mining Tool Division</i>
George G. Schuster..... <i>Director</i>	Wilbur L. Kennicott..... <i>Chief Engineer</i>
John C. Redmond..... <i>Vice President</i>	Francis J. Lennon..... <i>General Superintendent</i>
George J. Heideman..... <i>Treasurer</i>	Ray W. Senogles..... <i>Controller</i>
Charles R. Van Norden..... <i>Secretary</i>	Emlyn N. Smith..... <i>Metallurgical Superintendent</i>
Richard J. Flickinger..... <i>Assistant Secretary</i>	William M. Stoll..... <i>Manager, Macro Division</i>
	William O. Touhey..... <i>Purchasing Agent</i>

Divisions

Metallurgical Division, Kingston Station, Pa.	Metalworking Tool Division, Latrobe, Pa.
Mining Tool Division, Bedford, Pa.	Detroit Division, Oak Park, Mich.
Macro Division, Port Coquitlam, British Columbia	

Subsidiaries

Nevada Scheelite Corp., Fallon, Nev.	Kennametal Co. of Ohio, Willoughby, Ohio
Kennametal Overseas Corp., Panama, R. P.	

Legal Counsel

Smith, Buchanan, Ingersoll, Rodewald & Eckert, Pittsburgh, Pa.	
Paul, Lawrence & Rock, Pittsburgh, Pa.	DesJardins & Robinson, Cincinnati, Ohio

Auditors

Arthur Andersen & Co., Chicago, Ill.

Transfer Agent

Mellon National Bank and Trust Company, Pittsburgh, Pa.

Registrar

Fidelity Trust Company, Pittsburgh, Pa.

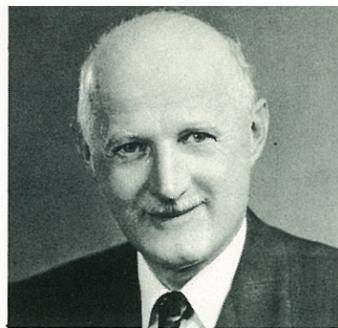
Shareholders' Annual Meeting

Scheduled for Monday, Sept. 10, 1956, at Latrobe, Pa. Notice of meeting will be mailed to each shareholder of record on August 17, 1956. Proxies will be solicited by the management.

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Whenever the following names appear in this report, they are used as Trade-Marks: Kennametal, Kentanium, Kendex, Kennamatic, Kenface.



To the shareholders:

We have completed another satisfactory year, the tenth year of continuously profitable operations. Sales and other income amounted to \$21,669,208 for the year ending June 30, 1956, an increase of \$1,753,873 over the preceding fiscal year. Net income increased 37 percent over the preceding year, from \$1,803,738 in 1955 to \$2,467,423 in 1956. This was equivalent to \$4.12 per share, an all-time high.

Regular maturities of serial notes aggregating \$250,000 were paid during the year, and in addition we prepaid another \$125,000, thus reducing the total long-term debt from \$1,500,000 at the beginning of the year to \$1,125,000 at June 30, 1956.

The Tax Court of the United States heard our case in March 1956 regarding return of amounts taken from us by the War Contracts Price Adjustment Board for our fiscal years 1944 and 1945. We have not been subjected to any refunds under the Renegotiation Act of 1951.

Our mining subsidiary, Nevada Scheelite Corp., contributed \$766,890 to the after-tax earnings. Exploration for additional ore deposits and development of methods which permit extraction and refining of the concentrates to salable form are being actively pursued. It now appears that the Government's tungsten purchase program will be continued for at least another year, at a lower price.

In scientific exploration your company also pushes forward in developing uses for our hard carbide alloys, Kennametal and Kentanium. A large part of my personal effort is devoted to that work. A policy of specialization and decentralization has been continued by your management. Many economies are being put into effect which should add to our earnings in future years.

Our sales policies continue to be both national and international in scope. To compete in foreign markets more effectively, we have formed a wholly-owned subsidiary, Kennametal Overseas Corp. This company is servicing the needs of our export customers with Kennametal products, and is actively engaged in expanding our foreign markets. Also, through that corporation, we will soon start a sintering plant in Milan, Italy, in cooperation with our Italian agents. Kennametal Overseas Corp. will have a 51% interest in the Italian corporation.

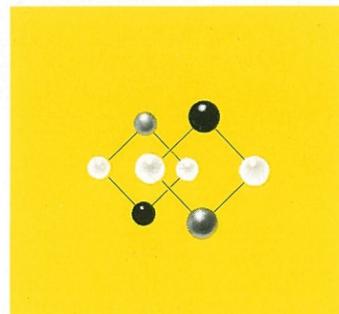
The internal management of your company has been improved, in my opinion, through personnel advancements and new employees who bring added strength to the organization. The election as director of Mr. Andrew Gahagan, the founder of a successful concern in the refining and utilization of beryllium, also strengthens your company.

Taxes and inflation continue to threaten your values, as they do the values of all corporations and individuals in the United States and in most other countries. Unsound national and international fiscal policies add to the hazards and difficulties of management. However, my belief is that economic values created by better tools are a positive and fundamental good which will survive political turmoil.

Yours very sincerely,

Philip M. McKenna
President

Latrobe, Pa.
August 4, 1956



Financial review

Sales and Earnings

Because of a record second half, 1956 turned out to be a very good year. Net income after taxes was \$2,467,423 or \$4.12 per share, the highest in our history; net income for 1955 was \$1,803,738, or \$3.01 per share.

Consolidated sales and other income in fiscal 1956 amounted to \$21,669,208 as compared to \$19,915,335 in the preceding fiscal year. It is to be noted that sales were higher in several previous years only because of substantial quantities of projectiles sold to the United States Government, none of which were made or sold in 1956. Sales of regular products exceeded any previous year, and reflected a strong demand for Kennametal products by our customers in practically all industries.

This improvement in net earnings was attained in the face of an illegal 83-day strike which disrupted operations at our two principal plants during the first half of the year. Higher earnings were possible largely because of the benefits resulting from the decentralization in operations which management has effected during the past several years, the introduction of new, cost-cutting methods, and a great effort by all segments of management to operate more efficiently. Increased production to offset continuing increases in wage rates and the higher prices we must pay for raw materials and almost all other items which we buy, is necessary for survival. To obtain such economies, we have found it necessary to make large expenditures for property, plant and equipment. Because of continuing inflationary pressures, we were also required to increase our selling prices on December 1, 1955.

All taxes continued to mount during the year. Taxes, other than payroll taxes, amounted to \$2,524,968 in 1956, and included a provision for Federal and State income taxes of \$2,335,000, as compared with \$1,738,304 in 1955, including \$1,600,000 for taxes on income. We continued our policy of amortizing goodwill and other intangibles with an annual charge of \$120,000 against income. On this basis, the remaining balance of \$518,187 at June 30, 1956, will be written off in slightly over four years.

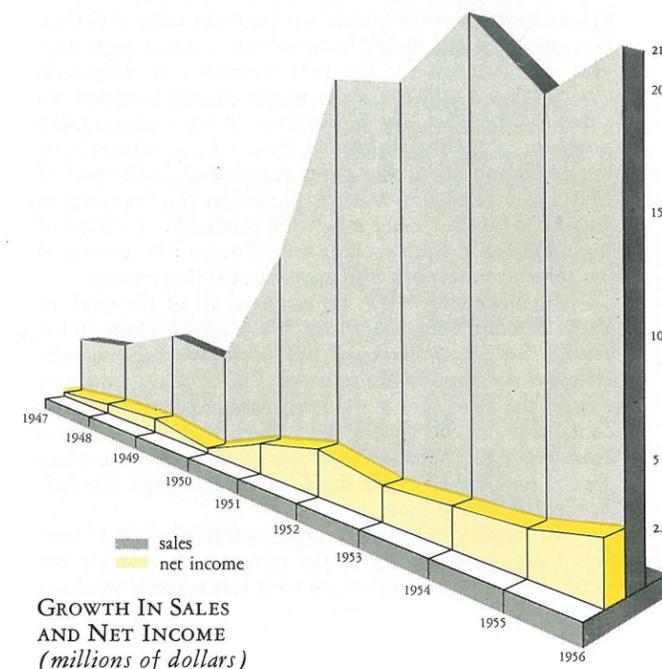
Regular quarterly dividends of 25 cents per share were paid during the year. This amounted to \$601,269, or \$1.00 per share, based on common shares outstanding at the quarterly dividend dates. Because of the six for five stock split in June 1955, the equivalent dividend rate for the preceding fiscal year was \$.833 per share.

A review of the past ten years shows that we have increased our sales fivefold. Net income also increased manifold, from \$183,142 in 1947 to \$2,467,423 in 1956. And the dividend rate has increased 500%.

Working Capital

Working capital (current assets, less current liabilities) at the year end was \$8,888,368, an increase of \$1,549,097 over the previous year end. The increase is accounted for in the following summary which shows the sources from which funds were obtained as well as the uses made of such funds during the year:

Funds obtained:			
Net income for the year....	\$2,467,423		
Provisions for depreciation and amortization	702,129		
Amortization of goodwill, trade-marks, etc.	120,000		
Issuance of common stock..	82,238	\$3,371,790	
Funds used:			
Dividends paid	\$ 601,269		
Net additions to fixed assets	978,458		
Prepayment of long-term debt	125,000		
Purchase of treasury stock..	105,000		
Increase in prepaid expenses, etc.	12,966	1,822,693	
Increase in working capital			<u>\$1,549,097</u>



The availability of adequate working capital from internal sources, without necessity for outside borrowings, is a source of strength to your Company, particularly in these times of great credit stringency and high interest rates. It has made it possible and will continue to enable the Company to conduct a greater volume of business, to maintain an adequate research and development program, and to plan for future expansion on a comprehensive scale, with confidence and certainty.

Long-Term Debt

In addition to the regular semi-annual payments of \$125,000 which were made in November 1955 and May 1956, an additional payment of \$125,000 was made in June 1956 to retire the last of the 3¾% notes which would have fallen due in November 1956. At June 30, 1956, only \$1,125,000 of the 4½% notes (payable to an insurance company) remain, the first \$125,000 payment thereon not being due until November 1957, and the final maturity taking place in November 1961. Interest paid on long-term debt in 1956 amounted to \$60,745 as compared to \$79,354 for the preceding fiscal year.

The loan agreement provides that \$2,443,552 of the earned surplus balance at June 30, 1956, is not available for the payment of cash dividends. The agreement further provides for the maintenance of not less than \$4,000,000 of net working capital. Net working capital at June 30, 1956 amounted to \$8,888,368.

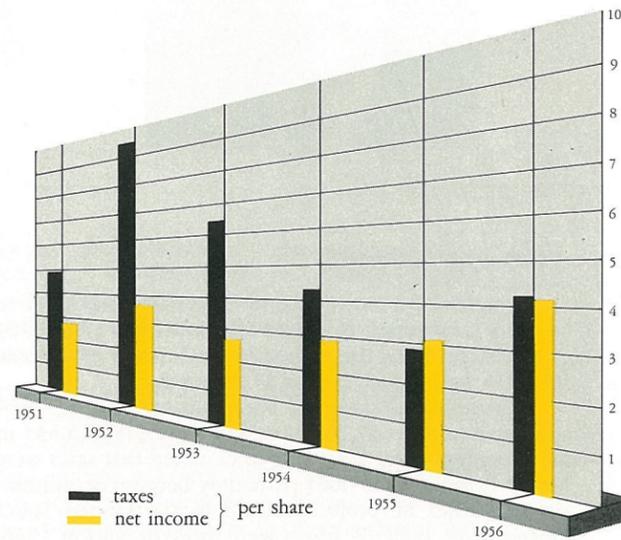
Subsidiary Companies

At June 30, 1956, the Company owned 100% interests in three subsidiary companies, all of whom are consolidated with the parent company in the accompanying financial statements.

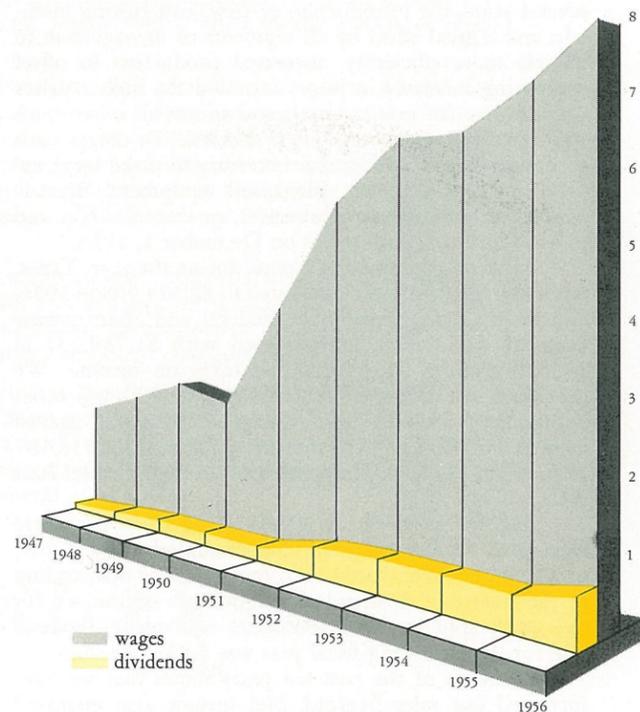
Nevada Scheelite Corp., which was formed in 1954 to take over the operations of our tungsten mine at Fallon, Nevada, acquired in 1951, completed another successful year. Its earnings for the year amounted to \$766,890, contributing \$1.28 per share to the consolidated net income for the year. The Government's domestic tungsten purchase program, which has been taking substantially the entire output of the mine, terminated at the end of May 1956, but a new bill was signed by the President in July 1956 which should insure the profitable operation of the mine for at least another year. Proven ore reserves at the mine appear more than adequate for this purpose.

In November 1955, we acquired all of the stock of T. R. Almond Mfg. Company, Willoughby, Ohio, in exchange for 3,825 shares of our stock. We subsequently changed its name to Kennametal Co. of Ohio, and purchased the land and a modern manufacturing building containing 15,000 square feet, which that company had been leasing. These facilities are being used to produce special tool holders, and the Cleveland District sales office is also located there.

In January 1956, we incorporated Kennametal Overseas Corp. in Panama, for the purpose of servicing the needs of our export customers with Kennametal products



TAXES AND NET INCOME (dollars per share)



WAGES AND DIVIDENDS (millions of dollars)

and expanding our foreign markets. An Italian corporation is in process of being formed, which will be owned 51% by Kennametal Overseas Corp. and 49% by our Italian agents, for the purpose of building and operating a sintering plant in Milan, Italy. We will supply our hard carbide compositions in powder form for their use.

Statutory Renegotiation

In only one year since its inception has this corporation operated in the absence of a Federal renegotiation statute, limiting closely the profits alleged to have been made on Government business. As set forth in previous annual reports, our renegotiation proceedings for both fiscal 1944 and 1945 resulted in the issuance of unilateral determinations by the War Contracts Price Adjustment Board, requiring gross refunds of \$1,000,000 and

\$1,500,000 respectively, for the two years. The net refund, after applicable Federal and State income tax credits, for 1944 was \$275,226.31, paid in 1946; the corresponding refund for 1945 was \$376,025.08, paid in 1950. Petitions for the recovery of these amounts in full were filed with the Tax Court of the United States promptly after payments were made. The issues in these proceedings were severed and in March the Tax Court heard our case on the severed issue, which involves the exemption of raw materials used by us. A decision on the case is expected within the next six months.

Under the Renegotiation Act of 1951, we have secured clearances for all fiscal years through 1953, and no assignment was made for the fiscal year ended June 30, 1954. It is the opinion of management that no refunds will be required for the years 1955 and 1956. This Act was recently extended to December 31, 1958.

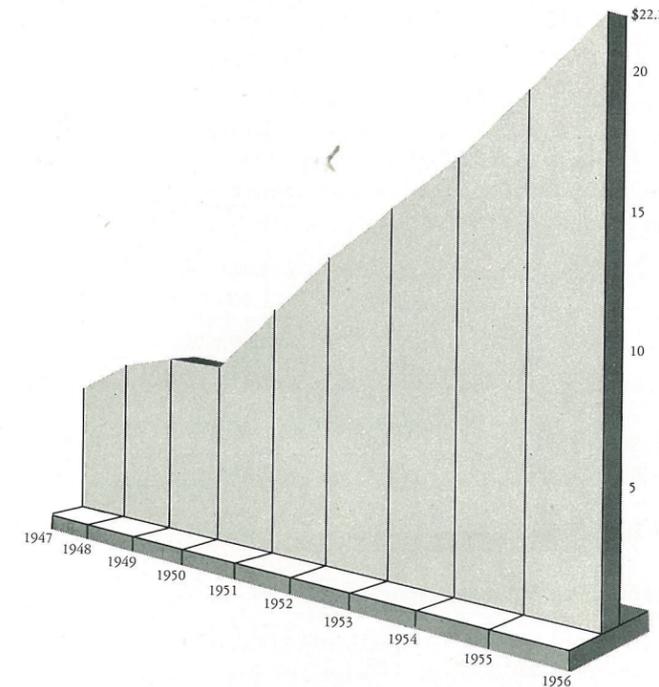
Shareholders' Equity

The book value per share at June 30, 1956, was \$22.23, and represented an increase in shareholders' equity of \$3.08, or 16.1%, since June 30, 1955. A comparison of how the shareholders' equity was invested at the last two balance sheet dates is presented in the tabulation at the bottom of this page.

The number of common shares outstanding in the hands of shareholders at June 30, 1956, decreased by 175 during the year, as the net result of the purchase of 4,000 shares for the treasury, and the issuance of 3,825 shares in connection with the acquisition of Kennametal Co. of Ohio.

Investor interest in the Company continued to expand during the year, and at June 30, 1956, there were 1,477 shareholders, compared with 1,272 at June 30, 1955. There was little change in the respective holdings of the major stockholders during the year. Kennametal shareholders now reside in 42 states and the District of Columbia.

As a result of continuously profitable operations over the past ten years, book value per share has increased from \$5.21 at June 30, 1946, to \$22.23 at June 30, 1956, or 327%. During this ten-year period, a total of \$3,356,031 was paid out in cash dividends.



GROWTH IN BOOK VALUE OF COMMON STOCK (dollars per share)

Investment of Shareholders' Equity

	June 30, 1956		June 30, 1955	
	Amount	Per Share	Amount	Per Share
Working capital	\$ 8,888,368	\$14.83	\$ 7,339,271	\$12.24
Plant and equipment, less reserves	4,749,725	7.93	4,473,396	7.46
Goodwill, trade-marks, patents, prepaid expenses, etc.	810,538	1.35	917,572	1.53
Less long-term debt	(1,125,000)	(1.88)	(1,250,000)	(2.08)
Shareholders' equity	<u>\$13,323,631</u>	<u>\$22.23</u>	<u>\$11,480,239</u>	<u>\$19.15</u>

KENNAMETAL *Inc.* and subsidiaries

Consolidated balance sheets

June 30, 1956 and 1955

Assets

	June 30		
	1956	1955	
CURRENT ASSETS:			
Cash	\$ 2,068,083	\$ 2,923,895	
U. S. Treasury bills, at cost.....	1,145,011	—	
Trade receivables, less reserves of \$20,198 in 1956 and \$31,722 in 1955	2,786,417	2,975,938	
Inventories, at lower of cost or market—			
Finished goods and work in process.....	\$ 4,286,856	\$ 3,678,790	
Raw materials and supplies	1,405,350	1,412,885	
Total inventories	\$ 5,692,206	\$ 5,091,675	
Total current assets	\$11,691,717	\$10,991,508	
PREPAID PREMIUMS AND CASH SURRENDER VALUE OF \$300,000 OF INSURANCE ON LIFE OF OFFICER.....	28,821	26,321	
PREPAID EXPENSES, DEFERRED CHARGES, ETC.	263,530	253,064	
PROPERTY, PLANT AND EQUIPMENT, at cost less reserves for depreciation and amortization:			
	Cost	Reserves	Net
Land	\$ 145,125	\$ —	\$ 145,125
Buildings	2,442,862	798,964	1,643,898
Machinery, equipment, etc...	4,646,096	1,828,695	2,817,401
Mining buildings, equip- ment and claims	987,868	844,567	143,301
	<u>\$8,221,951</u>	<u>\$3,472,226</u>	<u>\$4,749,725</u>
	4,749,725		4,473,396
GOODWILL, TRADE-MARKS, PATENTS, ETC., in process of amortization	518,187		638,187
	<u>\$17,251,980</u>		<u>\$16,382,476</u>

Liabilities

	June 30	
	1956	1955
CURRENT LIABILITIES:		
Accounts payable	\$ 1,228,316	\$ 1,291,603
Accrued liabilities	733,937	542,146
Current maturities on long-term debt	—	250,000
Federal and State taxes on income, less U. S. Treasury bills of \$1,443,854 in 1956	841,096	1,568,488
Total current liabilities	\$ 2,803,349	\$ 3,652,237
LONG-TERM DEBT (Note 1):		
4½% notes, due \$125,000 semiannually beginning November 14, 1957	\$ 1,125,000	\$ 1,125,000
3¾% note due November 14, 1956 (prepaid in June 1956).....	—	125,000
	<u>\$ 1,125,000</u>	<u>\$ 1,250,000</u>
CAPITAL STOCK AND SURPLUS:		
Common stock, \$10 par value, authorized 750,000 shares, issued 603,225 shares at June 30, 1956, and 599,400 shares at June 30, 1955	\$ 6,032,250	\$ 5,994,000
Paid-in surplus, excess of market over par value of 3,825 shares issued for acquisition of subsidiary	43,988	—
Earned surplus, per accompanying statement (Note 1).....	7,352,393	5,486,239
	<u>\$13,428,631</u>	<u>\$11,480,239</u>
Less—Treasury stock (4,000 shares at cost)	105,000	—
	<u>\$13,323,631</u>	<u>\$11,480,239</u>
	<u>\$17,251,980</u>	<u>\$16,382,476</u>

The accompanying notes (Page 8) are an integral part of this statement.

KENNAMETAL *Inc.* and subsidiaries

Auditors' certificate

Consolidated statements of income for the years ended June 30, 1956 and 1955

	June 30	
	1956	1955
SALES AND OTHER INCOME	\$21,669,208	\$19,915,335
COSTS AND OTHER CHARGES:		
Wages, salaries and payroll taxes	\$ 8,034,339	\$ 7,167,987
Materials, supplies, services, etc.	7,759,604	8,389,099
Depreciation and amortization of plant and equipment.....	702,129	616,853
Interest expense on long-term debt	60,745	79,354
Amortization of goodwill, trade-marks, patents, etc.	120,000	120,000
Taxes, other than payroll taxes	2,524,968	1,738,304
	<u>\$19,201,785</u>	<u>\$18,111,597</u>
Net income for the year	<u>\$ 2,467,423</u>	<u>\$ 1,803,738</u>

Consolidated earned surplus statement for the year ended June 30, 1956

BALANCE AT BEGINNING OF YEAR	\$ 5,486,239
NET INCOME	2,467,423
	<u>\$ 7,953,662</u>
DIVIDENDS PAID (\$1.00 per share)	601,269
BALANCE AT END OF YEAR	<u>\$ 7,352,393</u>

Notes to the financial statements — June 30, 1956

- (1) The long-term loan agreement as amended provides that: (a) of the earned surplus of \$7,352,393 at June 30, 1956, \$2,443,552 is not available for cash dividends, and (b) net working capital may not be less than \$4,000,000.
- (2) The company has a noncontributory pension plan for hourly rated employees and a contributory retirement income plan for salaried

employees. The annual cost of the two plans, including funding of past services over a ten-year period, is approximately \$300,000. Unfunded costs of past services for the plans were approximately \$1,000,000 at June 30, 1956. The company has agreed to continue the pension plan until November 26, 1959. The retirement income plan may be amended or terminated at any time.

ARTHUR ANDERSEN & CO.

120 SOUTH LA SALLE STREET
CHICAGO 3

To the Board of Directors,
Kennametal Inc.:

We have examined the consolidated balance sheet of KENNAMETAL INC. (a Pennsylvania corporation) and subsidiaries as of June 30, 1956, and the related consolidated statements of income and earned surplus 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. We satisfied ourselves as to the accounts receivable from agencies or departments of the U. S. Government by auditing procedures other than confirmation by direct correspondence.

In our opinion, the accompanying consolidated balance sheet and consolidated statements of income and earned surplus present fairly the financial position of Kennametal Inc. and subsidiaries as of June 30, 1956, and the results of their operations for the year then ended, and were prepared in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Arthur Andersen & Co.

Chicago, Illinois,
August 4, 1956.

KENNAMETAL Inc. 10 year review

Fiscal years ending June 30

KENNAMETAL Inc. LATROBE, PENNSYLVANIA	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947
Sales and other income	\$21,669,208	\$19,915,335	\$24,163,842	\$21,699,917	\$22,262,785	\$11,971,300	\$4,956,717	\$6,456,145	\$4,970,173	\$4,172,562
Taxes, other than payroll taxes	\$ 2,524,968	\$ 1,738,304	\$ 2,554,569	\$ 3,855,206	\$ 5,694,444	\$ 2,956,147	\$ 238,565	\$ 562,019	\$ 358,118	\$ 214,040
Taxes, other than payroll taxes —per share*	\$ 4.21	\$ 2.90	\$ 4.26	\$ 6.43	\$ 9.50	\$ 4.93	\$.40	\$.94	\$.60	\$.36
Net income for the year	\$ 2,467,423	\$ 1,803,738	\$ 1,737,949	\$ 1,651,872	\$ 2,217,364	\$ 1,667,070	\$ 179,239	\$ 626,294	\$ 414,370	\$ 183,142
Net income for the year—per share*	\$ 4.12	\$ 3.01	\$ 2.90	\$ 2.76	\$ 3.70	\$ 2.78	\$.30	\$ 1.04	\$.69	\$.31
Dividends paid	\$ 601,269	\$ 499,500	\$ 499,500	\$ 498,845	\$ 448,829	\$ 212,288	\$ 199,800	\$ 199,800	\$ 116,700	\$ 79,500
Dividends paid—per share*	\$ 1.00	\$.833	\$.833	\$.833	\$.75	\$.354	\$.333	\$.333	\$.222	\$.162
Working capital	\$ 8,888,368	\$ 7,339,271	\$ 6,359,966	\$ 5,583,661	\$ 5,049,754	\$ 3,197,136	\$1,963,001	\$1,886,948	\$1,721,472	\$1,392,092
Ratio, current assets to current liabilities	4.2	3.0	2.8	2.0	2.0	2.2	3.8	3.3	3.2	2.6
Additions to plant and equipment—net	\$ 978,458	\$ 524,495	\$ 847,761	\$ 890,474	\$ 1,560,265	\$ 604,261	\$ 111,895	\$ 402,789	\$ 155,799	\$ 91,675
Depreciation and amortization of plant and equipment	\$ 702,129	\$ 616,853	\$ 507,135	\$ 426,020	\$ 334,442	\$ 170,415	\$ 150,661	\$ 145,917	\$ 115,769	\$ 111,554
Plant and equipment—net	\$ 4,749,725	\$ 4,473,396	\$ 4,565,754	\$ 4,225,128	\$ 3,760,674	\$ 2,067,011	\$1,633,165	\$1,671,928	\$1,399,038	\$1,359,008
Long-term debt	\$ 1,125,000	\$ 1,250,000	\$ 1,750,000	\$ 2,000,000	\$ 2,250,000	\$ 675,000	\$ 20,000	\$ 75,000	\$ 180,000	\$ 672,500
Shareholders' equity	\$13,323,631	\$11,480,239	\$10,176,001	\$ 8,937,552	\$ 7,778,174	\$ 6,163,174	\$4,708,391	\$4,728,952	\$4,302,458	\$3,572,038
Number of shares outstanding (end of year)	599,225	599,400	499,500	499,500	499,500	249,750	199,800	199,800	33,300	29,100
Book value per share*	\$ 22.23	\$ 19.15	\$ 16.98	\$ 14.91	\$ 12.98	\$ 10.28	\$ 7.86	\$ 7.89	\$ 7.18	\$ 5.96
Number of registered shareholders (end of year)	1,477	1,272	983	865	427	250	187	137	112	95
Number of employees (end of year)	1,654	1,516	1,234	1,444	1,235	867	598	642	587	582

*Adjusted to reflect increased number of shares resulting from a 6 for 1 stock split in June 1949; a 5 for 4 stock split in June 1951; a 2 for 1 stock split in February 1952 and a 6 for 5 stock split in June 1955.

Credit to earned surplus in 1955(\$500,000) has been restored to years to which applicable(1951, 1952 and 1953) in the above summary.

Operating review

Marketing and Product Distribution— Metalworking

Metalworking sales for fiscal 1956 were substantially higher than for fiscal 1955, reflecting the high rate of general business activity and the continuing acceptance of Kennametal products. The increase in sales, which began in January 1955, received a setback in the fall of 1955 due to the strike at the Latrobe and Kingston Station plants, but the satisfactory condition of finished inventories and assistance from our decentralized plants helped to minimize the seriousness of the situation. The sharp curtailment in automotive production last spring also had an adverse effect on sales.

In December 1954 we introduced Grade K21, a composition created for general purpose steel-cutting and particularly suited for modern machine tools. From the start this grade has given outstanding performance and was another factor in increasing 1956 sales.

In January 1956 another new Kennametal grade, an extremely hard steel-cutting carbide designated as Grade K7H, was announced. This grade meets the demand for high velocity machining and for cutting high tensile alloy steels at higher cutting speeds. During 1956, considerable interest was created in the metal-cutting field by ceramic tool materials. These materials are capable of cutting metal under special conditions at very high speed ranges but lack strength for most machining operations, whereas Grade K7H with double the strength of the ceramics meets the requirements for higher velocity cutting of steel.

The wide acceptance of the Kendex throw-away insert type of tooling resulted in steadily increasing sales of both carbide inserts and holders during 1956. The expanded line of Kendex tools now offered permits mass retooling by users to take full advantage of the economy of throw-away insert tools.

Other applications for Kennametal continue to develop at an increased rate. Its use in blanking and forming dies for electrical laminations and for many operations in the can industry has been expanded. Long planer knives are finding increased use in woodworking plants. The newly developed particle boards, used as furniture cores and as structural wood, contain highly abrasive bonding resins requiring Kennametal knives to resist severe wear and to provide a smooth finish.

Mining Tool Division

A reversal of the downward trend in coal mining and a high level of activity in other extractive industries resulted in a very gratifying increase in the sales of our Mining Tool Division. The addition of a powder forming and sintering plant at Bedford has greatly improved service to customers. Further improvement has been effected through the appointment of additional large distributors who carry inventories of mining tools conveniently located in major mining districts.

Refining and Metallurgical Activities

Research and development of new and improved metallurgical refining processes was stepped up during the year. This has resulted in considerably broadening the products of the Company, particularly in the field of refractory metals. Marked progress was also made in our processes for making carbide mixes with the result that improved compositions of macrocrystalline tungsten carbide have been produced for use in new mining and metalworking grades. At our Macro Division at Port Coquitlam, B.C., the development of new refining techniques and experimental work on various raw materials are being continued. Deliveries of tungsten powder and carbides produced here increased considerably during the year.

During the year we developed, and are now ready to market, a new hard-facing product called Kenface. This is an extremely hard, wear resistant grade of sintered tungsten carbide, provided in various mesh sizes, for which there is an indicated market in the petroleum, construction, mining and other fields where a superior quality of wear-resisting material is needed.

Further progress has been made in the development of Kentanium, a light-weight titanium carbide which retains high strength and hardness and resists oxidation at temperatures where conventional high temperature alloys fail. Improved compositions and new fabrication and fastening procedures have increased the range of applications. Additional engineering design data have been developed and should assist materially in further broadening the fields of use. Sales of Kentanium, while still largely on a development basis, have grown and repeat orders are being received for certain products of proven application.

Laboratory and pilot plant work has resulted in a very satisfactory process for making high purity tantalum

and columbium oxides and new production facilities are now in operation. During the past year, we sold quantities of ferrocolumbium and tantalum oxide. In addition, and of greater importance, in response to an increasing demand for high purity columbium (niobium) metal for atomic power and other uses, we are now successfully producing and selling this material. For this purpose, we are further developing production processes and installing production facilities. A substantial volume of sales from this source during the coming year is anticipated.

Manufacturing and Production Facilities

Production operations during the coming year will be affected favorably by action taken in the year just concluded. The significant events in this connection were as follows:

- (1) The acquisition of manufacturing facilities at Willoughby, Ohio, operated by Kennametal Co. of Ohio, where substantial quantities of Kendex, Kennamatic and other mechanically clamped tools are being made.
- (2) The addition of facilities to produce Kennametal inserts at our Mining Tool Division.
- (3) The production potential of our Detroit Division was increased through the installation of additional furnaces, presses and other equipment, and it handled double the volume of the previous year.
- (4) Work is already underway in Milan, Italy, where a sintering plant will be installed, owned 51% by Kennametal Overseas Corp., to aid us in meeting the production and delivery problems involved in supplying Kennametal carbides to European markets.

As an additional step in our over-all decentralization program, and to minimize damage from future floods such as we suffered at our Latrobe Plant in October 1954, we recently acquired a 1200-acre site two miles from our Kingston Plant. The initial installation, started in July 1956, consists of a building with 24,000 square feet of floor space to be used for grinding and finishing of custom-fabricated carbide products. Additional construction to take care of other pressing production problems is now under consideration but detailed plans have not yet been completed.

The 83-day strike which seriously affected our Latrobe and Kingston operations last fall was an illegal work stoppage, in direct violation of our agreement with the local union. We had to insist on the elimination of irresponsible union action so that the future operations of these plants might be insured. The strike was settled and work finally resumed on November 2, 1955. In subsequent arbitration proceedings, 14 of the 18 men discharged in

connection with the strike were denied reinstatement. A new contract running until June 1957 was signed in January; wage increases averaging fifteen cents per hour, plus some added fringe benefits, were granted.

Export Sales

Kennametal Inc. has always been active in foreign markets, but increased demands for our products and a desire to widen the scope of our export operations resulted in the incorporation in Panama of Kennametal Overseas Corp. Since May 1, 1956, substantially all export sales have been handled by this corporation. A separate organization concentrating on the specialized problems incident to foreign trade can better serve the needs of our export customers. The outlook for the future is encouraging and we believe we will be able to obtain wider, more effective market coverage in all parts of the world.

Nevada Scheelite Corp.

Ore production and sales for fiscal 1956 increased over the previous year, as efforts were intensified to deliver to the Government a maximum quantity of concentrates prior to the expiration of the domestic tungsten purchase program. This program, which was limited to 3,000,000 short ton units of tungsten trioxide at a price of \$63.00 per unit, terminated at the end of May. In July, the Government extended the purchase program to cover another 1,250,000 short ton units, at a price of \$55.00 per unit, with monthly deliveries limited to 5,000 units from any one producer. This program should insure profitable operation of the mine at close to capacity during the next twelve months.

Search is being continued to locate other mineral properties which might be developed at a profit. Our excellent organization at Nevada Scheelite can be well used for such purposes.

Personnel

In September 1955 our Secretary-Treasurer, Mr. George T. Kearns, who had been with the corporation since its inception and who had been a Director since 1950, died quite suddenly. Mr. Charles R. Van Norden was elected Secretary, and Mr. George J. Heideman was elected Treasurer, to fill the vacancy. In January 1956, Mr. Andrew Gahagan of New York, who has had wide experience in beryllium and other industries, was elected a Director.

At June 30, 1956, the Company and its subsidiaries had 1654 employees, an increase of 138 over June 30, 1955. The employees' retirement and pension plans, initiated during the last two years, were continued in full force during 1956.



A few representative applications of Kennametal and Kentanium.

Nature of our business

The principal business of Kennametal Inc. is the manufacture of hard carbide alloys of tungsten, titanium, tantalum and columbium sold under the trade name "Kennametal".

Invented in 1937 by Philip M. McKenna as the first hard carbide to successfully cut steel, Kennametal is used in metal-cutting and forming tools; in cutting bits and drills to mine coal, ores, salt, potash and other minerals; in knives and bits for forming wood products and as wear parts in machines and processing equipment for practically every industry.

Kennametal is extremely hard and strong. It outwears steel 100 times or more under severe abrasive conditions. As the ingredients can be blended, Kennametal is adaptable to meet many specific requirements in combating deformation, corrosion, impact, deflection and other destructive forces. Kentanium, a heat-resistant series of compositions, is finding wide application at elevated temperatures since it retains its strength at temperatures that destroy conventional carbides or high temperature cast alloys.

Mining of tungsten ore; research in chemical and metallurgical techniques for reducing the ores to usable ingredients; development of new compositions for specific applications; mechanical development and engineering to adapt hard carbides to new areas of application . . . all are major activities of your company.

District offices

and Sales representatives

- ANDOVER, VA.—Central Supply Co. of Va., Inc.
 ATLANTA 8, GA.—70 Fourth St., N.W.
 BECKLEY, W. VA.—National Mine Service Co.
 BIRMINGHAM, ALA.—1727 Sixth Ave., N.
 BIRMINGHAM 1, ALA.—Salmon & Co., Inc.
 BOISE, IDAHO—M. R. Priest and Sons, Inc.
 BUFFALO 11, N.Y.—31 Moeller St.
 CHATTANOOGA, TENN.—310 W. 8th St.
 CHICAGO 50, ILL.—5830 W. 26th St.
 CINCINNATI 37, OHIO—4873 Reading Rd.
 CLEVELAND, OHIO—4610 Beidler Rd., Willoughby
 DALLAS 7, TEXAS—Engineering Sales Co.
 DAYTON 6, OHIO—Room 101, 2676 Salem Ave.
 DENVER, COLO.—5844 S. Huron St., Littleton
 DETROIT 37, MICH.—10201 Capital Ave., Oak Park
 ERIE, PA.—3615 W. Ridge Rd.
 FAIRMONT, W. VA.—Fairmont Supply Co.
 HONOLULU 14, T.H.—Chapson Bros., Ltd.
 HOUSTON 1, TEXAS—Engineering Sales Co.
 INDIANAPOLIS 8, IND.—2445 N. Meridian St.
 IRON MOUNTAIN, MICH.—Champion, Inc.
 KANSAS CITY 41, MO.—P. O. Box 1081
 LOS ANGELES 58, CALIF.—4585 Pacific Blvd.
 McCLURE, VA.—Erwin Supply & Hardware Co.
 MIAMI 10, FLA.—Harry P. Leu, Inc.
 MILWAUKEE 3, WIS.—744 N. Fourth St.
 MINNEAPOLIS 3, MINN.—605 Wesley Temple Bldg.
 NEW ORLEANS 6, LA.—Dixie Mill Supply Co.
 ORLANDO, FLA.—Harry P. Leu, Inc.
 PHILADELPHIA 40, PA.—3701 N. Broad St.
 PITTSBURGH 19, PA.—Room 802, 600 Grant St.
 PORTLAND 9, ORE.—Lindsay Bros.
 ROCKFORD, ILL.—2314 Barton Blvd.
 ST. LOUIS 8, MO.—Room 202, 4505 Olive St.
 SALISBURY, N.C.—518 W. Council St.
 SALT LAKE CITY, UTAH—Capitol City Steel Co.
 SAN FRANCISCO 27, CALIF.—4095 19th Ave.
 SEATTLE 4, WASH.—Campbell Industrial Supply Co.
 SHINNSTON, W. VA.—Erwin Supply Co.
 SPRINGFIELD 8, MASS.—758 Sumner Ave.
 SYRACUSE 2, N.Y.—State Tower Bldg., 109 S. Warren St.
 TULSA, OKLA.—626 E. Third St.
 WHEELING, W. VA.—Pa. & W. Va. Supply Corp.
KENAMETAL OVERSEAS CORP.
 Panama, R.P.
Sales Representatives in: Belgium and Luxembourg—
 Brazil—Central and South America—Cuba—
 France—Italy—Japan—Mexico—Netherlands—
 Norway—Sweden—Switzerland—
 Union of South Africa and Rhodesia
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