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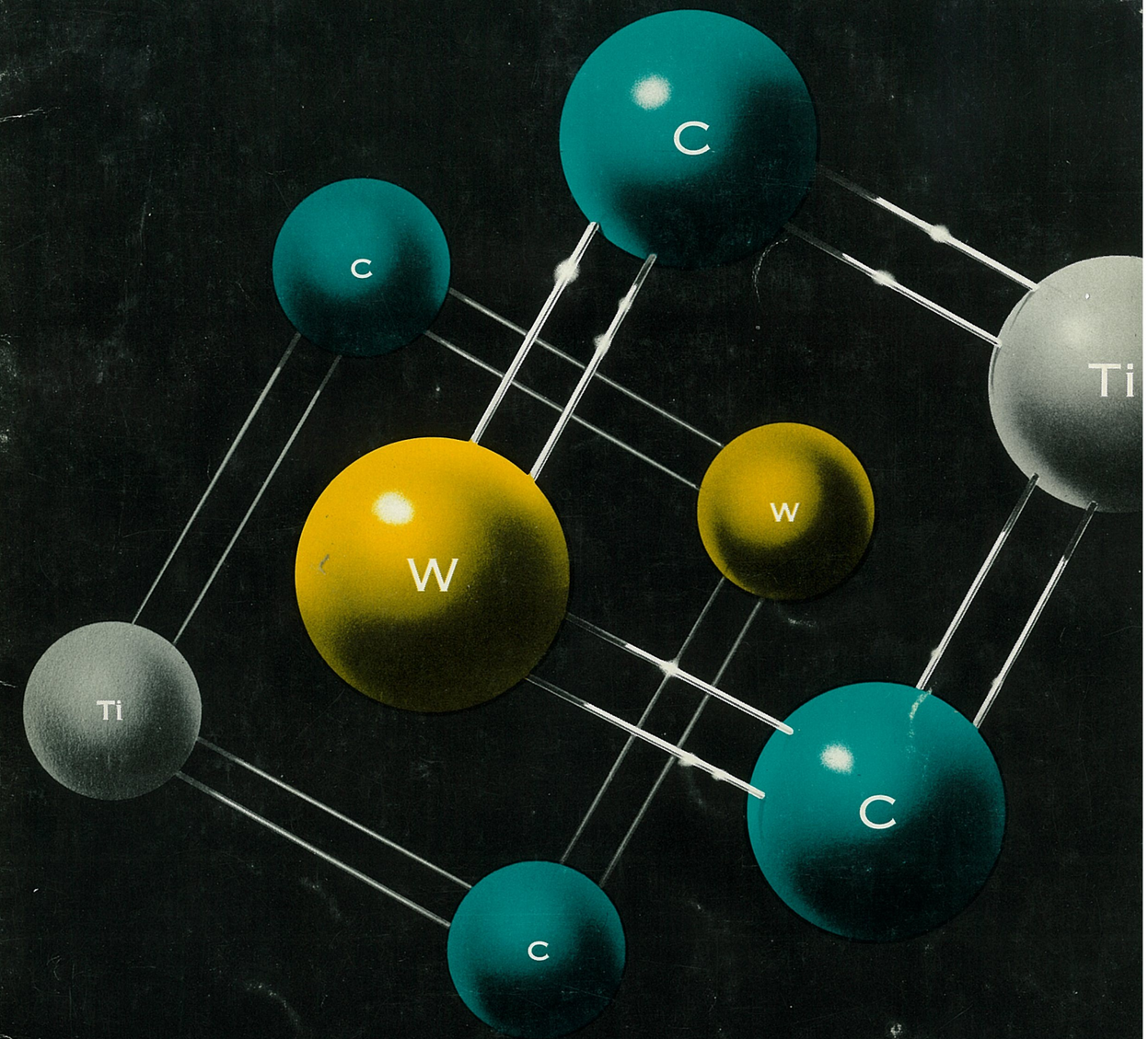
KENNAMETAL® 1954 ANNUAL REPORT

KENNAMETAL *Inc.*, LATROBE, PA.

INDUSTRY and KENNAMETAL® ...*Partners in Progress*

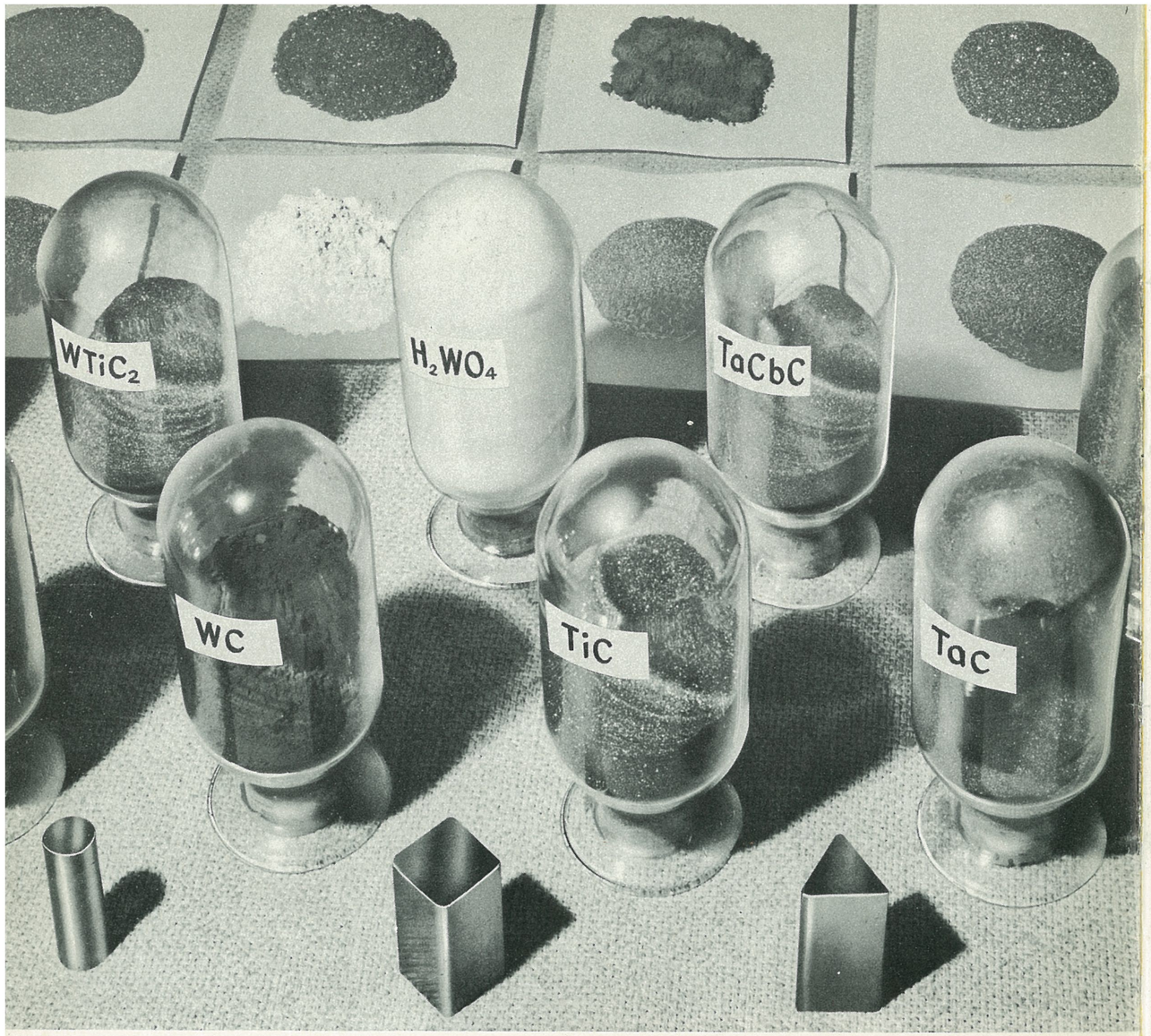


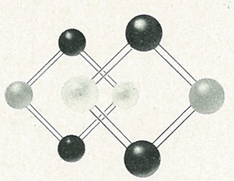
KENNAMETAL®

1954 ANNUAL REPORT

for the year ended June 30, 1954

KENNAMETAL *Inc.*, Latrobe, Pennsylvania *Cemented Carbide Products*





Symbolic of the metallurgical nature of Kennametal Inc., the molecular design shown on the cover represents tungsten-titanium-carbide ($WTiC_2$). This remarkable substance, invented by Philip M. McKenna in 1937, ushered in a new era in the history of metal-cutting, and was the forerunner of many other revolutionary metallurgical and engineering advancements that have been developed by the company.

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Whenever the following names appear in this Report they are used as Trade-Marks:
KENNAMETAL, KENNALOY, KENNEX

1954 ANNUAL REPORT

for the year ended June 30, 1954

KENNAMETAL *Inc.*, LATROBE, PENNSYLVANIA

(A Pennsylvania Corporation)

DIRECTORS and PRINCIPAL EXECUTIVES

PHILIP M. MCKENNA, *President and Director*

ALEX G. MCKENNA, *Exec. Vice Pres. and Director*
DONALD C. MCKENNA, *Vice Pres. and Director*
GEORGE T. KEARNS, *Sec.-Treas. and Director*
JOHN C. REDMOND, *Vice President*
GEORGE G. SCHUSTER, *Director*
WILLIAM D. TURNBULL, *General Sales Manager*
EDWIN H. JOHNSON, *Manager, Mining Tool Division*
WILBUR L. KENNICOTT, *Chief Engineer*
FRANCIS J. LENNON, *General Superintendent*
WILLIAM O. TOUHEY, *Purchasing Agent*
RAY W. SENOGLES, *Controller*
WILLIAM M. STOLL, *Manager, Macro Division*
DANIEL REEBEL, *Director of Advertising and Public Relations*

DIVISIONS

REFINING AND METALLURGICAL DIVISION—*Kingston Station, Pa.*
METALWORKING TOOL DIVISION—*Latrobe, Pa.*
DETROIT DIVISION—*Oak Park, Mich.*
MINING TOOL DIVISION—*Bedford, Pa.*
MACRO DIVISION—*Port Coquitlam, British Columbia*
NEVADA SCHEELITE DIVISION—*Fallon, Nevada*

DISTRICT SALES OFFICES AND DISTRIBUTORS

DISTRICT SALES OFFICES

ATLANTA, GA.—*70 Fourth St., N.W.*
CHICAGO 50, ILL.—*5830 W. 26th St.*
CINCINNATI 37, OHIO—*4873 Reading Rd.*
CLEVELAND 15, OHIO—*2443 Prospect Ave.*
DETROIT 37, MICH.—*10201 Capital Ave. (Oak Park)*
LOS ANGELES 58, CALIF.—*2600 Leonis Blvd.*
MILWAUKEE 3, WISC.—*744 N. Fourth St.*
PHILADELPHIA 40, PA.—*3701 N. Broad St.*
PITTSBURGH 19, PA.—*600 Grant St.*
ST. LOUIS 8, MO.—*Room 202, 4505 Olive St.*
SPRINGFIELD 8, MASS.—*758 Sumner Ave.*
SAN FRANCISCO 27, CALIF.—*4095 - 19th St.*

DISTRIBUTORS

DALLAS 1, TEXAS—*Engineering Sales Co.*
DENVER 4, COLO.—*F. J. Leonard Co.*
HONOLULU 14, T. H.—*Chapson Bros., Ltd.*
HOUSTON 1, TEXAS—*Engineering Sales Co.*
ORLANDO, FLA.—*Harry P. Leu, Inc.*
PITTSBURGH, PA.—*National Mine Service Co.*
PORTLAND 9, ORE.—*Lindsay Brothers*
SEATTLE 4, WASH.—*Campbell Industrial Supply Co.*
TULSA, OKLA.—*Martin Supply Co.*

Sales specialists represent the Metalworking and Mining Divisions in leading industrial centers and in all major coal and non-metallic producing areas.

Foreign sales representatives in: Belgium - Belgian Congo - Brazil - Canada - Chile - Cuba - Denmark - France - Holland - Indonesia - Italy - Japan - Luxembourg - Mexico - Norway - Sweden - Switzerland - Union of South Africa - and Rhodesia.

ANNUAL MEETING

The annual meeting of the shareholders of the Company is held at the general offices of Kennametal Inc. in Latrobe, Pa., on the second Monday in September. The 1954 meeting is scheduled for Monday, September 13 and a formal notice of the meeting, together with a proxy form, will be mailed to each shareholder of record on August 27, 1954. Proxies will be solicited by the management.

KENNAMETAL Inc., Latrobe, Pa.

LEGAL COUNSEL

SMITH, BUCHANAN, INGERSOLL, RODEWALD & ECKERT
Pittsburgh, Pa.

PAUL, LAWRENCE & ROCK
Pittsburgh, Pa.

DES JARDINS, ROBINSON & KEISER
Cincinnati, Ohio

AUDITORS

ARTHUR ANDERSEN & CO.
Chicago, Ill.

REGISTRAR

FIDELITY TRUST COMPANY
Pittsburgh, Pa.

TRANSFER AGENT

MELLON NATIONAL BANK AND TRUST COMPANY
Pittsburgh, Pa.

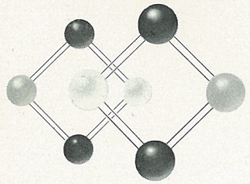
FINANCIAL HIGHLIGHT SUMMARY 1954

	Fiscal Year Ended June 30		Increase (+) Decrease (−)	
	1954	1953	Amount	Percent
NET INCOME:				
Sales and other income	$24,163,842	$21,699,917	+$ 2,463,925	+11.3%
Net income before taxes, other than payroll taxes	$ 4,292,518	$ 5,357,078	−$ 1,064,560	−19.9%
Taxes	2,554,569	3,855,206	− 1,300,637	−33.7%
Net income for the year	$ 1,737,949	$ 1,501,872	+$ 236,077	+15.7%
Net income—per share	$ 3.48	$ 3.01	+$ .47	+15.7%
Dividends paid—per share	1.00	1.00	..	..
FINANCIAL POSITION:				
Current assets	$ 9,873,782	$10,915,992	−$ 1,042,210	
Current liabilities	4,013,816	5,832,331	− 1,818,515	
Working capital	$ 5,859,966	$ 5,083,661	+$ 776,305	
Other assets	242,094	250,576	− 8,482	
Plant and equipment—net	4,565,754	4,225,128	+ 340,626	
Goodwill, trade-marks, patents, etc.	758,187	878,187	− 120,000	
	$11,426,001	$10,437,552	+$ 988,449	
Long-term debt*	1,750,000	2,000,000	− 250,000	
Net worth	$ 9,676,001	$ 8,437,552	+$ 1,238,449	
Represented by:				
Capital stock	$ 4,995,000	$ 4,995,000	$ ..	
Paid-in surplus	11,424	11,424	..	
Earned surplus	4,669,577	3,431,128	+ 1,238,449	
	$ 9,676,001	$ 8,437,552	+$ 1,238,449	

* Less current maturities

NARRATIVE HIGHLIGHTS

- Sales and other income amounted to $24,163,842, reaching the highest level in our history, and represents an 11.3% increase over 1953.
- The decline in net income before taxes was more than offset by the decrease in tax requirements with the result that final net income shows an increase of $236,077 or 15.7% over the amount realized last year.
- Our dividend policy has been maintained on a consistent basis which provided for a quarterly distribution of 25c per share for a total of $1.00 for the year.
- Our working capital position has been strengthened by an increase of $776,305 and amounted to $5,859,966 at the year end at which time our ratio of current assets to current liabilities was 2.5 to 1.
- During 1954 we expended $847,761 towards the expansion and improvement of our productive facilities. Provisions for depreciation, depletion and amortization of fixed properties amounted to $507,135 and our net investment in Plant and Equipment therefore shows an increase of $340,626 over that at the previous year end.
- Our policy of amortizing intangible assets has been continued and the carrying value of goodwill, trade-marks, patents, etc. has been reduced by $120,000 to a remaining balance of $758,187 at the year end.
- Long-term debt was reduced by $250,000 during the year representing the maturities of two semi-annual installments of $125,000 each.
- Net earnings retained in the business amounted to $1,238,449 and are represented by the increase in amount of earned surplus from $3,431,128 at the beginning of the year to $4,669,577 at June 30, 1954.



report to Kennametal stockholders

Latrobe, Pa., August 17, 1954

TO THE STOCKHOLDERS OF KENNAMETAL INC.:

Sales from all divisions totalled $24,163,842 for the year. The long term debt, originally $2,500,000 in ten year notes, has been reduced to $2,000,000 by repayment as agreed. Profit was $1,737,949 after write-off of $120,000 for amortization of goodwill, trademarks, patents, etc.

Earnings from the mining of tungsten by our Nevada Scheelite Division contributed substantially to the year's profit. All of the product of the mine is being sold to the U. S. Government at the stock-piling price of $63 a unit.

Refund of amounts taken from us under protest in previous years is being sought by your company under the regulations of the Renegotiation Board. A favorable determination is expected that our earnings, derived from refining the products of mines to their first state of refinement for general use in industry, should not have been subject to renegotiation. That determination should improve the liquid assets of the business and permit us to proceed in our activities by developing our products for greater use in industry and in national defense.

Contracts for ordnance items we provided in 1954 were cancelled by the Army at the close of the fiscal year. I believe that we shall be called upon to produce these ordnance items of improved design in the future as may be needed.

A retirement plan for salaried employees has been entered into with an insured fund. A pension plan for hourly-rated employees at our main plants is presently under consideration. However the dollars payable ten or twenty years from now will have value dependent upon monetary policy in the U.S.A. Without the protection of the gold coin standard of money and a redeemable currency your employees and your company face an uncertain future as regards financial commitments and responsibilities. Inflation and high taxes continue to threaten us all.

The best solution seems to be to improve our knowledge both technically and commercially during the coming year. The field of usefulness for our products can be greatly expanded. Your officers and employees will join with me in renewed efforts during the coming year.

Yours very sincerely,

Philip M. McKenna

President

review of Kennametal operations in 1954

Hard carbide metals have won acceptance throughout industry — for use in tools, dies, wear-resisting parts, and for machine components in which great rigidity is advantageous. Developing the potentials of Kennametal's profitable application for these uses is currently our major activity.

NATURE OF OUR BUSINESS

Mining, metallurgy, mechanical development, and economic application of hard carbide metals is the primary business of Kennametal Inc.

Our greatest source of revenue, in the period ended June 30, 1954, continued to be from the sales of tools and tool blanks to the metalworking industries. Since all metal-cutting machines have a common purpose—to remove metal from forgings, castings and bar stock—their effectiveness depends upon the small edge of the cutting tools they drive. Carbide tools last, on an average, up to 50 times longer than steel tools and enable machines to operate up to 10 times faster. The scope of work in metal-cutting with carbide tools has been greatly extended and presents further opportunities for profitable use.

This constitutes an enormous, well-developed market for carbides — but competition is keen. Your management continues to further integrate manufacturing processes and to improve efficiency in order to provide uniformly high quality products at lower prices. During the past fiscal year prices on various Kennametal metal-cutting tool blanks were reduced 10%.

Every effort is being made to educate users of carbide tooling to the fact that quality is more important than price—since a few extra cents in tool cost frequently prevents excessive, costly machine downtime. This is an extremely important factor in the success of machine shop automation where uninterrupted operation is essential, as in the automotive and aircraft industries.

Production of carbide cutter and drill bits for the mining industry accounted for a substantial part of our past year's sales. New, continuous mining machines cannot be operated successfully without harder, longer-lasting carbide cutting edges. Kennametal has maintained sales leadership in this field for many years.

Our Company is an important factor in the manufacture of ordnance items, its products being used in arsenals, navy yards, airforce development centers, and by leading makers of aircraft, shells and other armament.

Other users of Kennametal and Kentanium in fiscal 1954 . . . in the form of blanks or fabricated products . . . were the woodworking, ceramics, petroleum, chemical and textile industries. Profitable advancement of our hard carbide metals in these comparatively undeveloped markets is being intensively pursued. This activity is described, in greater detail, in the last section of this report.

Among companies in the United States producing hard carbide metals, our company ranks second in sales dollar volume. We are by far the largest producer whose entire activities are devoted to the creation of hard carbides.

SALES

Sales and other income in fiscal 1954 amounted to $24,163,842 as compared to $21,699,917 in fiscal 1953. Our sales for the past five years, together with income before tax and net income, are charted on the next page.

DISPOSITION OF SALES DOLLARS

Our fiscal 1954 sales dollars were divided this way:

27.8% for wages, salaries and payroll taxes . . . an increase of $213,334 over fiscal 1953.

51.8% for materials, supplies and services purchased from others . . . an increase of $3,384,036 over fiscal 1953.

10.6% for income taxes, excess profits tax, and miscellaneous taxes, together with provisions for contingencies . . . a decrease of $1,450,637 from fiscal 1953.

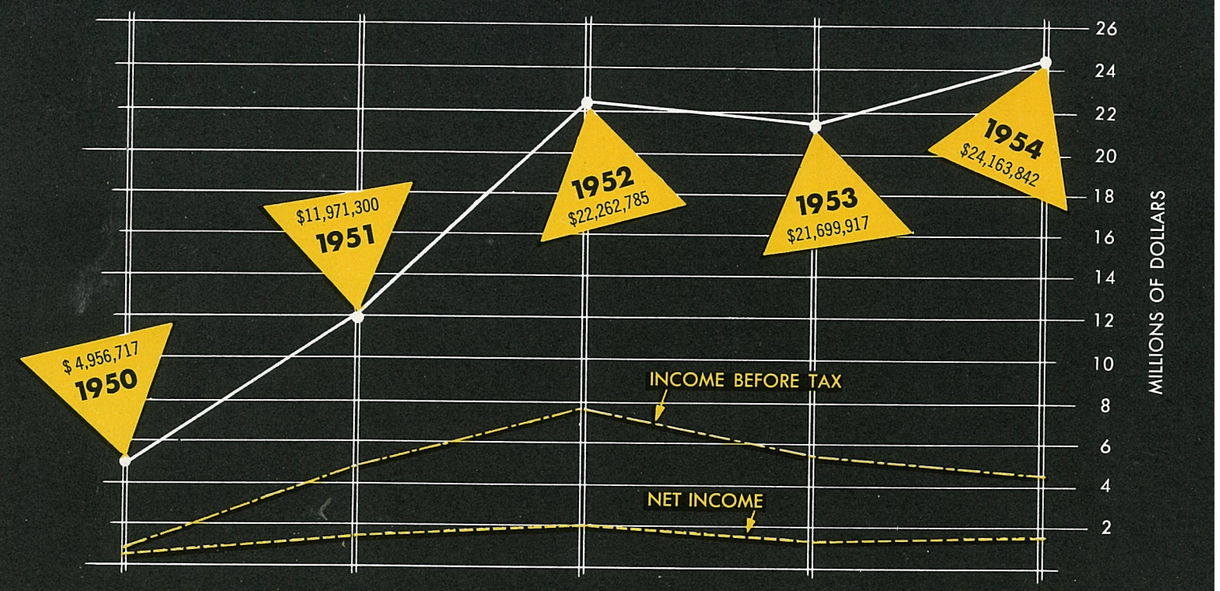
2.6% retained to replace worn out facilities, and to cover amortization of goodwill, patents, etc. . . . an increase of $81,115 over fiscal 1953.

2.1% for dividends to shareholders as a return on the money they invested in the business . . . $1.00 for each share outstanding—499,500 in 1954; 498,845 in 1953. There were 983 registered shareholders at the end of fiscal 1954; 865 at the end of fiscal 1953.

5.1% retained to provide for future increases in production facilities, and to carry inventories and accounts receivable . . . an increase of $235,422 over fiscal 1953.

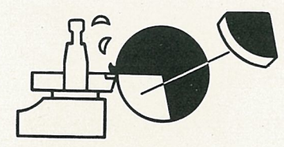
The chart on the opposite page shows disposition of our fiscal 1954 sales income as compared to 1953.

KENNAMETAL SALES IN THE YEAR ENDED JUNE 30, 1954 AMOUNTED TO $24,163,842



WHAT HAPPENED TO THE DOLLARS KENNAMETAL RECEIVED IN 1954

27.8c PAID TO EMPLOYEES
as against 30.0c in 1953

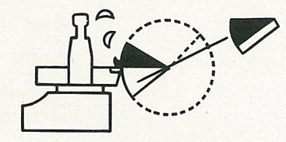


Total Dollars Paid: 1954—$6,728,349
1953— 6,515,015

51.8c USED TO BUY GOODS AND SERVICES FROM OTHERS
as against 42.1c in 1953

Total Dollars Paid: 1954—$12,515,840
1953— 9,131,804

10.6c PAID TO TAX COLLECTOR
as against 18.5c in 1953

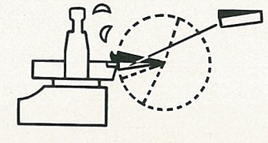


Total Dollars Paid: 1954—$2,554,569
1953— 4,005,206

2.6c USED TO REPLACE WORN OUT TOOLS
as against 2.5c in 1953

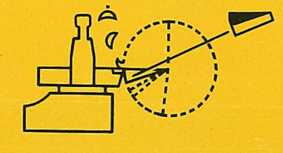
Total Dollars Paid: 1954—$627,135
1953— 546,020

2.1c PAID TO OWNERS OF THE BUSINESS
as against 2.3c in 1953



Total Dollars Paid: 1954—$499,500
1953— 498,845

5.1c SAVED FOR FUTURE IMPROVEMENTS
as against 4.6c in 1953



Total Dollars Paid: 1954—$1,238,449
1953— 1,003,027

BALANCE SHEETS——June 30, 1954 and 1953

ASSETS

	June 30 1954	June 30 1953
CURRENT ASSETS:		
Cash	$ 1,978,348	$ 1,559,246
Trade receivables, less reserves of $26,980 in 1954 and $15,189 in 1953	1,791,760	1,943,737
Inventories, at lower of cost or market—		
Finished goods and work in process	$ 4,339,318	$ 6,965,044
Raw materials and supplies	1,764,356	2,091,377
Less—Partial payments on government contracts collateralized by raw materials purchased therewith	—	(1,643,412)
Net inventories	$ 6,103,674	$ 7,413,009
Total current assets	$ 9,873,782	$10,915,992
PREPAID PREMIUMS AND CASH SURRENDER VALUE OF $300,000 OF INSURANCE ON LIFE OF OFFICER	22,107	19,640
PREPAID EXPENSES, DEFERRED CHARGES, ETC.	219,987	230,936

PROPERTY, PLANT AND EQUIPMENT, at cost less reserves for depreciation and amortization:

	Cost	Reserves	Net	June 30 1954	June 30 1953
Land	$ 111,161	$ —	$ 111,161		
Buildings	2,171,933	573,628	1,598,305		
Machinery, equipment, etc.	3,597,563	1,194,488	2,403,075		
Mining buildings, equipment and claims	867,865	414,652	453,213		
	$6,748,522	$2,182,768	$4,565,754	4,565,754	4,225,128
GOODWILL, TRADE-MARKS, PATENTS, ETC., representing par value of capital stock issued in exchange therefor in an amount determined by the management, in process of amortization				758,187	878,187
				$15,439,817	$16,269,883

LIABILITIES

	June 30 1954	June 30 1953
CURRENT LIABILITIES:		
Current maturities on long-term debt	$ 250,000	$ 250,000
Accounts payable	988,979	912,686
Accrued liabilities	428,991	371,937
Federal and State taxes on income less U. S. treasury bills of $499,775 in 1954	1,845,846	3,797,708
Reserve for contingencies in connection with government contracts	500,000	500,000
Total current liabilities	$ 4,013,816	$ 5,832,331
LONG-TERM DEBT (see Note 1):		
3¾% notes, due $125,000 semiannually to May 14, 1957, less $250,000 included in current liabilities	$ 500,000	$ 750,000
4½% notes, due $125,000 semiannually beginning November 14, 1957	1,250,000	1,250,000
	$ 1,750,000	$ 2,000,000
CAPITAL STOCK AND SURPLUS:		
Common stock, $10 par value, authorized 750,000 shares, issued and outstanding 499,500 shares	$ 4,995,000	$ 4,995,000
Paid-in surplus (arising from sale of treasury shares)	11,424	11,424
Earned surplus, per accompanying statement (See Note 1)	4,669,577	3,431,128
	$ 9,676,001	$ 8,437,552
	$15,439,817	$16,269,883

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

STATEMENTS OF INCOME AND SURPLUS

STATEMENTS OF INCOME

FOR THE YEARS ENDED JUNE 30, 1954 AND 1953

	June 30	
	1954	1953
SALES AND OTHER INCOME	$24,163,842	$21,699,917
COSTS AND OTHER CHARGES:		
Wages, salaries and payroll taxes	$ 6,728,349	$ 6,515,015
Materials, supplies, services, etc.	12,425,660	9,032,446
Depreciation and amortization of plant and equipment	507,135	426,020
Interest expense on long-term debt	90,180	99,358
Amortization of goodwill, trade-marks, patents, etc.	120,000	120,000
Provision for contingencies in connection with government contracts	—	150,000
Taxes, other than payroll taxes, including $300,000 in 1954, and $900,000 in 1953, for Federal excess profits tax	2,554,569	3,855,206
	$22,425,893	$20,198,045
Net income for the year	$ 1,737,949	$ 1,501,872

STATEMENT OF EARNED SURPLUS

FOR THE YEAR ENDED JUNE 30, 1954

BALANCE AT BEGINNING OF YEAR	$ 3,431,128
NET INCOME	1,737,949
	$ 5,169,077
DIVIDENDS PAID ($1.00 per share)	499,500
BALANCE AT END OF YEAR	$ 4,669,577

NOTES TO THE FINANCIAL STATEMENTS — JUNE 30, 1954

(1) The long-term loan agreement as amended on June 30, 1954, provides that (1) of the earned surplus of $4,669,577 at June 30, 1954, $3,431,128 is not available for cash dividends, and (2) net working capital may not be less than $4,000,000.

(2) Effective June 30, 1954, the company established a contributory retirement income plan for salaried employees. The annual cost of the plan, including funding of past services over a ten-year period, will be approximately $168,000. In 1954, $73,100 for past services only was charged to operations. Unfunded costs of past services were approximately $660,000 at June 30, 1954. The plan may be amended or terminated at any time. A pension plan for hourly rated employees is under consideration.

(3) On June 29, 1954, the U. S. Government terminated a contract for high velocity armor-piercing projectiles. Inventories applicable to the terminated portion of this contract amounted to approximately $546,000 at June 30, 1954. Shipments of projectiles during 1954 accounted for approximately 25% of net sales.

(4) At June 30, 1954, the company, as agent for the U. S. Government in the procurement of certain strategic ores, held cash of $399,139 and ores costing $182,000. The agency transactions are not reflected in the financial statements.

AUDITORS' CERTIFICATE

ARTHUR ANDERSEN & CO.

120 SOUTH LASALLE STREET
CHICAGO 3

To the Board of Directors,

Kennametal Inc.:

We have examined the balance sheet of KENNAMETAL INC. (a Pennsylvania corporation) as of June 30, 1954, and the related 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 had previously made a similar examination for the year ended June 30, 1953.

In our opinion, the accompanying balance sheet and statements of income and earned surplus present fairly the financial position of Kennametal Inc. as of June 30, 1954, and the results of its 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 3, Illinois,
August 12, 1954.

WORKING CAPITAL

Current assets at June 30, 1954 amounted to $9,873,782 and current liabilities totaled $4,013,816 leaving net working capital of $5,859,966. This compares with $5,083,661 of net working capital at June 30, 1953 and represents an increase of $776,305 during the current year. An indication of the sources from which funds were provided during 1954 and the manner in which such funds were used is disclosed in the following condensed summary:

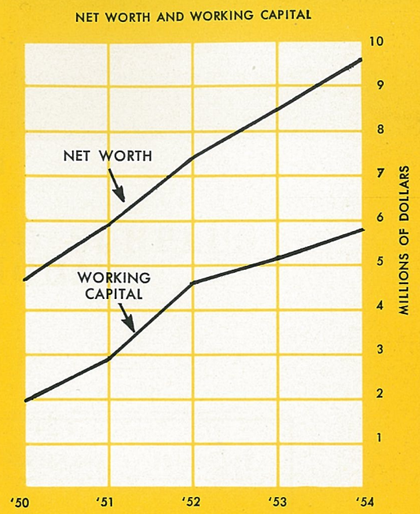
Funds Obtained:		
Net income for the year	$1,737,949	
Provision for depreciation and amortization	507,135	
Amortization of goodwill, trade-marks, etc.	120,000	
Decrease in prepaid expenses, etc.	8,482	
		$2,373,566
Funds Used:		
Dividends paid	$ 499,500	
Additions to fixed assets (net)	847,761	
Payments on long-term debt	250,000	
		1,597,261
Increase in working capital		$ 776,305

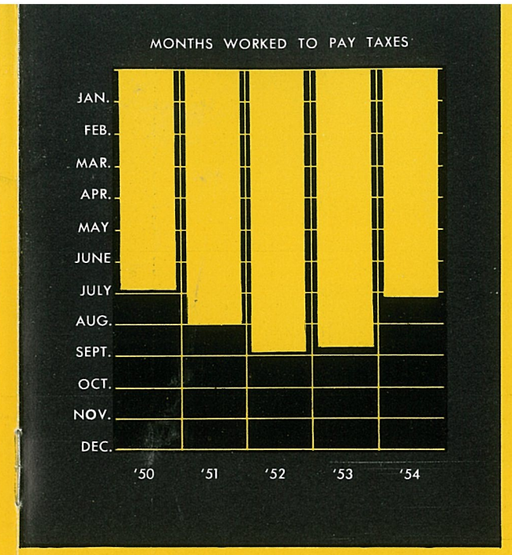
SHAREHOLDERS' EQUITY

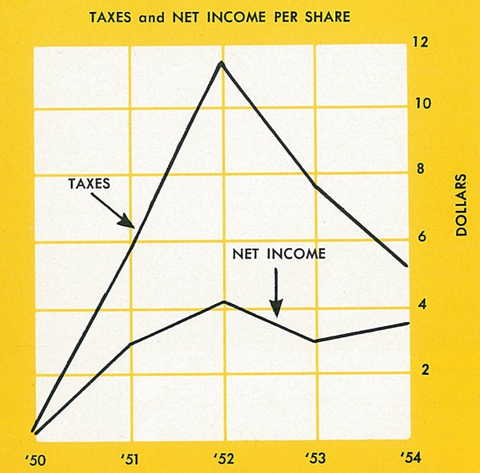
The book value per share of capital stock outstanding increased from $16.89 at June 30, 1953 to $19.37 at the close of the current year. This increase of $2.48 per share amounts to an improvement of $1,238,449 in the aggregate net worth of the company (shareholders' equity) and represents the excess of current earnings over the total of cash dividends paid during the year.

	1954	1953	Increase
Capital stock	$4,995,000	$4,995,000	$ ....
Paid-in surplus	11,424	11,424	....
Earned surplus	4,669,577	3,431,128	1,238,449
Total	$9,676,001	$8,437,552	$1,238,449
Book value per share	$ 19.37	$ 16.89	$ 2.48

The accompanying graph reveals the continued growth in working capital and net worth over the past several years.







LONG-TERM DEBT

The long-term debt was reduced by $250,000 during the year, semi-annual payments of $125,000 having been made in November 1953 and May 1954. Interest paid on this loan during the year amounted to $90,180 compared with $99,358 in the preceding fiscal year. An amendment to the loan agreement was executed on June 30, 1954 which provides that $3,431,128 of the earned surplus balance at that date is unavailable for the payment of cash dividends. The amendment further provides for the maintenance of not less than $4,000,000 of net working capital. This amendment relieves and clarifies certain of the previous conditions of the loan which contained more stringent restrictions with regard to working capital, capital expenditures and the payment of cash dividends.

TAXES

The provision for Taxes during the current year, although substantially less in terms of dollars than in 1953, nevertheless continued to consume a substantial proportion of our gross income. The relation of Taxes to Net Income was 2½ to 1 in 1953 and even though reduced in 1954 was still 1½ times greater than Net Income. The Federal excess profits tax expired on December 31, 1953 and we were therefore subject to this tax for only the first six months of the current year. Our total rate for Federal tax purposes was 70% for the first half and 52% for the last half of the year resulting in an effective rate of 61% for the full fiscal year. The effect of the acceleration in the method of payment of Federal income tax installments will become aggravated by the recently enacted legislation which provides for the anticipation of current tax obligations and will create an added problem for the growing company which desperately needs working capital for expansion purposes. Even during 1954 this latter arrangement was inaugurated by the Commonwealth of Pennsylvania with respect to Pennsylvania Corporate Net Income Taxes.

The power to tax, although best exemplified by the Federal Government, is being utilized to an increasing degree by our various State governments and municipalities in the form of sales taxes, wage taxes and other revenue raising mechanisms.

DISTRIBUTION OF SHARES

The number of individual shareholders of Kennametal Inc. increased from 865 at June 30, 1953 to 983 at June 30, 1954.

The following tabulation shows a distribution of shareholders by number of shares owned. It indicates that, while the number of individual shareholders has increased, the concentration of shares held by the major holders has remained unchanged and thus continuity of management policies is assured.

Owners of	Number of Shareholders at June 30 1954	1953
Up to 50 shares	487	411
51 — 100 shares	233	207
101 — 500 shares	177	168
501 — 1,000 shares	40	37
1,001 — 5,000 shares	31	27
5,001 — 10,000 shares	6	6
10,001 — 20,000 shares	3	3
Over 20,000 shares	6	6
	983	865

The extent of interest in the company is suggested in the following summary of residence of shareholders which indicates a geographical distribution in all but 16 of the United States.

Arizona	1	New Jersey	19
California	72	New York	99
Colorado	2	North Carolina	1
Connecticut	15	Ohio	21
Delaware	5	Oklahoma	1
District of Columbia	3	Oregon	1
Florida	3	Pennsylvania	631
Georgia	4	Rhode Island	3
Indiana	3	South Carolina	2
Illinois	13	Tennessee	2
Iowa	1	Texas	2
Maine	1	Washington	2
Maryland	6	West Virginia	1
Massachusetts	25	Wisconsin	14
Michigan	17	Wyoming	1
Missouri	10	Vermont	1
New Hampshire	1		

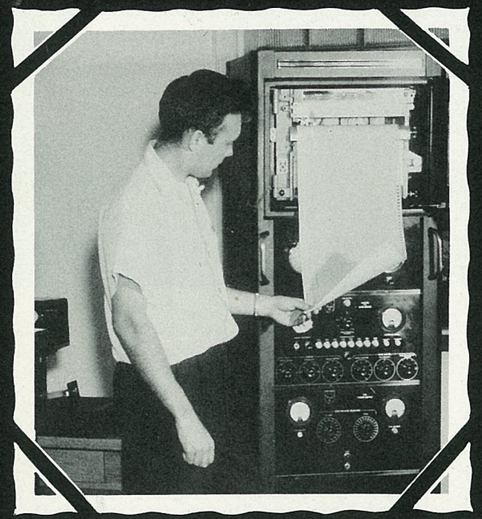
10 YEAR REVIEW *Fiscal Years Ending June 30*

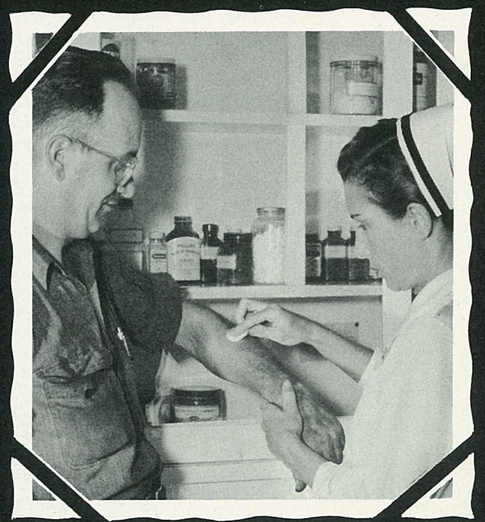
KENNAMETAL *Inc.* LATROBE, PA.	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945
Sales and other income	$24,163,842	$21,699,917	$22,262,785	$11,971,300	$ 4,956,717	$ 6,456,145	$ 4,970,173	$ 4,172,562	$ 3,501,532	$ 9,762,044
Taxes, other than payroll taxes	$ 2,554,569	$ 3,855,206	$ 5,694,444	$ 2,956,147	$ 238,565	$ 562,019	$ 358,118	$ 214,040	$ 39,193	$ 2,933,212
Taxes, other than payroll taxes —per share*	$ 5.11	$ 7.72	$ 11.40	$ 5.92	$ .48	$ 1.13	$ .72	$ .43	$ .08	$ 5.87
Net income for the year	$ 1,737,949	$ 1,501,872	$ 2,067,364	$ 1,467,070	$ 179,239	$ 626,294	$ 414,370	$ 183,142	$ (109,210)	$ 544,445
Net income for the year— per share*	$ 3.48	$ 3.01	$ 4.14	$ 2.94	$ .36	$ 1.25	$ .83	$ .37	$ (.22)	$ 1.09
Dividends paid	$ 499,500	$ 498,845	$ 448,829	$ 212,288	$ 199,800	$ 199,800	$ 116,700	$ 79,500	$ 26,500	$ 50,750
Dividends paid—per share*	$ 1.00	$ 1.00	$ .90	$ .425	$ .40	$ .40	$ .267	$ .195	$ .067	$ .128
Working capital	$ 5,859,966	$ 5,083,661	$ 4,699,754	$ 2,997,136	$ 1,963,001	$ 1,886,948	$ 1,721,472	$ 1,392,092	$ 1,352,584	$ 787,704
Ratio, current assets to current liabilities	2.5	1.9	1.9	2.0	3.8	3.3	3.2	2.6	2.6	1.4
Additions to plant and equipment—net	$ 847,761	$ 890,474	$ 1,560,265	$ 604,261	$ 111,895	$ 402,789	$ 155,799	$ 91,675	$ 332,476	$ 563,393
Depreciation and amortization of plant and equipment	$ 507,135	$ 426,020	$ 334,442	$ 170,415	$ 150,661	$ 145,917	$ 115,769	$ 111,554	$ 167,539	$ 141,224
Plant and equipment, net	$ 4,565,754	$ 4,225,128	$ 3,760,674	$ 2,067,011	$ 1,633,165	$ 1,671,928	$ 1,399,038	$ 1,359,008	$ 1,378,887	$ 937,808
Long-term debt	$ 1,750,000	$ 2,000,000	$ 2,250,000	$ 675,000	$ 20,000	$ 75,000	$ 180,000	$ 672,500	$ 1,187,500	$ 795,000
Capital stock and surplus (net worth)	$ 9,676,001	$ 8,437,552	$ 7,428,174	$ 5,963,174	$ 4,708,391	$ 4,728,952	$ 4,302,458	$ 3,572,038	$ 3,122,023	$ 3,257,733
Number of shares issued (end of year)	499,500	499,500	499,500	249,750	199,800	199,800	33,300	29,100	26,500	26,500
Book value per share*	$ 19.37	$ 16.89	$ 14.87	$ 11.94	$ 9.43	$ 9.47	$ 8.61	$ 7.15	$ 6.25	$ 6.52
Number of registered stock-holders (end of year)	983	865	427	250	187	137	112	95	87	35
Number of employees (end of year)	1,234	1,444	1,235	867	598	642	587	582	502	868

*Adjusted to reflect increased number of shares resulting from 6% stock dividend in April 1945; a 6 for 1 stock split in June 1949; a 25% stock dividend in June 1951 and a 2 for 1 stock split in February 1952.

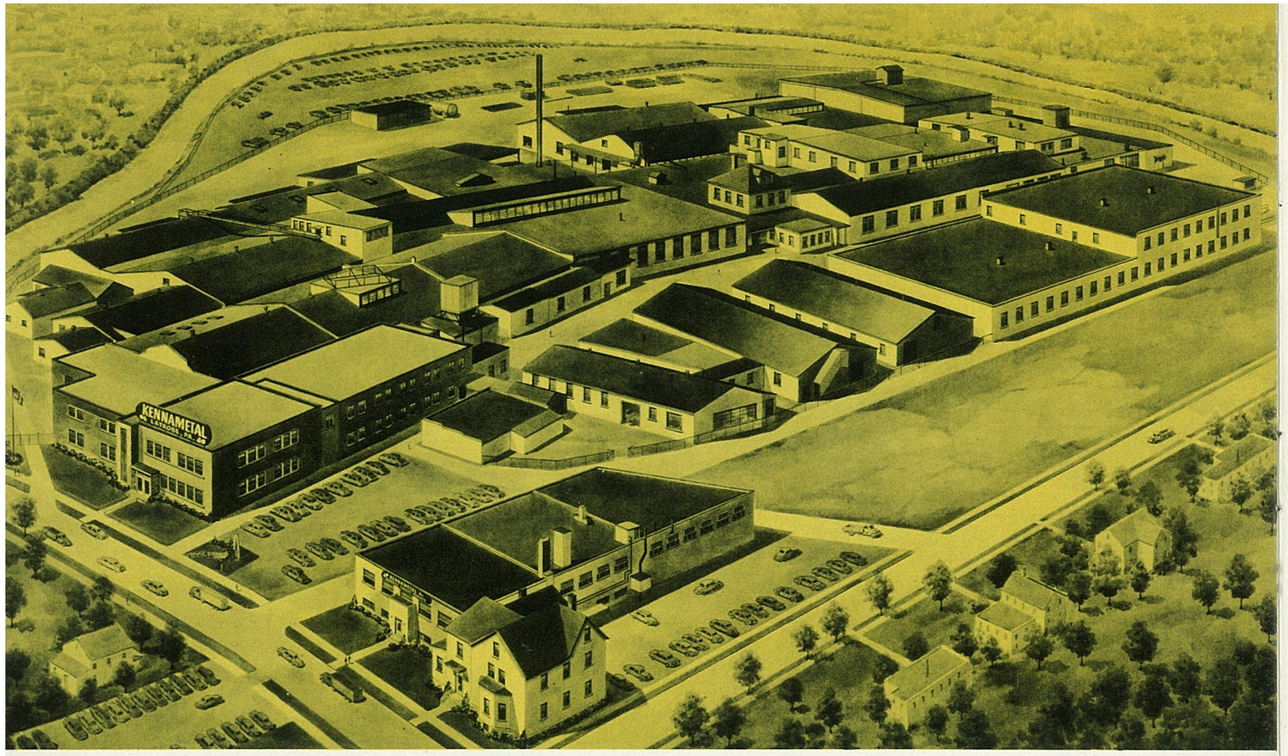
KENNAMETAL® . . .

"A good place to work!"





The direct, desirable economic consequences of invention and individual enterprise are strikingly demonstrated by the fact that in sixteen years, since the business was founded, Kennametal has grown from a plant employing 12 persons to one that employed more than 1200 men and women in 1954. Modern facilities and equipment, employee benefit and welfare programs, employee training and continuous public relations activities . . . all combine to make Kennametal Inc. "a good place to work."



Main Plant and General Offices, Latrobe, Pa.

MARKETING METHODS

In every field of industrial activity, the machines and equipment which are the basic tools of production are either actual or potential users of hard carbide metals. To serve these diversified markets we maintain a sales organization of approximately 150 trained specialists augmented domestically by selected industrial distributors, and internationally by concerns located in a number of countries as listed on page one of this report.

In the main, Kennametal products are sold directly to users by tool and mining engineers, and metallurgists. Because of the specialized technical knowledge required for intelligent selling, our sales organization is divided into three sections. One section serves the metal-cutting industry . . . another the mining industry. The third is comprised of engineers skilled in the application of our carbide compositions in dies, heat-resistant parts, oil field tools and wear-parts, woodworking tools, ordnance items and other products.

Sales to metal-working industries are handled through district and branch offices located throughout the United States. Warehouses are maintained in important industrial centers. Mining tool representatives are located in all major coal and non-metallic mineral producing areas. Our general sales offices are in Latrobe.

Extensive sales promotional activities are carried on continuously. These include public relations, publicity and advertising campaigns directed at major markets; distribution of catalogs, technical bulletins and manuals; regular publication of "Reports of Kennametal Performance" in the form of "news" letters to key personnel in metal-working plants and mines; and exhibits at the various industrial trade shows.

SALES-SERVICE FACILITIES EXPANDED

Where there's industry, there's business for Kennametal. Industrial expansion in southern United States has created numerous opportunities. During fiscal 1954 we established a Southern District Headquarters sales office and warehouse in Atlanta, Georgia, with branch offices or representatives in Salisbury, North Carolina; Orlando, Florida; Chattanooga, Tennessee; and Birmingham, Alabama.

Our new Detroit plant provides an expanded stock of metal-cutting tools and blanks, and is equipped to produce tool blanks and moulded shapes for Kennametal users in this important industrial region.

"In-plant" training was expanded during the past year to educate customers' personnel in the selection, use and care of Kennametal tooling. Our field engineers conducted training programs in more than 100 important plants throughout the nation. Operational movies, produced by our photographic section, were employed in the "In-plant" program, and used in other sales promotional activities.

During fiscal 1954 we completed arrangements for distributing mining tools through the facilities of National Mine Service Company. The activities of this organization have been integrated with those of our own sales force to provide improved service in all principal coal-producing centers.

NEW PRODUCTS

Intensive efforts were made in the past year to develop the use of our hard carbide metals in several comparatively new fields.

We developed a successful means for adapting carbide to bottle capping dies and received substantial orders for this item.

Several highly effective Kennametal die grades were perfected and applied for lamination operations by leading manufacturers.

Other items made in fiscal 1954 include: Orifices for high pressure guns to debark trees; components for ceramic pug mills; knife blades for cutting paper; hooks and guides for textile machinery; blades for planing wood products and acoustical tile; new types of pulverizing hammers; and cylinder liners for compressors.

Heat-resistant Kentanium was successfully applied to several new industrial processes. One of the most promising is rod mill guides. Installed in a number of mills, these titanium base carbide guides last up to 45 times longer than previously-used materials. Kentanium is also being employed in an ordnance item for which we have experimental orders covering parts for gas turbines.

CAPITAL EXPENDITURES

The necessity for further expansion of our productive facilities continued during 1954 and expenditures for new construction and additional machinery and equipment amounted to $847,761. One of the more important individual projects included the construction of a new manufacturing building at Latrobe which not only provides additional floor space but also permitted a re-arrangement of certain of our operating departments to bring about a more efficient flow of manufacturing processes. This program involved an over-all expenditure of approximately $350,000. Our new Detroit plant, completed late this year, represented the only other major expansion move. This expenditure, consisting of the purchase of land, the construction of a combination plant and office building and the purchase of necessary equipment, amounted to $185,000. The Detroit plant was required in order to provide improved production and delivery service to serve the growing demand for cemented carbide products in that concentrated area.

The remaining expenditures covered a wide variety of machinery, equipment and minor items of construction at the Latrobe, Kingston Station and Bedford plants and at our Nevada Scheelite Division.

Refining and Metallurgical Division, Kingston Station, Pa.

KENNAMETAL ACTIVITIES

Sixteen years ago Philip M. McKenna founded an enterprise to make "the best tool material in the world." Its assets consisted of the owner's superlative metallurgical background, his personal capital, and his extensive knowledge of how to produce carbide compositions capable of machining hardened steel. Today, the company is the world's largest independent manufacturer of cemented carbides. Its activities comprise research and engineering, exploration for raw materials, tungsten mining, metallurgical refining, processing hard carbides, and fabrication of hundreds of complete products in which hard carbides are the essential elements. The company's plants are located in Latrobe, Kingston Station and Bedford, Pennsylvania; Detroit (Oak Park), Michigan; Port Coquitlam, British Columbia; and its tungsten ore mine is at Rawhide, Nevada.

RESEARCH AND ENGINEERING

Ten thousand intricate experiments preceded Philip M. McKenna's invention of $WTiC_2$ (tungsten-titanium-carbide) — the essential ingredient in the first commercially successful steel-cutting carbide. In the scientific research involved he was assisted by Alex G. McKenna who joined the business when it was founded in 1938, and is now its executive vice president.

Research in chemical and metallurgical techniques has been, and continues to be a major Kennametal activity. Highly specialized laboratory facilities, valued at $750,000, are used for production control and for investigating improved methods of ore recovery, refining of ingredients, and new Kennametal compositions.

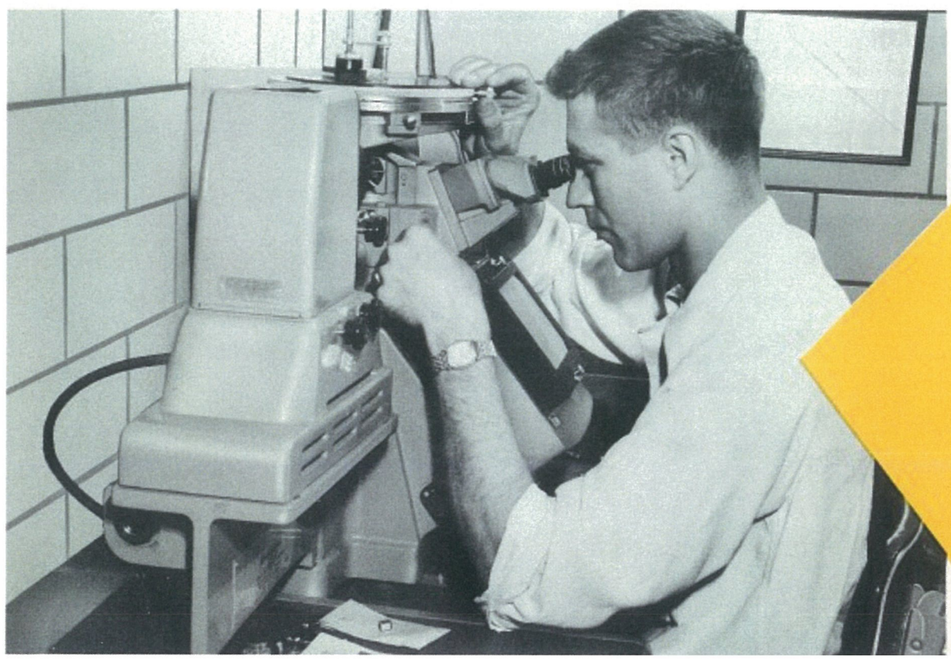
Engineering research, to develop the most effective applications of Kennametal products, is coordinated with metallurgical research. Skilled engineers, thoroughly grounded in carbide technology, collaborate with manufacturers of metal-working, mining and wood-working equipment . . . as well as with builders of many other machines . . . to effect new and improved ways in which Kennametal's high wear-resistance is effectively applied to increase the productivity of men and machines.

PRODUCTS AND PROCESSES DEVELOPED

Kennametal's basic products are cemented carbide compositions which, in the form of solid "blanks," have extremely high strength and wear-resistance.

The initial Kennametal composition, introduced in 1938, made possible machining hardened steel—thereby eliminating the necessity of "softening" it by annealing to make it machinable with high speed steel tools, then rehardening it. Using Kennametal — steel parts are now machined up to 10 times faster than is possible with steel tools.

More than forty different carbide compositions have been successfully developed and are being marketed by Kennametal Inc.



Production of hard carbide metals is a highly specialized art involving processes that must be accurately controlled by means of scientific apparatus operated by skilled technicians.

Photo at left shows metallurgical examination of a Kennametal composition — one of many laboratory activities.

Many tool designs and tooling techniques have been innovated by the company's engineers, including cutters for high rate carbide milling, and heavy duty tooling for machining steel mill rolls, shell forgings and railroad wheels and axles. "Clamped" tools, in which the carbide element is mechanically-held, are a Kennametal development essential to the fullest development of machine shop automation.

Many of the Kennametal products and methods of manufacture are covered by United States patents.

MINING

Nevada Scheelite Division of Kennametal Inc. consists of a tungsten mine and mill at Rawhide, Nevada. This property, acquired March 1951, has been modernized and processing methods have been improved. Production has attained a new high level. Exploratory drilling has revealed extensive tungsten ore reserves. Ore has been discovered at greater depths and at further extensions than heretofore known.

METALLURGICAL REFINING

Kennametal's main metallurgical refinery is at Kingston Station, near Latrobe, Pa. Its facilities are augmented by those of our Macro Division at Port Coquitlam, British Columbia which has access to Canadian tungsten deposits and can readily utilize low-grade ores procured from other foreign countries.

These plants refine raw materials containing tungsten, tantalum, columbium, titanium or cobalt . . . segregating the basic elements. Additional facilities and improved methods are now effecting economies in ore recovery and refining operations. Our requirements of tantalum carbide and columbium carbide are completely supplied by our refining of tantalite and columbite ores.

PROCESSING OF CARBIDES

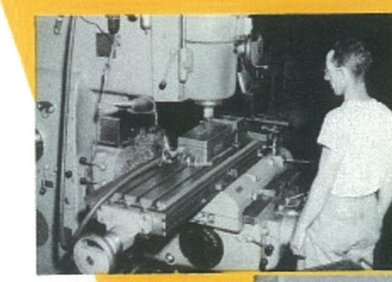
Refined materials are blended according to formula for the desired carbide composition, ball milled with "binder" metal, formed to various shapes under high pressure, and "sintered" in special vacuum furnaces. The resultant blanks are the basic commercially-useful product of Kennametal activities. They are used in our own fabricating plants or sold to other manufacturers for making tools, dies, wear-parts and numerous other articles.

FABRICATING COMPLETE PRODUCTS

Initially, Kennametal production consisted of tool blanks for metal-working plants where the blanks were brazed, or attached, to the ends of steel shanks to make complete tools. Soon after Kennametal's introduction it became desirable for the company to design,

Carbide powder tableting operation in making Kennametal tool blanks.

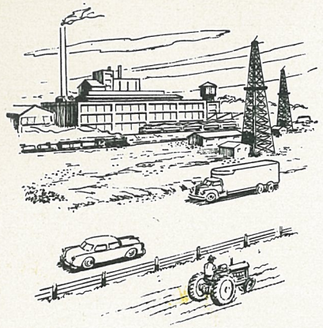
Surface grinding Kennametal tool blanks on diamond wheel grinder.

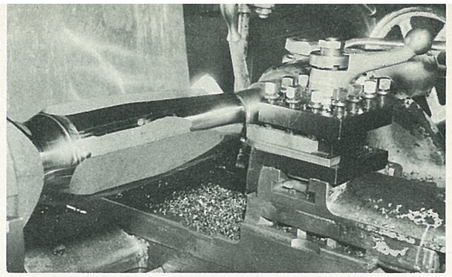


Milling steel shanks used to make Kennametal-tipped metal-cutting tools.

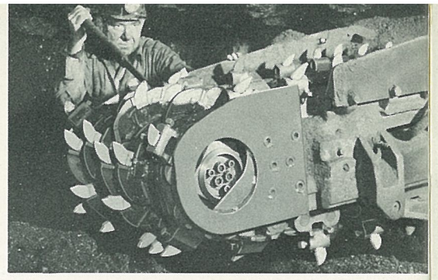
Attaching Kennametal blanks to steel tool shanks with high frequency induction brazing equipment.

A section of finished products stockroom in the Latrobe plant.

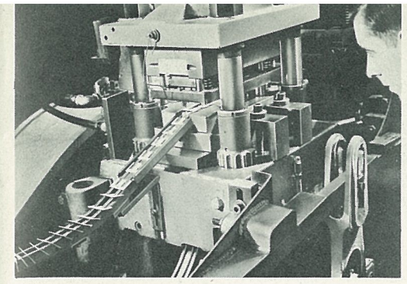




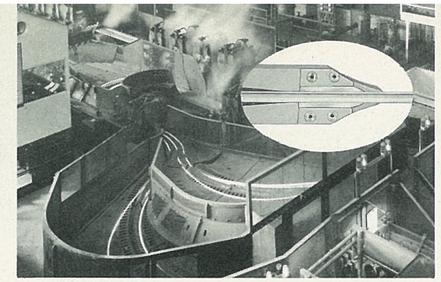
Machining steel forgings with Kendex triangular insert tools.



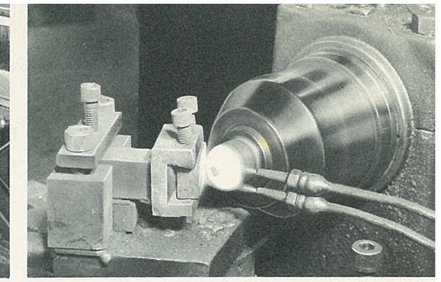
Installing Kennametal Cutter Bits in continuous coal mining machine.



Stamping "E" laminations from abrasive silicon steel with Kennametal die inserts.



Modern rod mills, like this Morgan installation, use Kentanium guides in hot rolling operations.



Spinning end of hot steel tubing with Kentanium tool.

engineer and fabricate complete tools — in order to assure proper application of this revolutionary carbide material.

Today, three large fabricating plants are owned and operated by the company. Complete tools for metal-working purposes and for mining operations are manufactured in these plants. As users of Kennametal gain more experience with carbides and related design and application, the sale of carbide blanks increases. Currently, however, fabrication of complete tools and wear-parts is an important part of the company's production.

PRINCIPAL PRODUCTS

Principal Kennametal products are tool blanks and tools for the metal-working and mining industries; saw tips and wood-working blades; die parts; pulverizing hammers; gas turbine blades; balls and seats for oil well pumps; and wear-parts for many types of machines and appliances.

METAL-WORKING TOOLS

The metal-working industry is the current major market for our products—because of its size and because of Kennametal's applicability to an almost infinite number of machining operations. This industry includes manufacturers of automobiles, aircraft, farm machinery, home appliances, ordnance and many others. To them we supply tool blanks, complete single point tools in hundreds of types and sizes, and milling cutter blades and bodies. These tools are used in lathes, milling machines, planers, shapers, boring mills and other machines to turn, face, groove, bore, chamfer, trepan and thread parts made of steel, cast-iron, brass, aluminum, magnesium, nickel, titanium, and non-metallics such as plastics. Metal-working tools and blanks are produced at our Metalworking Tool Division at Latrobe, Pa. Tool blanks are also made at our new Oak Park plant in Detroit, Mich.

MINING TOOLS

Kennametal Inc. pioneered the use of carbide tools in the mining industry — drills, and cutters which made practicable development of continuous coal mining machines by other manufacturers, and which are generally recognized as being responsible for a marked increase in productivity. Major users of mining tools include coal mines, hard rock mines and quarries, iron ore producers and various metal mines. Products made for operations in these properties include tool blanks, cutter bits, rotary drill bits, percussion rock bits, drills for roof support bolts and core bits. Mining tools are fabricated in our plant at Bedford, Pa. Engineering and application of tools for the oil fields are under development.

DIES

Manufacturing die parts, a relatively new Kennametal activity, offers a large potential outlet for carbide. Performance reports indicate that Kennametal provides, in metal blanking and similar die operations, the same cost-cutting advantages it has brought to metal-cutting. Special die grades have been developed for blanking, stamping, perforating, coining, swaging, forming and drawing, and increased sales activity is being devoted to this field.

WEAR-RESISTANT PARTS

Many revolutionary, mechanically-sound designs in machines and equipment depend for successful development upon the use of harder, longer-wearing materials in critical "wear-spots." Because Kennametal gives superior service under conditions of abrasion, shock and strain which are destructive to other metals, it opens new horizons for designers, inventors and engineers. Its use as a construction material is increasing. Current applications of Kennametal in wear-resisting parts include balls and seats for oil well pumps, feed finger pads for various machines, rolls for processing foils and thin metal sheets, tips for hammers in food and grain pulverizing machines, blades for plywood and woodworking machines, chuck jaws, thread guides and hooks in weaving operations, orifices for homogenizing and mixing devices, valves, guides, cam followers and many others.

HEAT-RESISTANT WEAR PARTS

Kentanium, our light-weight titanium carbide base composition, retains high strength and hardness, and resists oxidation in temperature ranges that destroy conventional alloys. We are currently producing an ordnance item of this metal and have experimental orders for gas turbine parts.

Kentanium's characteristics are advantageous in many industrial processes in which conditions of wear and high temperature are combined. It is now being used in hot metal spinning tools, quench rings for induction hardening of king pins, high temperature thermostat parts, wear-rings in acetylene torches, hot extrusion die inserts, rod mill guides, valves and valve seats, flame tubes, and other devices. Our research and engineering efforts in this field are being intensified.

PRINCIPAL INDUSTRIES SERVED

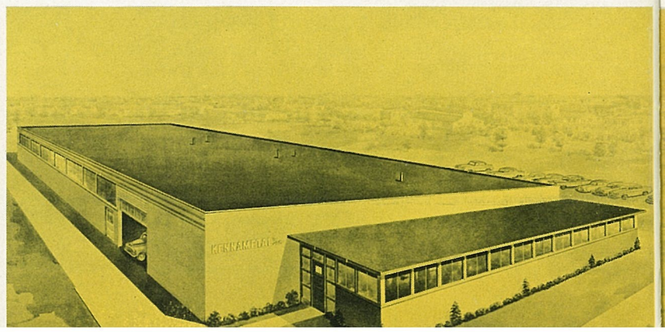
Kennametal is used in practically all producing, manufacturing and service industries. Chief consumers of Kennametal are manufacturers of products for which steel or other metal parts are needed. The list of such manufacturers is almost endless. A substantial proportion of our carbides go into mining tools. Wood-working and petroleum industries are consuming an increasing amount of our metals.

Other industries using Kennametal products — primarily for wear-resistance — are food processing, beverage, textile, paper, plastics, ceramic, and building materials. Individually, these industries are not large volume consumers of Kennametal. Collectively, however, they represent an enormous outlet for our metals — a potential which is being developed through new applications.

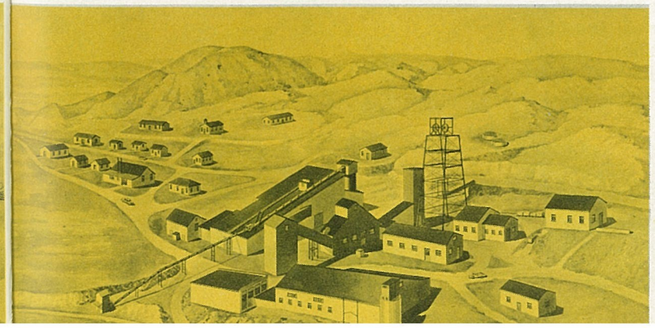
During the current year, a substantial part of our production of straight tungsten carbide went into the making of carbide cores for high velocity armor-piercing projectiles.

Mining Tool Division, Bedford, Pa.

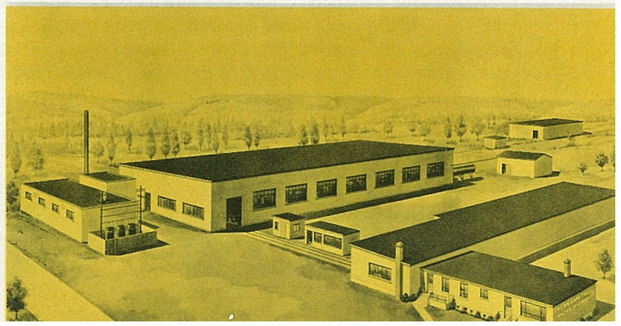
Detroit Division, Detroit (Oak Park), Mich.



Nevada Scheelite Division property at Rawhide, Nevada.

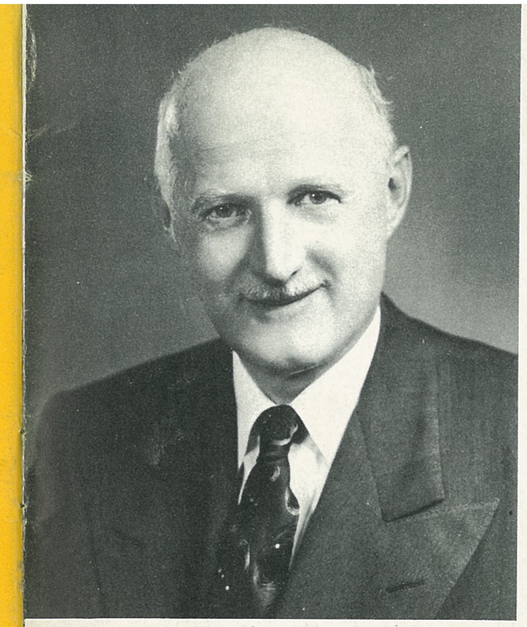


Macro Division, Port Coquitlam, British Columbia.



TYPICAL PRODUCTS IN WHICH KENNAMETAL IS THE KEY TO GREATER PRODUCTIVITY

Industry uses our hard carbide materials in many ways to improve its processes and products. The tools and devices shown on this page do widely different jobs—such as machining steel, drilling rock, crushing cocoa beans, or forming pills. Yet, all have a common attribute—longer life and improved performance because of the durability and wear-resistance of Kennametal and Kentanium.



PHILIP M. MCKENNA, *President*
KENNAMETAL Inc.

THE AMERICAN SOCIETY of MECHANICAL ENGINEERS

Conferred Two Honors

on

PHILIP M. McKENNA

at its annual meeting in New York

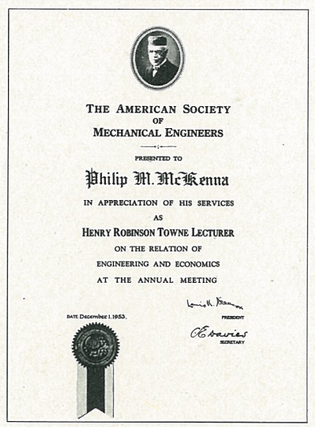
November 29 - December 4, 1953

The Holley Medal

. . . for a great and unique act of genius of an engineering nature

"The Medal is conferred for a great and unique act of an engineering nature that has accomplished a timely benefit . . . for the discovery of principles and the development of new processes in the application of distinctive types of tool materials resulting in great improvements in metal cutting."

—The American Society of Mechanical Engineers



THE AMERICAN SOCIETY
OF
MECHANICAL ENGINEERS

PRESENTED TO

Philip M. McKenna

IN APPRECIATION OF HIS SERVICES
AS
HENRY ROBINSON TOWNE LECTURER
ON THE RELATION OF
ENGINEERING AND ECONOMICS
AT THE ANNUAL MEETING

DATE December 1, 1953.

PRESIDENT

SECRETARY

The Towne Lectureship

The Society selects its annual Towne Lecturer on the basis of outstanding leadership in the field of management, economics or business. Mr. McKenna was chosen to deliver the 1953 Towne Lecture in recognition of his leadership in the field of monetary economics. His subject was "Economics and the Engineer," and his theme was the need for a return to a redeemable gold coin standard.