

# BRUSH WELLMAN INC

## FORM 10-K (Annual Report)

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 **FORM 10-K**

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934 [FEE REQUIRED]**

For the fiscal year ended December 31, 1993

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

*Commission file number 1-7006*

## BRUSH WELLMAN INC.

(Exact name of Registrant as specified in charter)

OHIO  
(State or other jurisdiction of  
incorporation or organization)

34-0119320  
(I.R.S. Employer  
Identification No.)

17876 St. Clair Avenue, Cleveland, Ohio  
(Address of principal executive offices)

44110  
(Zip Code)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE 216-486-4200

SECURITIES REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT:	
Title of each class	Name of each exchange on which registered
COMMON STOCK, PAR VALUE \$1 PER SHARE	NEW YORK STOCK EXCHANGE

### SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT:

None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No

Indicate by check mark if disclosure of delinquent filers pursuant to

Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

The aggregate market value of Common Stock, par value \$1 per share, held by non-affiliates of the registrant (based upon the closing sale price on the New York Stock Exchange) on March 8, 1994 was approximately \$234,427,845.

As of March 8, 1994, there were 16,088,315 shares of Common Stock, par value \$1 per share, outstanding.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the annual report to shareholders for the year ended December 31, 1993 are incorporated by reference into Parts I and II.

Portions of the proxy statement for the annual meeting of shareholders to be held on May 3, 1994 are incorporated by reference into Part III.

## PART I

### ITEM 1. BUSINESS

Brush Wellman Inc. ("Company") manufactures and sells engineered materials for use by manufacturers and others who perform further operations for eventual incorporation into capital, aerospace/defense or consumer products. These materials typically comprise a small portion of the final product's cost. They are generally premium priced and are often developed or customized for the customer's specific process or product requirements. The Company's product lines are supported by research and development activities, modern processing facilities and a global distribution network.

Customers include manufacturers of electrical/electronic connectors, communication equipment, computers, lasers, spacecraft, appliances, automobiles, aircraft, oil field instruments and equipment, sporting goods, and defense contractors and suppliers to all of the foregoing industries.

The Company operates in a single business segment with product lines comprised of beryllium-containing materials and other specialty materials.

The Company is a fully integrated producer of beryllium, beryllium alloys (primarily beryllium copper), and beryllia ceramic, each of which exhibits its own unique set of properties. The Company holds extensive mineral rights and mines the beryllium bearing ore, bertrandite, in central Utah. Beryllium is extracted from both bertrandite and imported beryl ore. In 1993, 74% of the Company's sales were of products containing the element beryllium (80% in 1992 and 80% in 1991). Beryllium-containing products are sold in competitive markets throughout the world through a direct sales organization and through captive and independent distribution centers. NGK Metals Corporation of Reading, Pennsylvania and NGK Insulators, Ltd. of Nagoya, Japan compete with the Company in the beryllium alloys field. Beryllium alloys also compete with other generally less expensive materials, including phosphor bronze, stainless steel and other specialty copper and nickel alloys. General Ceramics Inc. is a major domestic competitor in beryllia ceramic. Other competitive materials include alumina, aluminum nitride and composites. While the Company is the only domestic producer of the metal beryllium, it competes with other fabricators as well as with designs utilizing other materials.

Sales of other specialty materials, principally metal systems and precious metal products, were 26% of total sales in 1993 (20% in 1992 and 20% in 1991). Precious metal products are produced by Williams Advanced Materials Inc. (hereinafter referred to as "WAM"), a subsidiary of the Company comprised of businesses acquired in 1986 and 1989. WAM's major product lines include sealing lid assemblies, vapor deposition materials, contact ribbon products for various segments of the semiconductor markets, clad and precious metal preforms and restorative dental products. WAM also specializes in precious metal refining and recovery.

WAM's principal competitors are Semi-Alloys and Johnson Matthey in the sealing lid assembly business and Materials Research Corporation in the vapor deposition materials

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As used in this report, except as the context otherwise requires, the term "Company" means Brush Wellman Inc. and its consolidated subsidiaries, all of which are wholly owned.

product line. The products are sold directly from their facilities in Buffalo, New York and Singapore and through sales representatives.

Technical Materials, Inc. (hereinafter referred to as "TMI"), a subsidiary of the Company, produces specialty metal systems, consisting principally of narrow metal strip, such as copper alloys, nickel alloys and stainless steels into which strips of precious metal are inlaid. TMI also offers a number of other material systems, including electron beam welded dual metal, contour milling and skiving, thick and thin selective solder coatings, selective electroplated products and bonded aluminum strips on nickel-iron alloys for semiconductor leadframes. Divisions of Handy & Harman, Texas Instruments and Metallon are competitors for the sale of inlaid strip. Strip with selective electroplating is a competitive alternative as are other design approaches. The products are sold directly and through sales representatives.

### **SALES AND BACKLOG**

The backlog of unshipped orders as of December 31, 1993, 1992 and 1991 was \$86,531,000, \$90,201,000 and \$112,620,000, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. The Company expects that, based on recent experience, substantially all of its backlog of orders at December 31, 1993 will be filled during 1994.

Sales are made to approximately 5,900 customers. Government sales, principally subcontracts, accounted for about 6.1% of consolidated sales in 1993 as compared to 8.9% in 1992 and 9.5% in 1991. Sales outside the United States, principally to Western Europe, Canada and Japan, accounted for approximately 29% of sales in 1993, 27% in 1992 and 28% in 1991. Financial information as to sales, identifiable assets and profitability by geographic area set forth on pages 16-17 in Note M to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 1993 is incorporated herein by reference.

### **RESEARCH & DEVELOPMENT**

Active research and development programs seek new product compositions and designs as well as process innovations. Expenditures for research and development amounted to \$7,121,000 in 1993, \$7,294,000 in 1992 and \$7,625,000 in 1991. A staff of 53 scientists, engineers and technicians was employed in this effort during 1993. Some research and development projects were externally sponsored and expenditures related to those projects (approximately \$80,446 in 1993, \$217,000 in 1992 and \$164,000 in 1991) are excluded from the above totals.

### **AVAILABILITY OF RAW MATERIALS**

The more important raw materials used by the Company are beryllium (extracted from both imported beryl ore and bertrandite mined from the Company's Utah properties), copper, gold, silver, nickel and palladium. The availability of these raw materials, as well as other materials used by the Company, is adequate and generally not dependent on any one supplier. Certain items are supplied by a preferred single source, but alternatives are believed readily available.

## **PATENTS AND LICENSES**

The Company owns patents, patent applications and licenses relating to certain of its products and processes. While the Company's rights under the patents and licenses are of some importance to its operations, the Company's businesses are not materially dependent on any one patent or license or on the patents and licenses as a group.

## **ENVIRONMENTAL MATTERS**

The inhalation of excessive amounts of airborne beryllium particulate may present a hazard to human health. For decades the Company has operated its beryllium facilities under stringent standards of inplant and outplant discharge. These standards, which were first established by the Atomic Energy Commission over forty years ago, were, in general, subsequently adopted by the United States Environmental Protection Agency and the Occupational Safety and Health Administration. The Company's experience in sampling, measurement, personnel training and other aspects of environmental control gained over the years, and its investment in environmental control equipment, are believed to be of material importance to the conduct of its business.

## **EMPLOYEES**

As of December 31, 1993 the Company had 1,803 employees.

## ITEM 2. PROPERTIES

The material properties of the Company, all of which are owned in fee except as otherwise indicated, are as follows:

CLEVELAND, OHIO - A structure containing 110,000 square feet on an 18 acre site housing corporate and administrative offices, data processing and research and development facilities.

ELMORE, OHIO - A complex containing approximately 676,000 square feet of building space on a 385 acre plant site. This facility employs diverse chemical, metallurgical and metalworking processes in the production of beryllium, beryllium oxide, beryllium alloys and related products. Beryllium ore concentrate from the Delta, Utah plant is used in all beryllium-containing products.

SHOEMAKERSVILLE (READING), PENNSYLVANIA - A 123,000 square foot plant on a ten acre site that produces thin precision strips of beryllium copper and other alloys and beryllium copper rod.

NEWBURYPORT, MASSACHUSETTS - A 30,000 square foot manufacturing facility on a four acre site that produces alumina, beryllia ceramic and direct bond copper products.

TUCSON, ARIZONA - A 45,000 square foot plant on a ten acre site for the manufacture of beryllia ceramic parts from beryllium oxide powder supplied by the Elmore, Ohio facility.

DELTA, UTAH - An ore extraction plant consisting of 86,000 square feet of buildings and large outdoor facilities situated on a two square mile site. This plant extracts beryllium from bertrandite ore from the Company's mines as well as from imported beryl ore.

JUAB COUNTY, UTAH - The Company holds extensive mineral rights in Juab County, Utah from which the beryllium bearing ore, bertrandite, is mined by the open pit method. A substantial portion of these rights is held under lease. Ore reserve data set forth on page 16 of this Form 10-K annual report for the year ended December 31, 1993 are incorporated herein by reference.

FREMONT, CALIFORNIA - A 49,000 square foot leased facility for the fabrication of precision electron beam welded, brazed and diffusion bonded beryllium structures.

THEALE (READING), ENGLAND - A 19,700 square foot leased facility principally for distribution of beryllium alloys.

STUTTGART, WEST GERMANY - A 24,750 square foot leased facility principally for distribution of beryllium alloys.

FUKAYA, JAPAN - A 35,500 square foot facility on 1.8 acres of land in Saitama Prefecture principally for distribution of beryllium alloys.

LINCOLN, RHODE ISLAND - A manufacturing facility consisting of 124,000 square feet located on seven and one-half acres. This facility produces metal strip inlaid with precious metals and related metal systems products.

BUFFALO, NEW YORK - A complex of approximately 97,000 square feet on a 3.8 acre site providing facilities for manufacturing, refining and laboratory services relating to high purity precious metals.

SYRACUSE, NEW YORK - A 14,000 square foot leased portion of a multi-story facility for the design and manufacture of circuits and packages using a direct bond process to combine conductive copper with insulating ceramic substrates.

Production capacity is believed to be adequate to fill the Company's backlog of orders and is expected to meet demand for the foreseeable future.

### ITEM 3. LEGAL PROCEEDINGS

The Company is from time to time a defendant in various civil and administrative proceedings that relate to the ordinary course of its operating business. These proceedings include environmental, health and safety related actions and other matters relating to the Company's present and former operations. Included in such proceedings are the matters discussed below.

#### (a) ENVIRONMENTAL PROCEEDINGS

On November 1, 1989, the Company appealed to the Ohio Environmental Board of Review to vacate or modify certain conditions in an NPDES wastewater discharge permit issued by the Ohio Environmental Protection Agency (the "Ohio EPA") for the Company's Elmore, Ohio facility. The Company challenges these conditions on several bases, including technical infeasibility and economic unreasonableness. Settlement discussions are continuing.

On or about September 25, 1992, the Company was served with a third-party complaint alleging that the Company, along with 159 other third-party defendants, are jointly and severally liable under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. Sections 9607(a) and 9613(b), for response costs incurred in connection with the clean-up of hazardous substances in soil and groundwater at the Douglassville Site (the "Site") located in Berks County, Pennsylvania.

UNITED STATES OF AMERICA V. BERKS ASSOCIATES, INC., ET AL. V. AAMCO TRANSMISSIONS, ET AL., United States District Court for the Eastern District of Pennsylvania, Case No. 91-4968. Prior to the commencement of litigation, the Company responded to a request for information from the United States Environmental Protection Agency (the "United States EPA") by denying that it arranged to send any substances to the Site. Although the Company has no documents in its own files relating to the shipment of any waste to the Site, documents maintained by third-party plaintiffs suggest that 8,344 gallons of waste oil from the Company may have been taken there. Based on settlement discussions currently underway, the Company believes that its liability arising from this matter will be nominal.

In April 1993, the Company learned that the Ohio EPA had recommended that the Ohio Attorney General's Office consider initiation of enforcement proceedings against the Company with respect to alleged violations of various environmental laws at its facility in Elmore, Ohio. The Company is presently involved in settlement discussions while contesting the alleged violations. The Company believes that resolution of this matter will have no material effect on the Company.

#### (b) BERYLLIUM EXPOSURE CLAIMS

The inhalation of excessive amounts of airborne beryllium particulate may present a health hazard to certain individuals.

For decades the Company has operated its beryllium facilities under stringent standards of inplant and outplant discharge. These standards, which were first developed by



the Atomic Energy Commission over forty years ago, were, in general, subsequently adopted by the United States Environmental Protection Agency and the Occupational Safety and Health Administration.

PENDING CLAIMS. The Company is currently a defendant in the following legal actions where the plaintiffs allege injury resulting from exposure to beryllium and beryllium-containing materials and are claiming recovery based on various legal theories. The Company believes that resolution of these cases will not have a material effect on the Company.

NAME OF PLAINTIFF -----	DATE LAWSUIT INSTITUTED -----	FORUM -----	RELIEF REQUESTED -----
John W Rosenbauer and Spouse	February, 1989	Court of Common Pleas. Westmoreland County, Pennsylvania	Damages in excess of \$20,000 for personal injury and loss of consortium
Richard Neiman and Spouse	November, 1990	Court of Common Pleas. Philadelphia County, Pennsylvania	Damages in excess of \$20,000 for personal injury and in excess of 20,000 for loss of consortium
Geraldine G. Ruffin, individually and as executive	September, 1991	Superior Court, Essex County, New Jersey	Compensatory and punitive damages of an unspecified amount
Steven Campbell	January, 1992	Superior Court for Orange County, California	Compensatory and punitive damages of an unspecified amount
Ray Amante	April, 1992	Superior Court for Orange County, California	Compensatory and punitive damages of an unspecified amount
Alfred L. Haynes and Spouse	September, 1992	United States District Court, Eastern District of Tennessee	Compensatory damages of \$5 million, \$1.5 million for loss of consortium and combined punitive damages of \$3 million
McKinley Houk	October, 1992	United States District Court Eastern District of Tennessee	Compensatory damages of \$5 million and punitive damages of \$3 million
William Ray Vance	October, 1992	United States District Court, Eastern District of Tennessee	Compensatory damages of \$5 million for personal injury, \$1 million for loss of consortium and combined punitive damages of \$5 million
David Taggart	October, 1992	Court of Common Pleas, Chester County, Pennsylvania	Compensatory damages in excess of \$25,000 each for personal injury and loss of consortium against Williams Advanced Materials, Inc., a subsidiary of the Company
Ernest Needham	December, 1992	Superior Court of New Jersey, Passaic County	Compensatory damages of an unspecified amount
Harry Robbins	June, 1993	Court of Common Pleas, Montgomery County, Pennsylvania	Both parties individually seek compensatory damages in excess of \$50,000. Mr. Robbins also seeks punitive damages in excess of \$50,000
Bruce Hand	September, 1983	Superior Court, Passaic County, New Jersey	Compensatory damages of an unspecified amount
Frances Lutz	March, 1994	Superior Court, Passaic County, New Jersey	Compensatory damages of an unspecified amount

Defense for each of the cases identified above is being conducted by counsel selected by the Company and retained, with certain reservations of rights, by the Company's insurance carriers.

RECENT DEVELOPMENTS RELATING TO PENDING CLAIMS. The Company has filed a motion for summary judgment in both the ROSENBAUER and HAYNES cases on which the respective Courts have not yet ruled.

CLAIMS CONCLUDED SINCE THE END OF THIRD QUARTER 1993. Joseph R. Harper and his wife filed suit against the Company and several other defendants in the United States District Court for the Eastern District of Tennessee, for which service of process on the Company occurred on May 6, 1992. Mr. Harper claimed that, while he was an employee of an alleged customer of the Company, he contracted chronic beryllium disease as a result of exposure to beryllium or beryllium-containing products. Mr. Harper sought compensatory damages in the amount of \$5 million; his wife claimed damages of \$1.5 million for loss of consortium. Both plaintiffs sought punitive damages in the amount of \$3 million. On December 28, 1993 the Court granted the Company's motion for summary judgment and dismissed the action. Although the action is dismissed as to the Company, the case remains pending as to other defendants. Plaintiffs are not expected to appeal, but any such appeal need not occur until the case is resolved as to the remaining defendants.

#### (c) ASBESTOS EXPOSURE CLAIMS

A subsidiary of the Company (the "Subsidiary") is a co-defendant in twenty-eight cases making claims for asbestos-induced illness allegedly relating to the former operations of the Subsidiary, then known as The S. K. Wellman Corp. Twenty-three of these cases have been reported in prior filings with the S.E.C. The Subsidiary is one of a large number of defendants in each case. The plaintiffs seek compensatory and punitive damages, in most cases of unspecified sums. Each case has been referred to a liability insurance carrier for defense. With respect to those referrals on which a carrier has acted to date, a carrier has accepted the defense of the actions, without admitting or denying liability. Two hundred and six similar cases previously reported have been dismissed or disposed of by pre-trial judgment, one by jury verdict of no liability and ten others by settlement for nominal sums. The Company believes that resolution of the pending cases referred to above will not have a material effect upon the Company.

The Subsidiary has entered into an agreement with the predecessor owner of its operating assets, Pneumo Abex Corporation (formerly Abex Corporation), and five insurers, regarding the handling of these cases. Under the agreement, the insurers share expenses of defense, and the Subsidiary, Pneumo Abex Corporation and the insurers share payment of settlements and/or

judgments. Certain expenses of handling the cases are also subject to a limited, separate reimbursement agreement with Pneumo Abex Corporation. In eleven of the pending cases, both expenses of defense and payment of settlements and/or judgments are subject to a limited, separate reimbursement agreement with MLX Corp., the parent of the company that purchased the Subsidiary's operating assets in 1986.

#### **ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

Not Applicable.

Executive Officers of the Registrant

The following table provides information as to the executive officers of the Company.

Name ----	Age ---	Positions and Offices -----
Gordon D. Harnett	51	Chairman of the Board, President, Chief Executive Officer and Director
Clark G. Waite	61	Senior Vice President, Finance and Administration, Chief Financial Officer, Secretary and Director
Jere H. Brophy	59	Vice President Technology
Stephen Freeman	47	Vice President Sales and Marketing
Craig B. Harlan	56	Vice President Business Development
Robert H. Rozek	59	Vice President International
Andrew J. Sandor	54	Vice President Operations
Daniel A. Skoch	44	Vice President Human Resources

MR. HARNETT was elected Chairman of the Board, President, Chief Executive Officer and Director of the Company effective January 22, 1991. He had served as a Senior Vice President of The B. F. Goodrich Company from November 1988.

MR. WAITE was elected Senior Vice President Finance and Administration in October of 1991. He was elected Chief Financial Officer in September 1987 and served as Vice President, Finance from September 1976 until his election as Senior Vice President in September 1989. Mr. Waite was elected Secretary effective January 1, 1988. He was Treasurer from December 31, 1987 to April 24, 1990.

DR. BROPHY was elected Vice President Technology effective March 31, 1988. Prior to that he was Vice President of Engineering, Engine and General Components Group, Automotive Sector of TRW Inc. He had been Vice President, Manufacturing and Materials Development, Automotive Sector of TRW Inc. from 1986 to 1987.

MR. FREEMAN was elected Vice President Sales and Marketing August 3, 1993. He served as Vice President Sales and Marketing-Alloy Products since July, 1992. Prior to that, he had served as Management Consultant for Adastra, Inc.

MR. HARLAN was elected Vice President Business Development in August, 1993. He had served as Senior Vice President, Sales and Marketing since October, 1991. He had served as Vice President/General Manager, Alloy Division since January 1, 1987. Prior to that he was President of TMI.

MR. ROZEK was elected Vice President International in October 1991. He had served as Vice President, Corporate Development effective February 27, 1990. He was elected Vice President, Governmental and Environmental Affairs in April 1989. He had been Vice President/General Manager, International Division since November 1985.

MR. SANDOR was elected Vice President Operations in October 1991. He had served as Senior Vice President since September 1989. He was appointed Vice President/General Manager, Material Systems Division effective January 1, 1988. Prior to that he was Manager of the Company's Shoemakersville, PA facility.

MR. SKOCH was elected Vice President Human Resources in July 1991. Prior to that he was Corporate Director - Personnel. He had been Corporate Manager Employee Relations and Training from December 1985 to July 1987.

## **PART II**

### **ITEM 5. MARKET FOR THE REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS**

The Company's Common Stock is traded on the New York Stock Exchange. As of March 8, 1994, there were 2,681 shareholders of record. Information as to stock price and dividends declared set forth on page 17 in Note N to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 1993 is incorporated herein by reference. The Company's ability to pay dividends is generally unrestricted, except that it is obligated to maintain a specified level of tangible net worth pursuant to an existing credit facility.

### **ITEM 6. SELECTED FINANCIAL DATA**

Selected Financial Data on pages 22 and 23 of the annual report to shareholders for the year ended December 31, 1993 is incorporated herein by reference.

### **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

Brush Wellman's engineered materials are comprised of five product lines: BERYLLIUM ALLOYS, principally beryllium copper; BERYLLIUM and materials rich in beryllium; beryllia CERAMICS; SPECIALTY METAL SYSTEMS, principally clad metals; and PRECIOUS METAL PRODUCTS. All five product lines have items that contain the element beryllium. SPECIALTY METAL SYSTEMS are produced and sold by a wholly owned subsidiary, Technical Materials, Inc. Another wholly owned subsidiary, Williams Advanced Materials Inc., specializes in PRECIOUS METAL PRODUCTS. Worldwide sales in 1993 were \$295 million as compared to \$265 million in 1992 and \$267 million in 1991.

Sales of BERYLLIUM ALLOYS increased in 1993. Solid increases domestically and in Asia offset lower sales in Europe. The improvement was led by automotive electronics and telecommunications applications, although most markets enjoyed higher volume. An increased and more focused marketing effort is the driving force behind the development of new applications as well as growth in existing applications. For example, growth in undersea telephone cable products is a result of increased market penetration and an expanding market. A significant influence was the start of the TPC-5 transpacific fiber optic cable project. This market is anticipated to continue its growth as new cable projects that have recently been announced are brought on line. A second example is in the aircraft industry. Working with the airframe manufacturers and airline maintenance facilities as "demand generators" has resulted in an increasing number of bushings and bearings being designed using beryllium copper as an enabling technology to allow lower flying weight and improved performance. This process is showing success in both new aircraft component designs and in the retrofit of the installed base of landing gear on older aircraft. Due to these and other favorable trends, continued growth of BERYLLIUM ALLOYS is expected in 1994.

BERYLLIUM sales increased in 1993 from the year ago period due to AlBeMet(TM) sales of a computer disk drive component. Absent the AlBeMet(TM) sales, there was a reduction in

BERYLLIUM sales due largely to lower defense spending. In 1994, sales will be lower due to completion of the Defense Logistics Agency (DLA) supply contract and reduced AlBeMet(TM) sales due to the end of an application at a computer disk drive manufacturer. To counter this reduction in volume, process improvement and cost containment are being emphasized. Marketing and product development efforts are being focused on materials and designs for the aerospace and avionics industries.

CERAMIC sales increased in 1993 as compared to 1992. Demand for beryllia ceramic products was strong in United States automotive markets as well as from telecommunications growth worldwide. Sales of direct bond copper products increased 40% because of new applications in power electronics such as solid state motor controls. These products of mainly alumina and copper are bonded without the use of brazing materials. Continued growth is anticipated in 1994 from new applications in automotive electronics and additional penetration of Asian markets coupled with use of direct bond copper products in power conversion and wireless communications.

SPECIALTY METAL SYSTEMS had a sizable sales increase in 1993 as compared to 1992 and exceeded the sales level of 1991. The increase resulted from recently developed applications, primarily in the automotive electronics, telecommunications and computer industries. In the telecommunications industry, for example, a precious metal clad on beryllium copper offered superior performance in a requirement in cellular telephone connector contacts. Additionally, a proprietary ductile nickel coating on beryllium copper Alloy 174 will be utilized in battery chargers for cellular telephones and other products. In 1994, the continued development of new applications, along with an effort to improve manufacturing response time, are necessary for the growth of SPECIALTY METAL SYSTEMS.

PRECIOUS METAL PRODUCTS had a significant sales increase in 1993 as compared to 1992. High demand for frame lid assemblies from semiconductor manufacturers, along with added sales of a new line of vapor deposition targets, accounted for much of the increase. Sales are expected to be lower in 1994 because semiconductor demand is expected to slow. In addition, first-time vapor deposition target sales have a large precious metal content; as these spent targets are recycled and refurbished, the customer maintains ownership of the material, resulting in lower sales, but similar profit from value-added services.

International sales were \$86 million in 1993, \$71 million in 1992 and \$76 million in 1991. The increase in 1993 is primarily due to deliveries of disk drive components to Asia and the start-up of PRECIOUS METAL PRODUCT assemblies in Singapore. The distribution of BERYLLIUM ALLOYS is the major component of international sales. Lower demand in Europe, due principally to economic conditions, precluded any growth. International sales are likely to be lower in 1994 due to the end of the previously mentioned disk drive application. However, BERYLLIUM ALLOY sales should increase as economic conditions in Europe improve and marketing efforts in Asia are strengthened.

Worldwide sales in 1992 were slightly under those of 1991. Gains in BERYLLIUM ALLOYS, CERAMIC and PRECIOUS METAL PRODUCTS were offset by declines in BERYLLIUM and SPECIALTY METAL SYSTEMS. The increases were primarily in automotive and semiconductor markets with the decreases primarily in defense-related applications.

Gross margin (sales less cost of sales) was 22.9%, 27.2%, and 24.4% of sales in the years 1993, 1992 and 1991, respectively. The two primary factors affecting margins were a product

mix shift to lower margin products, particularly those with a high precious metal content, and manufacturing problems associated with the AlBeMet(TM) disk drive component. In addition, competitive conditions limit the ability to cover cost increases. However, the Company continues to be encouraged by the favorable impact on margins from manufacturing yield and productivity improvements, especially in BERYLLIUM ALLOY strip products. Margin percentages are expected to improve in 1994 due to an anticipated shift in product mix to high value-added products, manufacturing improvements and the significant reduction of low margin AlBeMet(TM) disk drive sales.

The higher gross margin in 1992 was due to improved manufacturing performance, primarily in BERYLLIUM ALLOYS, coupled with cost reduction efforts. This was in spite of relatively low capacity utilization. Other favorable factors included about \$4 million in lower depreciation and amortization due to the asset impairment charge taken in 1991 and about \$2 million from a weaker dollar.

Selling, administrative and general expenses in 1993 were \$47.8 million (16.2% of sales) compared to \$46.6 million (17.6% of sales) in 1992. The increase was primarily in worldwide marketing, selling and customer service activities that support the critical issue of sales growth. This category of expense increased over 6% in 1993 from 1992 while administrative and general expenses, which include lower incentive compensation, decreased.

Selling, administrative and general expenses in 1992 were down from 1991. Increased marketing, selling and distribution were more than offset by a reduction in administrative expenses.

Research and Development (R&D) expenses of \$7.1 million in 1993 were slightly lower than the \$7.3 million spent in 1992. The Company's marketing efforts are leading to changes in R&D resource utilization. Cross-functional marketing teams, which include R&D representation, bring more focus to those activities and opportunities that offer the greatest sales and margin potential to the Company. In 1991, R&D expenses were \$7.6 million.

Interest expense was \$3.0 million in 1993, \$3.2 million in 1992 and \$3.8 million in 1991. All amounts are net of interest capitalized on active construction and mine development projects. Lower interest rates and less debt, on average, favorably impacted interest costs in 1993 and 1992.

The impairment and restructuring charges in 1991 had a pre-tax income impact of \$39.3 million. These charges consisted of a writedown of the carrying value of the assets of Technical Materials, Inc. and Williams Advanced Materials Inc. and provisions for early retirement, severance and environmental matters.

In 1991, the Company adopted Statement of Financial Accounting Standard No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" (FAS 106). This accounting change was effective as of January 1, 1991 and resulted in recording a transition obligation that reduced earnings by \$1.02 per share. In addition, the ongoing effect of adopting FAS 106 was to increase net periodic postretirement cost and reduce earnings by \$.08 per share in 1991.



Other-net expense was \$2.2 million in 1993, \$1.3 million in 1992 and \$3.0 million in 1991. This category includes such expenses as amortization of goodwill and other intangibles, the effect of currency exchange and translation and other non-operating items. Included in all three years are the postretirement benefit costs pursuant to FAS 106 for a divested operation. In 1993, the Company made an adjustment to the FAS 106 demographic assumptions for the divested operation. This resulted in a reduction of the liability and resulting income of \$1.3 million. The carrying value of a building from the divested operation was reduced by \$0.9 million. Included in 1992 was about \$1.4 million of nonrecurring gains.

Income before income taxes in 1993 of \$7.7 million was significantly lower than the 1992 pre-tax income of \$13.7 million. The reduction is due to the lower gross margin, owing principally to the manufacturing problems with the disk drive component and lower sales of BERYLLIUM for defense related applications. The increase in selling, general and administrative expense was also a contributing factor to the lower pre-tax income. On the positive side was improved manufacturing performance in BERYLLIUM ALLOYS and CERAMICS. In 1992, pre-tax income of \$13.7 million was significantly higher than the 1991 pre-tax income of \$3.2 million, exclusive of the impairment and restructuring charges. The combination of better manufacturing performance, cost reduction and the ongoing effects of the previously mentioned 1991 asset impairment charges accounted for the gain.

The effective tax rate employed for 1993 was 16.2% of pre-tax income as compared to a rate of 23.6% of pre-tax income in 1992. The lower pre-tax income, coupled with relatively fixed tax credits and allowances, results in the significantly lower tax rate for 1993 as compared to 1992 and to statutory rates. As shown in Note H to the consolidated financial statements, the tax credit for percentage depletion in excess of cost depletion from mining operations, along with the tax benefit of the Company-owned life insurance program, account for almost the entire reduction from statutory rates in both 1993 and 1992. In 1991, a tax benefit of 23.8% on the pre-tax loss was utilized.

Earnings per share were \$0.40 in 1993 and \$0.65 in 1992. Loss per share of \$2.74 in 1991 includes \$2.93 per share of non-recurring items for the impairment and restructuring charges and the accounting change. Comparable per share earnings in 1991 were \$0.19.

## **FINANCIAL POSITION**

### **CAPITAL RESOURCES AND LIQUIDITY**

Cash flow from operating activities totaled \$18.3 million in 1993. Cash balances increased by \$3.5 million while total debt decreased by \$13.4 million.

Capital expenditures for property, plant and equipment amounting to \$12 million in 1993 were focused on upgrades and additions to improve quality and productivity. Capital expenditures in 1994 are expected to approach \$20 million with a significant portion devoted to projects at the Company's extraction facilities in Utah, including extending the life and capacity of the tailings pond.

Long-term financial resources available to the Company include \$60 million of medium-term notes and \$40 million under a bank credit agreement (unused at December 31, 1993).

In the fourth quarter of 1993, the Company borrowed the \$15 million cash surrender value from a group of Company-owned life insurance policies. The proceeds were used to repay all borrowings under the bank credit agreement. Long-term debt at December 31, 1993 was \$24 million or 12% of total capital.

Short-term debt at December 31, 1993 was \$16 million and is denominated principally in gold, yen, marks and sterling to provide hedges against assets so denominated. In addition, credit lines amounting to \$54 million are available.

Funds being generated from operations plus the available borrowing capacity are believed adequate to support operating requirements, capital expenditures, remediation projects, dividends and small acquisitions. Excess cash, if any, is invested in collateralized repurchase agreements and other high quality instruments.

Cash flow from operating activities in 1992 was \$31 million. Total debt was reduced \$5.4 million while capital and mine development expenditures totaled \$14 million and dividends totalled \$3.2 million. Long-term debt at December 31, 1992 was 17% of total capital.

## ORE RESERVES

The Company's reserves of beryllium-bearing bertrandite ore are located in Juab County, Utah. An ongoing drilling program has generally added to proven reserves. Proven reserves are the measured quantities of ore commercially recoverable through the open pit method. Probable reserves are the estimated quantities of ore known to exist, principally at greater depths, but prospects for commercial recovery are indeterminable. Ore dilution that occurs during mining approximates 7%. About 87% of beryllium in ore is recovered in the extraction process. The Company augments its proven reserves of bertrandite ore through the purchase of imported beryl ore (approximately 4% beryllium) which is also processed at the Utah extraction plant.

	1993	1992	1991	1990	1989
	-----	-----	-----	-----	-----
Proven bertrandite ore reserves at year end (thousands of dry tons)	6,786	6,787	6,855	6,758	6,504
Grade % beryllium	0.251%	0.251%	0.251%	0.251%	0.249%
Probable bertrandite ore reserves at year-end (thousands of dry tons)	7,594	7,482	7,215	7,302	7,217
Grade % beryllium	0.279%	0.281%	0.284%	0.281%	0.263%
Bertrandite ore processed (thousands of dry tons, diluted)	92	91	80	85	85
Grade % beryllium, diluted	0.232%	0.234%	0.237%	0.234%	0.231%

## **INFLATION AND CHANGING PRICES**

The prices of major raw materials, such as copper, nickel and gold, purchased by the Company were mixed during 1993. Such changes in costs are generally reflected in selling price adjustments. The prices of labor and other factors of production generally increase with inflation. Additions to capacity, while more expensive over time, usually result in greater productivity or improved yields. However, market factors, alternative materials and competitive pricing have affected the Company's ability to offset wage and benefit increases. The Company employs the last-in, first-out (LIFO) inventory valuation method domestically to more closely match current costs with revenues.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The following consolidated financial statements of the Company included in the annual report to shareholders for the year ended December 31, 1993 are incorporated herein by reference:

### **Consolidated Balance Sheets - December 31, 1993 and 1992.**

Consolidated Statements of Income - Years ended December 31, 1993, 1992 and 1991.

Consolidated Statements of Shareholders' Equity - Years ended December 31, 1993, 1992 and 1991.

Consolidated Statements of Cash Flows - Years ended December 31, 1993, 1992 and 1991.

### **Notes to Consolidated Financial Statements.**

Quarterly Data on page 17 of the Annual Report to shareholders and Ore Reserves on page 16 of this Form 10-K annual report to shareholders for the year ended December 31, 1993 are incorporated herein by reference.

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None

### **PART III**

#### **ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

The information under Election of Directors on pages 2 through 5 of the Proxy Statement dated March 11, 1994 is incorporated herein by reference. Information with respect to Executive Officers of the Company is set forth earlier on pages 10 and 11 of this Report.

#### **ITEM 11. EXECUTIVE COMPENSATION**

The information under Executive Officer Compensation on pages 8 through 14 of the Proxy Statement dated March 11, 1994 is incorporated herein by reference.

#### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The information under Common Stock Ownership of Certain Beneficial Owners and Management on pages 6 through 7 of the Proxy Statement dated March 11, 1994 is incorporated herein by reference.

#### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The information under Compensation Committee Interlocks and Insider Participation and Related Party Transactions on page 15 of the Proxy Statement dated March 11, 1994 is incorporated herein by reference.

## PART IV

### ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

#### (a) 1. FINANCIAL STATEMENTS AND SUPPLEMENTAL INFORMATION

Included in Part II of this Report by reference to the annual report to shareholders for the year ended December 31, 1993 are the following consolidated financial statements:

#### **Consolidated Balance Sheets - December 31, 1993 and 1992.**

Consolidated Statements of Income - Years ended December 31, 1993, 1992 and 1991.

Consolidated Statements of Shareholders' Equity - Years ended December 31, 1993, 1992 and 1991.

Consolidated Statements of Cash Flows - Years ended December 31, 1993, 1992 and 1991.

#### **Notes to Consolidated Financial Statements.**

#### **Report of Independent Auditors.**

#### (a) 2. FINANCIAL STATEMENT SCHEDULES

The following consolidated financial information for the years 1993, 1992 and 1991 is submitted herewith:

Schedule V	-	Property, plant and equipment
Schedule VI	-	Accumulated depreciation, depletion and amortization of property, plant and equipment
Schedule VIII	-	Valuation and qualifying accounts
Schedule IX	-	Short-term borrowings
Schedule X	-	Supplementary income statement information

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

(a) 3. EXHIBITS

(3a) Amended Articles of Incorporation of the Company as amended February 28, 1989 (filed as Exhibit 3a to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.

(3b) Regulations of the Company as amended April 25, 1989 (filed as Exhibit 3 to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989) and further amended April 27, 1993 (filed as Exhibit 3ii to the Company's Form 10-Q Quarterly Report for the quarter ended April 4, 1993), incorporated herein by reference.

(4a) Common Stock Certificate of the Company (filed as Exhibit 4c to Post-Effective Amendment No. 2 to Registration Statement No. 2-64080), incorporated herein by reference.

(4b) Credit Agreement dated as of December 23, 1991 between the Company and National City Bank acting for itself and as agent for three other banking institutions (filed as Exhibit 4b to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.

(4c) Rights Agreement between the Company and Society National Bank (formerly Ameritrust Company National Association) as amended February 28, 1989 (filed as Exhibit 4c to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.

(4d) Issuing and Paying Agency Agreement dated as of February 1, 1990, including a specimen form of a medium term note issued thereunder, between the Company and Morgan Guaranty Trust Company of New York (filed as Exhibit 4d to the Company's Form 10-K Annual Report for the year ended December 31, 1989), incorporated herein by reference.

(4e) Pursuant to Regulation S-K, Item 601-(b)(4), the

Company agrees to furnish to the Commission, upon its request, a copy of the instruments defining the rights of holders of long-term debt of the Company that are not being filed with this report.

(10a) \* Employment Agreement entered into by the Company and Mr. Gordon D. Harnett on March 20, 1991 (filed as Exhibit 10a to the Company's Form 10-K Annual Report for the year ended December 31, 1990), incorporated herein by reference.

\*Reflects management contract or other compensatory arrangement required to be filed as an Exhibit pursuant to Item 14(c) of this Report.

- (10b) \* Form of Employment Agreement entered into by the Company and Messrs. Waite, Brophy, Hanes, Harlan, Rozek and Sandor on February 20, 1989 (filed as Exhibit 10j to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.
- (10c) \* Form of Amendment to the Employment Agreement (dated February 20, 1989) entered into by the Company and Messrs. Waite, Brophy, Hanes, Harlan, Rozek and Sandor dated February 28, 1991 (filed as Exhibit 10c to the Company's Form 10-K Annual Report for the year ended December 31, 1990), incorporated herein by reference.
- (10d) \* Form of Employment Agreement entered into by the Company and Mr. Daniel A. Skoch on January 28, 1992 and Mr. Stephen Freeman dated August 3, 1993 (filed as Exhibit 10d to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.
- (10e) \* Form of Trust Agreement between the Company and Society National Bank (formerly Ameritrust Company National Association) on behalf of Messrs. Waite, Brophy, Hanes, Harlan, Rozek and Sandor dated February 20, 1989, Mr. Harnett dated March 20, 1991 and Mr. Skoch dated January 28, 1992 and Mr. Stephen Freeman dated August 3, 1993 (filed as Exhibit 10k to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.
- (10f) Form of Indemnification Agreement entered into by the Company and Mr. C. G. Waite on June 27, 1989 and Mr. G. D. Harnett on March 20, 1991 (filed as Exhibit 10a to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989), incorporated herein by reference.
- (10g) Form of Indemnification Agreement entered into by the Company and Messrs. J. H. Brophy, A. J. Sandor, C. B. Harlan, H. D. Hanes, and R. H. Rozek on June 27, 1989, Mr. D. A. Skoch on January 28, 1992 and Mr. Stephen Freeman dated August 3, 1993 (filed as Exhibit 10b to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989), incorporated herein by reference.
- (10h) Form of Indemnification Agreement entered into by the Company and Messrs. C. F. Brush, F. B. Carr, W. E. MacDonald, J. L. McCall, W. P. Madar, G. C. McDonough, R.

\*Reflects management contract or other compensatory arrangement required to be filed as an Exhibit pursuant to Item 14(c) of this Report.

M. McInnes, H. G. Piper and J. Sherwin Jr. on June 27, 1989 and Mr. A. C. Bersticker on April 27, 1993 (filed as Exhibit 10c to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989), incorporated herein by reference.

- (10i) \* Directors' Retirement Plan as amended January 26, 1993 (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.
- (10j) \* Deferred Compensation Plan for Nonemployee Directors effective January 1, 1992 (filed as Exhibit I to the Company's Proxy Statement dated March 6, 1992), incorporated herein by reference.
- (10k) \* Form of Trust Agreement between the Company and National City Bank dated January 1, 1992 on behalf of Nonemployee Directors of the Company (filed as Exhibit 10k to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.
- (10l) \* Incentive Compensation Plan adopted December 16, 1991, effective January 1, 1992 (filed as Exhibit 10l to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.
- (10m) \* Management Performance Compensation Plan adopted February 22, 1993, effective January 1, 1993 (filed as Exhibit 10m to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.
- (10n) \* Supplemental Retirement Plan as amended and restated December 1, 1992 (filed as Exhibit 10n to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.
- (10o) \* Form of Trust Agreement between the Company and Society National Bank dated January 8, 1993 pursuant to the December 1, 1992 amended Supplemental Retirement Plan (filed as Exhibit 10o to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.
- (10p) \* Employment arrangement between the Company and Mr. Gordon D. Harnett effective January 22, 1991 (filed as Exhibit 10k to the Company's Form 10-K Annual Report for the year ended December 31, 1990) incorporated herein by reference.

\*Reflects management contract or other compensatory arrangement required to be filed as an Exhibit pursuant to Item 14(c) of this Report.



- (10q) \* Amendment to the employment arrangement (effective January 22, 1991) between the Company and Mr. Gordon D. Harnett (filed as Exhibit 10o to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.
- (10r) \* Agreement between the Company and H. G. Piper dated as of January 23, 1990 (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1989), incorporated herein by reference.
- (10s) \* Amendment dated February 19, 1991 to the agreement between the Company and Mr. H. G. Piper dated January 23, 1990 (filed as Exhibit 10m to the Company's Form 10-K Annual Report for the year ended December 31, 1990) incorporated herein by reference.
- (10t) Amendment dated February 27, 1990 to the Indemnification Agreement between the Company and H. G. Piper (filed as Exhibit 10l to the Company's Form 10-K Annual Report for the year ended December 31, 1989), incorporated herein by reference.
- (10u) \* 1979 Stock Option Plan, as amended pursuant to approval of shareholders on April 21, 1982 (filed as Exhibit 15A to Post-Effective Amendment No. 3 to Registration Statement No. 2-64080), incorporated herein by reference.
- (10v) \* 1984 Stock Option Plan as amended by the Board of Directors on April 18, 1984 and February 24, 1987 (filed as Exhibit 4.4 to Registration Statement No. 33-28605), incorporated herein by reference.
- (10w) \* 1989 Stock Option Plan (filed as Exhibit 4.5 to Registration Statement No. 33-28605), incorporated herein by reference.
- (10x) \* 1990 Stock Option Plan for Nonemployee Directors (filed as Exhibit 4.6 to Registration Statement No. 33-35979), incorporated herein by reference.
- (10y) \* 1977 Stock Appreciation Rights Plan (filed as Exhibit 4.6 to Registration Statement No. 33-28605), incorporated herein by reference.
- (11) Statement re: calculation of per share earnings for the years ended December 31, 1993, 1992 and 1991.

\*Reflects management contract or other compensatory arrangement required to be filed as an Exhibit pursuant to Item 14(c) of this Report.

- (13) Portions of the Annual Report to shareholders for the year ended December 31, 1993.
- (21) Subsidiaries of the registrant.
- (23) Consent of Ernst & Young.
- (24) Power of Attorney.
- (99a) Form 11-K Annual Report for the Brush Wellman Inc. Savings and Investment Plan for the year ended December 30, 1993.
- (99b) Form 11-K Annual Report for the Williams Advanced Materials Inc. Savings and Investment Plan for the year ended December 30, 1993.

(b) Reports on Form 8-K

There were no reports on Form 8-K filed during the fourth quarter of the year ended December 31, 1993.

## SIGNATURES

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. March 25, 1994 BRUSH WELLMAN INC.

By: /s/ Gordon D. Harnett

By: /s/ Clark G. Waite

-----  
Gordon D. Harnett  
Chairman of the Board,  
President and Chief Executive Officer

-----  
Clark G. Waite  
Senior Vice President and  
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

GORDON D. HARNETT* ----- Gordon D. Harnett	Chairman of the Board, President, Chief Executive (Principal Executive Officer)	March 25, 1994 Officer and Director
Clark G. Waite ----- Clark G. Waite	Senior Vice President, Chief Financial Officer and Director (Principal Financial and Accounting Officer)	March 25, 1994
ALBERT C. BERSTICKER* ----- Albert C. Bersticker	Director	March 25, 1994
CHARLES F. BRUSH, III* ----- Charles F. Brush, III	Director	March 25, 1994
FRANK B. CARR ----- Frank B. Carr	Director	March 25, 1994
WILLIAM P. MADAR* ----- William P. Madar	Director	March 25, 1994
JULIEN L. MCCALL* ----- Julien L. McCall	Director	March 25, 1994
GERALD C. McDONOUGH* ----- Gerald C. McDonough	Director	March 25, 1994
ROBERT M. MCINNES* ----- Robert M. McInnes	Director	March 25, 1994
HENRY G. PIPER* ----- Henry G. Piper	Director	March 25, 1994
JOHN SHERWIN, JR.* ----- John Sherwin, Jr.	Director	March 25, 1994

\*The undersigned, by signing his name hereto, does sign and execute this report on behalf of each of the above-named officers and directors of Brush Wellman Inc., pursuant to Powers of Attorney executed by each such officer and director filed with the Securities and Exchange Commission.

By: /s/ Clark G. Waite

-----  
Clark G. Waite  
March 25, 1994  
Attorney-in-Fact

## SCHEDULE V--PROPERTY, PLANT AND EQUIPMENT

## BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1993

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CLASSIFICATION	Balance at Beginning of Period	Additions at Cost	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period
Mineral claims and leases	\$ 4,748,000	\$ 148,132	\$ -0-	\$ -0-	\$ 4,896,132
Natural gas properties	601,970	-0-	-0-	-0-	601,970
Mine development	18,401,573	813,544	5,325,561	-0-	13,889,556
Land	4,399,021	-0-	-0-	-0-	4,399,021
Land improvements	9,143,111	-0-	-0-	-0-	9,143,111
Buildings	57,276,359	601,737	8,577	(142,809)	57,726,710
Machinery and equipment	218,947,697	5,001,770	2,688,184	306,849	221,568,132
Leasehold improvements	633,317	185,487	-0-	(118,345)	700,459
Furniture and fixtures	6,137,647	221,805	105,776	(309,251)	5,944,425
Computer equipment	5,424,314	599,380	162,643	317,453	6,178,504
Automobiles and trucks	1,029,694	235,051	35,000	3,000	1,232,745
Research equipment	3,168,937	225,990	26,413	(27,445)	3,341,069
Construction in progress	3,060,337	4,660,077 (A)	-0-	-0-	7,720,414
Total	\$ 332,971,977 =====	\$12,692,973 =====	\$8,352,154 =====	\$ 29,452 (B) =====	\$337,342,248 =====

Note A - Net change for the year.

B - Transfers, reclassifications and adjustments

## SCHEDULE V--PROPERTY, PLANT AND EQUIPMENT

## BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1993

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CLASSIFICATION	Balance at Beginning of Period	Additions at Cost	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period

Note C - Depreciable lives used in computing the annual provision for depreciation. See Note A of the Notes to Consolidated Financial Statements found on page 12 of the annual report to shareholders.

Land improvements	5 to 25 years
Buildings	10 to 40 years
Leasehold improvements	Life of Lease
Machinery and equipment	3 to 15 years
Furniture and fixtures	4 to 15 years
Automobiles and trucks	2 to 8 years
Research equipment	6 to 12 years

## SCHEDULE V--PROPERTY, PLANT AND EQUIPMENT

## BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1992

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CLASSIFICATION	Balance at Beginning of Period	Additions at Cost	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period
Mineral claims and leases	\$ 4,501,667	\$ 246,333	\$ -0-	\$ -0-	\$ 4,748,000
Natural gas properties	601,970	-0-	-0-	-0-	601,970
Mine development	17,553,233	848,340	-0-	-0-	18,401,573
Land	4,007,495	414,526	-0-	(23,000)	4,399,021
Land improvements	6,338,560	2,966,001	126,988	(34,462)	9,143,111
Buildings	55,987,160	3,247,850	978,589	(980,062)	57,276,359
Machinery and equipment	207,557,026	11,658,600	1,444,510	1,176,581	218,947,697
Leasehold improvements	454,186	10,152	53,948	222,927	633,317
Furniture and fixtures	5,793,770	895,818	610,937	58,996	6,137,647
Computer equipment	4,284,086	1,355,583	203,212	(12,143)	5,424,314
Automobiles and trucks	958,377	72,217	900	-0-	1,029,694
Research equipment	3,477,156	138,788	367,992	(79,015)	3,168,937
Construction in progress	10,466,262	(7,402,363) (A)	-0-	(3,562)	3,060,337
Total	\$ 321,980,948 =====	\$14,451,845 =====	\$3,787,076 =====	\$ 326,260 (B) =====	\$332,971,977 =====

Note A - Net change for the year.

B - Other changes include deductions of \$818,000 for property held for resale (reclassified to Other Assets), additions of \$1,248,000 for the Tegmen acquisition and other adjustments of \$104,000.

## SCHEDULE V--PROPERTY, PLANT AND EQUIPMENT

## BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1992

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CLASSIFICATION	Balance at Beginning of Period	Additions at Cost	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period

Note C - Depreciable lives used in computing the annual provision for depreciation. See Note A of the Notes to Consolidated Financial Statements found on page 12 of the annual report to shareholders.

Land improvements	5 to 25 years
Buildings	10 to 40 years
Leasehold improvements	Life of Lease
Machinery and equipment	3 to 15 years
Furniture and fixtures	4 to 15 years
Automobiles and trucks	2 to 8 years
Research equipment	6 to 12 years

## SCHEDULE V--PROPERTY, PLANT AND EQUIPMENT

## BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1991

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CLASSIFICATION	Balance at Beginning of Period	Additions at Cost	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period
Mineral claims and leases	\$ 4,241,740	\$ 259,927	\$ -0-	\$ -0-	\$ 4,501,667
Natural gas properties	601,970	-0-	-0-	-0-	601,970
Mine development	11,164,547	6,388,686	-0-	-0-	17,553,233
Land	4,187,495	-0-	-0-	(180,000)	4,007,495
Land improvements	6,155,043	214,279	30,762	-0-	6,338,560
Buildings	55,173,721	865,111	45,112	(6,560)	55,987,160
Machinery and equipment	201,603,329	10,360,328	4,503,302	96,671	207,557,026
Leasehold improvements	501,242	46,814	6,560	(87,310)	454,186
Furniture and fixtures	5,504,715	224,726	149,642	213,971	5,793,770
Computer equipment	3,841,224	695,637	44,098	(208,677)	4,284,086
Automobiles and trucks	873,353	99,170	14,146	-0-	958,377
Research equipment	3,498,849	92,048	113,741	-0-	3,477,156
Construction in progress	9,740,438	744,254 (A)	-0-	(18,430)	10,466,262
Total	\$ 307,087,666	\$19,990,980	\$4,907,363	\$ (190,335) (B)	\$321,980,948
	=====	=====	=====	=====	=====

Note A - Net change for the year.

B - Other changes include charges of \$190,000 for the writedown of impaired assets at Williams Advanced Materials Inc.



## SCHEDULE V--PROPERTY, PLANT AND EQUIPMENT

## BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1991

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CLASSIFICATION	Balance at Beginning of Period	Additions at Cost	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period

Note C - Depreciable lives used in computing the annual provision for depreciation. See Note A of the Notes to Consolidated Financial Statements found on page 12 of the annual report to shareholders.

Land improvements	5 to 25 years
Buildings	10 to 40 years
Leasehold improvements	Life of Lease
Machinery and equipment	3 to 15 years
Furniture and fixtures	4 to 15 years
Automobiles and trucks	2 to 8 years
Research equipment	6 to 12 years

SCHEDULE VI--ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION  
OF PROPERTY, PLANT AND EQUIPMENT

BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1993

COL. A	COL. B	COL. C	COL. D	COL. E	COL. F
DESCRIPTION	Balance at Beginning of Period	Additions Charged to Costs and Expenses	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period
Mineral claims and leases	\$ 1,462,369	\$ 66,265	\$ -0-	\$ -0-	\$ 1,528,634
Natural gas properties	601,970	-0-	-0-	-0-	601,970
Mine development	7,851,946	3,078,237	5,325,561	-0-	5,604,622
Land improvements	4,366,231	610,355	-0-	-0-	4,976,586
Buildings	27,455,565	2,409,733	5,003	(3)	29,860,292
Machinery and equipment	151,515,241	13,330,569	2,193,939	345,670	162,997,541
Leasehold improvements	408,850	232,394	-0-	(8,398)	632,846
Furniture and fixtures	4,574,688	339,349	92,530	(506,406)	4,315,101
Computer equipment	3,502,598	795,831	127,775	225,624	4,396,278
Automobiles and trucks	824,398	101,555	35,000	(3,000)	887,953
Research equipment	2,416,680	241,441	26,314	(17,378)	2,614,429
Total	\$204,980,536 =====	\$21,205,729 =====	\$7,806,122 =====	\$ 36,109(A) =====	\$218,416,252 =====

Note A = Transfers, reclassifications and adjustments

SCHEDULE VI--ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION  
OF PROPERTY, PLANT AND EQUIPMENT

BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1992

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
DESCRIPTION	Balance at Beginning of Period	Additions Charged to Costs and Expenses	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period
Mineral claims and leases	\$ 1,399,669	\$ 62,700	\$ -0-	\$ -0-	\$ 1,462,369
Natural gas properties	601,970	-0-	-0-	-0-	601,970
Mine development	5,522,298	2,329,648	-0-	-0-	7,851,946
Land improvements	3,983,038	543,279	125,624	(34,462)	4,366,231
Buildings	26,565,602	2,224,695	877,826	(456,906)	27,455,565
Machinery and equipment	139,930,913	12,811,480	1,252,834	25,682	151,515,241
Leasehold improvements	392,646	70,152	53,948	-0-	408,850
Furniture and fixtures	4,644,100	564,746	549,903	(84,255)	4,574,688
Computer equipment	3,024,454	667,833	189,300	(389)	3,502,598
Automobiles and trucks	735,170	90,128	900	-0-	824,398
Research equipment	2,601,745	234,330	367,366	(52,029)	2,416,680
	-----	-----	-----	-----	-----
Total	\$ 189,401,605	\$19,598,991	\$3,417,701	\$ (602,359) (A)	\$204,980,536
	=====	=====	=====	=====	=====

Note A = Property held for resale (reclassified to Other Assets) transfers and adjustments.

SCHEDULE VI--ACCUMULATED DEPRECIATION, DEPLETION AND AMORTIZATION  
OF PROPERTY, PLANT AND EQUIPMENT

BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1991

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
DESCRIPTION	Balance at Beginning of Period	Additions Charged to Costs and Expenses	Retirements	Other Changes--Add (Deduct)--Describe	Balance at End of Period
Mineral claims and leases	\$ 1,382,794	\$ 16,875	\$ -0-	\$ -0-	\$ 1,399,669
Natural gas properties	601,970	-0-	-0-	-0-	601,970
Mine development	4,566,952	955,346	-0-	-0-	5,522,298
Land improvements	3,505,458	447,707	3,494	33,367	3,983,038
Buildings	23,723,916	2,367,773	19,482	493,395	26,565,602
Machinery and equipment	119,838,135	14,546,672	3,452,797	8,998,903	139,930,913
Leasehold improvements	227,033	81,100	6,560	91,073	392,646
Furniture and fixtures	4,170,940	448,373	134,134	158,921	4,644,100
Computer equipment	2,345,702	623,164	12,593	68,181	3,024,454
Automobiles and trucks	646,105	70,636	-0-	18,429	735,170
Research equipment	2,443,536	247,891	89,682	-0-	2,601,745
	-----	-----	-----	-----	-----
Total	\$163,452,541	\$19,805,537	\$3,718,742	\$9,862,269(A)	\$189,401,605
	=====	=====	=====	=====	=====

Note A = Other changes include additions of \$6,070,000 and \$3,782,000 for the write-down of impaired assets at Technical Materials, Inc. and Williams Advanced Materials Inc., respectively.

SCHEDULE VIII--VALUATION AND QUALIFYING ACCOUNTS

BRUSH WELLMAN AND SUBSIDIARIES

Years ended December 31, 1993, 1992 and 1991

COL. A	COL. B	COL. C	COL. D	COL. E
-----				
ADDITIONS				
-----				
		(1)	(2)	
DESCRIPTION	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts--Describe	Deductions--Describe
				Balance at End of Period
Year ended December 31, 1993				
Deducted from asset accounts:				
Allowance for doubtful accounts receivable	\$ 781,389	\$ 234,392	\$ -0-	\$ 110,868(A)
Inventory reserves and obsolescence	\$ -0-	\$ 3,187,135	\$ -0-	\$ - 0 -
Allowance for deferred tax assets	\$ -0-	\$ -0-	\$ 1,540,000(B)	\$ -0-
				\$ 904,913
				\$3,187,135
				\$1,540,000
Year ended December 31, 1992				
Deducted from asset accounts:				
Allowance for doubtful accounts receivable	\$ 792,162	\$ 5,245	\$ -0-	\$ 16,018(A)
				\$ 781,389
Year ended December 31, 1991				
Deducted from asset accounts:				
Allowance for doubtful accounts receivable	\$ 698,901	\$ 536,143	\$ -0-	\$ 442,882(A)
				\$ 792,162

Note A - Bad debts written off.

Note B - The Company adopted SFAS No. 109, "Accounting for Income Taxes," effective January 1, 1993. Under Statement 109, a deferred tax asset of \$1,540,000 was recorded for net operating loss carryforwards. Since it is unknown as to whether the deferred tax asset would be utilized, a valuation allowance was recorded to offset the asset.

SCHEDULE IX -- SHORT-TERM BORROWINGS

BRUSH WELLMAN AND SUBSIDIARIES

Year ended December 31, 1993

COL.A	COL.B	COL.C	COL.D	COL.E	COL.F
CATEGORY OF AGGREGATE SHORT-TERM BORROWINGS	Balance at End of Period	Weighted Average Interest Rate	Maximum Amount Outstanding During the Period	Average Amount Outstanding During the Period	Weighted Average Interest Rate During the Period
Year ended December 31, 1993					
Notes payable	\$16,263,373(A)	2.7%	\$27,365,696	\$ 20,644,171(B)	3.7%(C)
Year ended December 31, 1992					
Notes payable	\$19,805,811(A)	5.0%	\$27,177,508	\$ 22,878,725(B)	5.6%(C)
Year ended December 31, 1991					
Notes payable	\$24,040,488(A)	5.9%	\$27,581,143	\$ 24,119,504(B)	6.2%(C)

Note A - Short-term borrowings include borrowings incurred by foreign subsidiaries payable in foreign currency, the current portion of long-term notes payable and debt denominated in precious metal, primarily gold.

Note B - The average amount outstanding during the period was computed by dividing the total of daily outstanding principal balances by 365 days in 1993 and 1991 and 366 days in 1992.

Note C - The weighted average interest rate during the period was computed by dividing interest expense by the related average short-term debt outstanding.

SCHEDULE X--SUPPLEMENTARY INCOME STATEMENT INFORMATION

BRUSH WELLMAN INC. AND SUBSIDIARIES

Years Ended December 31, 1993, 1992 and 1991

COL. A	COL. B		
ITEM	CHARGED TO COSTS AND EXPENSES		
	Years ended December 31,		
	1993	1992	1991
Maintenance and repairs	\$17,124,857	\$ 15,633,149	\$19,141,792
Taxes, other than payroll and income taxes	\$ 2,899,736	\$ 2,985,743	\$ 3,097,285
Depreciation and amortization of intangible assets:			
Technology	\$ 13,858	\$ 18,000	\$ 2,850,315(A)
Goodwill	\$ 139,084	\$ 315,088	\$12,238,404(A)

Note: Amounts for depreciation and amortization of pre-operating costs and similar deferrals, royalties and advertising are not presented as such amounts are less than 1% of total sales and revenues. Separate categories of taxes included in the total are less than 1% of total sales and revenues.

(A) The increase in goodwill and technology amortization in 1991 is due to the writedown of asset values at Williams Advanced Materials Inc. and Technical Materials Inc.

# INDEX TO EXHIBITS

Exhibit Number	Description of Exhibit	Sequential Page Number
(3a)	Amended Articles of Incorporation of the Company as amended February 28, 1989 (filed as Exhibit 3a to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.	
(3b)	Regulations of the Company as amended April 25, 1989 (filed as Exhibit 3 to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989) and further amended April 27, 1993 (filed as Exhibit 3ii to the Company's Form 10-Q Quarterly Report for the quarter ended April 4, 1993), incorporated herein by reference.	
(4a)	Common Stock Certificate of the Company (filed as Exhibit 4c to Post-Effective Amendment No. 2 to Registration Statement No. 2-64080), incorporated herein by reference.	
(4b)	Credit Agreement dated as of December 23, 1991 between the Company and National City Bank acting for itself and as agent for three other banking institutions (filed as Exhibit 4b to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.	
(4c)	Rights Agreement between the Company and Society National Bank (formerly Ameritrust Company National Association) as amended February 28, 1989 (filed as Exhibit 4c to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.	
(4d)	Issuing and Paying Agency Agreement dated as of February 1, 1990, including a specimen form of a medium term note issued thereunder, between the Company and Morgan Guaranty Trust Company of New York (filed as Exhibit 4d to the Company's Form 10-K Annual Report for the year ended December 31, 1989), incorporated herein by reference.	
(4e)	Pursuant to Regulation S-K, Item 601-(b)(4), the Company agrees to furnish to the Commission, upon its request, a copy of the instruments defining the rights of holders of long-term debt of the Company that are not being filed with this report.	



Exhibit Number	Description of Exhibit	Sequential Page Number
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(10a)	Employment Agreement entered into by the Company and Mr. Gordon D. Harnett on March 20, 1991 (filed as Exhibit 10a to the Company's Form 10-K Annual Report for the year ended December 31, 1990), incorporated herein by reference.	
(10b)	Form of Employment Agreement entered into by the Company and Messrs. Waite, Brophy, Hanes, Harlan, Rozek and Sandor on February 20, 1989 (filed as Exhibit 10j to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.	
(10c)	Form of Amendment to the Employment Agreement (dated February 20, 1989) entered into by the Company and Messrs. Waite, Brophy, Hanes, Harlan, Rozek and Sandor dated February 28, 1991 (filed as Exhibit 10c to the Company's Form 10-K Annual Report for the year ended December 31, 1990), incorporated herein by reference.	
(10d)	Form of Employment Agreement entered into by the Company and Mr. Daniel A. Skoch on January 28, 1992 and Mr. Stephen Freeman dated August 3, 1993 (filed as Exhibit 10d to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.	
(10e)	Form of Trust Agreement between the Company and Society National Bank (formerly Ameritrust Company National Association) on behalf of Messrs. Waite, Brophy, Hanes, Harlan, Rozek and Sandor dated February 20, 1989, Mr. Harnett dated March 20, 1991 and Mr. Skoch dated January 28, 1992 and Mr. Stephen Freeman dated August 3, 1993 (filed as Exhibit 10k to the Company's Form 10-K Annual Report for the year ended December 31, 1988), incorporated herein by reference.	
(10f)	Form of Indemnification Agreement entered into by the Company and Mr. C. G. Waite on June 27, 1989 and Mr. G. D. Harnett on March 20, 1991 (filed as Exhibit 10a to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989), incorporated herein by reference.	
(10g)	Form of Indemnification Agreement entered into by the Company and Messrs. J. H. Brophy, A. J. Sandor, C. B. Harlan, H. D. Hanes, and R. H. Rozek on June 27, 1989, Mr. D. A. Skoch on January 28, 1992 and Mr. Stephen Freeman dated August 3, 1993 (filed as Exhibit 10b to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989), incorporated herein by reference.	

Exhibit Number	Description of Exhibit	Sequential Page Number
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(10h)	Form of Indemnification Agreement entered into by the Company and Messrs. C. F. Brush, F. B. Carr, W. E. MacDonald, J. L. McCall, W. P. Madar, G. C. McDonough, R. M. McInnes, H. G. Piper and J. Sherwin Jr. on June 27, 1989 and Mr. A. C. Bersticker on April 27, 1993 (filed as Exhibit 10c to the Company's Form 10-Q Quarterly Report for the quarter ended July 2, 1989), incorporated herein by reference.	
(10i)	Directors' Retirement Plan as amended January 26, 1993 (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.	
(10j)	Deferred Compensation Plan for Nonemployee Directors effective January 1, 1992 (filed as Exhibit I to the Company's Proxy Statement dated March 6, 1992), incorporated herein by reference.	
(10k)	Form of Trust Agreement between the Company and National City Bank N.A. dated January 1, 1992 on behalf of Nonemployee Directors of the Company (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.	
(10l)	Incentive Compensation Plan adopted December 16, 1991, effective January 1, 1992 (filed as Exhibit 10l to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.	
(10m)	Management Performance Compensation Plan adopted February 22, 1993, effective January 1, 1993 (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.	
(10n)	Supplemental Retirement Plan as amended and restated December 1, 1992 (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.	
(10o)	Form of Trust Agreement between the Company and Society National Bank dated January 8, 1993 pursuant to the December 1, 1992 amended Supplemental Retirement Plan (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.	

Exhibit Number	Description of Exhibit	Sequential Page Number
-----	-----	-----
(10p)	Employment arrangement between the Company and Mr. Gordon D. Harnett effective January 22, 1991 (filed as Exhibit 10k to the Company's Form 10-K Annual Report for the year ended December 31, 1990) incorporated herein by reference.	
(10q)	Amendment to the employment arrangement (effective January 22, 1991) between the Company and Mr. Gordon D. Harnett (filed as Exhibit 10o to the Company's Form 10-K Annual Report for the year ended December 31, 1991), incorporated herein by reference.	
(10r)	Agreement between the Company and H. G. Piper dated as of January 23, 1990 (filed as Exhibit 10i to the Company's Form 10-K Annual Report for the year ended December 31, 1989), incorporated herein by reference.	
(10s)	Amendment dated February 19, 1991 to the agreement between the Company and Mr. H. G. Piper dated January 23, 1990 (filed as Exhibit 10m to the Company's Form 10-K Annual Report for the year ended December 31, 1990) incorporated herein by reference.	
(10t)	Amendment dated February 27, 1990 to the Indemnification Agreement between the Company and H. G. Piper (filed as Exhibit 10l to the Company's Form 10-K Annual Report for the year ended December 31, 1989), incorporated herein by reference.	
(10u)	1979 Stock Option Plan, as amended pursuant to approval of shareholders on April 21, 1982 (filed as Exhibit 15A to Post-Effective Amendment No. 3 to Registration Statement No. 2-64080), incorporated herein by reference.	
(10v)	1984 Stock Option Plan as amended by the Board of Directors on April 18, 1984 and February 24, 1987 (filed as Exhibit 4.4 to Registration Statement No. 33-28605), incorporated herein by reference.	
(10w)	1989 Stock Option Plan (filed as Exhibit 4.5 to Registration Statement No. 33-28605), incorporated herein by reference.	
(10x)	1990 Stock Option Plan for Nonemployee Directors (filed as Exhibit 4.6 to Registration Statement No. 33-35979), incorporated herein by reference.	

Exhibit Number	Description of Exhibit	Sequential Page Number
(10y)	1977 Stock Appreciation Rights Plan (filed as Exhibit 4.6 to Registration Statement No. 33-28605), incorporated herein by reference.	
(11)	Statement re: calculation of per share earnings for the years ended December 31, 1993, 1992 and 1991.	
(13)	Portions of the Annual Report to shareholders for the year ended December 31, 1993.	
(21)	Subsidiaries of the registrant.	
(23)	Consent of Ernst & Young.	
(24)	Power of Attorney.	
(99a)	Form 11-K Annual Report for the Brush Wellman Inc. Savings and Investment Plan for the year ended December 30, 1993.	
(99b)	Form 11-K Annual Report for the Williams Advanced Materials Inc. Savings and Investment Plan for the year ended December 30, 1993.	

# EXHIBIT 11

## BRUSH WELLMAN INC. AND SUBSIDIARIES COMPUTATION OF PER SHARE EARNINGS

	1993 ----	1992 ----	1991 ----
Primary:			
Average shares outstanding	16,087,250	16,080,554	16,069,902
Dilutive stock options based on the treasury stock method using average market price	9,442	45,233	0
TOTALS	16,096,692 =====	16,125,787 =====	16,069,902 =====
Net Income (Loss) before cumulative effect of accounting change	\$ 6,458,000	\$ 10,500,000	(\$ 27,547,000)
Cumulative effect of change in accounting for post- retirement benefits	0	0	(\$ 16,471,000)
Net Income (Loss)	\$ 6,458,000 =====	\$ 10,500,000 =====	(\$ 44,018,000) =====
Per share amount:			
Before accounting change	\$ .40	\$ .65	\$ (1.72)
Cumulative effect of change in accounting for post- retirement benefits	0	0	(1.02)
Net Income (Loss) Per Share of Common Stock	\$ .40 =====	\$ .65 =====	\$ (2.74) =====
Fully diluted:			
Average shares outstanding	16,087,250	16,080,554	16,069,902
Dilutive stock options based on the treasury stock method using year-end market price, if higher than the average market price	20,603	45,233	0
TOTALS	16,107,853 =====	16,125,787 =====	16,069,902 =====
Net Income (Loss) before cumulative effect of accounting change	\$ 6,458,000	\$ 10,500,000	(\$ 27,547,000)
Cumulative effect of change in accounting for post- retirement benefits	0	0	(\$ 16,471,000)
Net Income (Loss)	\$ 6,458,000 =====	\$ 10,500,000 =====	(\$ 44,018,000) =====
Per share amount:			
Before accounting change	\$ .40	\$ .65	\$ (1.72)
Cumulative effect of change in accounting for post- retirement benefits	0	0	(1.02)
Net Income (Loss) Per Share of Common Stock	\$ .40 =====	\$ .65 =====	\$ (2.74) =====

## CONSOLIDATED STATEMENTS OF INCOME

Brush Wellman Inc. and Subsidiaries

Years ended December 31, 1993, 1992 and 1991

(Dollars in thousands except per share amounts)

	1993	1992	1991
	-----	-----	-----
Net sales .....	\$295,478	\$265,034	\$267,473
Costs and expenses:			
Cost of sales .....	227,686	192,944	202,080
Selling, administrative and general expenses .....	47,814	46,576	47,837
Research and development expenses .....	7,121	7,294	7,625
Interest expense .....	2,952	3,206	3,755
Impairment and restructuring charge .....	-	-	39,333
Other - net .....	2,199	1,271	2,996
	-----	-----	-----
	287,772	251,291	303,626
	-----	-----	-----
INCOME (LOSS) BEFORE INCOME TAXES	7,706	13,743	(36,153)
Income taxes:			
Currently payable .....	3,597	3,407	1,469
Deferred .....	(2,349)	(164)	(10,075)
	-----	-----	-----
	1,248	3,243	(8,606)
	-----	-----	-----
Net Income (Loss) Before Cumulative Effect of Accounting Change .....	6,458	10,500	(27,547)
Cumulative effect of change in accounting for postretirement benefits (Note J) .....	-	-	(16,471)
	-----	-----	-----
NET INCOME (LOSS)	\$6,458	\$10,500	(\$44,018)
	-----	-----	-----
Net income (loss) per share of Common Stock:			
Before accounting change .....	\$0.40	\$0.65	(\$1.72)
Cumulative effect of change in accounting for postretirement benefits .....	-	-	(1.02)
	-----	-----	-----
Net Income (Loss) Per Share of Common Stock: .....	\$0.40	\$0.65	(\$2.74)
	-----	-----	-----
Average number of shares of Common Stock outstanding .....	16,107,853	16,125,787	16,069,902
See notes to consolidated financial statements.			

# **CONSOLIDATED STATEMENTS OF CASH FLOWS**

Brush Wellman Inc. and Subsidiaries  
Years ended December 31, 1993, 1992, and 1991  
(Dollars in thousands)

	1993	1992	1991
	-----	-----	-----
NET INCOME (LOSS) .....	\$ 6,458	\$10,500	(\$44,018)
ADJUSTMENTS TO RECONCILE NET INCOME TO NET CASH PROVIDED FROM OPERATING ACTIVITIES:			
Depreciation, depletion and amortization .....	18,642	17,851	21,804
Amortization of mine development .....	3,078	2,329	955
Impairment charges .....	-	-	23,844
Cumulative effect of accounting change .....	-	-	16,471
Decrease (Increase) in accounts receivable .....	(9,941)	1,403	2,246
Decrease (Increase) in inventory .....	6,416	(1,586)	2,703
Decrease (Increase) in prepaid and other current assets .....	(112)	559	(1,448)
Increase (Decrease) in accounts payable and accrued expenses .....	(4,721)	(3,651)	5,295
Increase (Decrease) in interest and taxes payable .....	(408)	3,018	(3,184)
Increase (Decrease) in deferred income tax .....	(1,554)	(149)	(3,453)
Increase (Decrease) in other long-term liabilities .....	332	1,805	5,470
Other - net .....	144	(1,216)	273
	-----	-----	-----
NET CASH PROVIDED FROM OPERATING ACTIVITIES	18,334	30,863	26,958
Cash Flows From Investing Activities:			
Payments for purchase of property, plant and equipment .....	(11,901)	(13,604)	(13,605)
Payments for mine development .....	(814)	(848)	(6,389)
Payments for acquisition of business .....	-	(2,296)	-
Other investments - net .....	645	(4,000)	(4,184)
Borrowing from Company-owned life insurance policy .....	14,885	-	-
	-----	-----	-----
NET CASH PROVIDED FROM INVESTING ACTIVITIES	2,815	(20,748)	(24,178)
Cash Flows From Financing Activities:			
Proceeds from (repayment of) short-term debt - net .....	(5,101)	(3,138)	(642)
Proceeds from issuance of long-term debt .....	-	428	32,035
Repayment of long-term debt .....	(9,000)	(1,574)	(22,902)
Issuance of Common Stock under stock option plans .....	10	244	6
Purchase of Common Stock for treasury .....	-	-	(137)
Payments of dividends .....	(4,183)	(3,218)	(11,573)
	-----	-----	-----
NET CASH USED IN FINANCING ACTIVITIES	(18,274)	(7,258)	(3,213)
Effects of Exchange Rate Changes	625	(321)	169
	-----	-----	-----
NET CHANGE IN CASH AND CASH EQUIVALENTS	3,500	2,536	(264)
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	4,190	1,654	1,918
	-----	-----	-----
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$7,690	\$4,190	\$1,654
	-----	-----	-----

See notes to consolidated financial statements.

# **CONSOLIDATED BALANCE SHEETS**

Brush Wellman Inc. and Subsidiaries  
December 31, 1993 and 1992  
(Dollars in thousands)

	1993	1992
	-----	-----
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents .....	\$7,690	\$4,190
Accounts receivable		
(less allowance of \$905 for 1993 and \$781 for 1992) .....	46,462	36,388
Inventories .....	86,477	92,893
Prepaid expenses and deferred income taxes .....	15,595	15,011
	-----	-----
TOTAL CURRENT ASSETS	156,224	148,482
OTHER ASSETS .....	16,231	31,284
PROPERTY, PLANT AND EQUIPMENT		
Land .....	4,399	4,399
Buildings .....	67,570	66,419
Machinery and equipment .....	238,265	235,342
Construction in progress .....	7,720	3,060
Allowances for depreciation and impairment .....	(210,681)	(195,064)
	-----	-----
	107,273	114,156
Mineral resources .....	5,498	5,350
Mine development .....	13,890	18,401
Allowances for amortization and depletion .....	(7,735)	(9,916)
	-----	-----
	11,653	13,835
	-----	-----
PROPERTY, PLANT AND EQUIPMENT-NET	118,926	127,991
GOODWILL .....	1,991	2,282
	-----	-----
	\$293,372	\$310,039
	-----	-----
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Short-term debt .....	\$16,263	\$19,806
Accounts payable .....	5,427	7,565
Salaries and wages .....	5,438	6,147
Taxes other than income taxes .....	2,209	2,179
Other liabilities and accrued items .....	13,175	14,882
Dividends payable .....	804	1,769
Income taxes .....	7,636	7,518
	-----	-----
TOTAL CURRENT LIABILITIES	50,952	59,866
OTHER LONG-TERM LIABILITIES .....	40,663	40,332
LONG-TERM DEBT .....	24,000	33,808
DEFERRED INCOME TAXES .....	5,682	7,209
SHAREHOLDERS' EQUITY		
Common Stock, \$1 par value		
Authorized 45,000,000 shares; issued 21,180,710 shares		
(21,179,810 for 1992) .....	21,181	21,180
Additional paid-in capital .....	43,790	43,781
Retained income .....	188,978	185,737
	-----	-----
	253,949	250,698
Less Common Stock in treasury, 5,093,295 shares .....	81,874	81,874
	-----	-----
TOTAL SHAREHOLDERS' EQUITY	172,075	168,824
	-----	-----
	\$293,372	\$310,039
	-----	-----
	-----	-----

See notes to consolidated financial statements.



# **CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

Brush Wellman Inc. and Subsidiaries  
Years ended December 31, 1993, 1992 and 1991  
(Dollars in thousands except per share amounts)

	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	RETAINED INCOME	COMMON STOCK IN TREASURY
BALANCES AT JANUARY 1, 1991	\$21,162	\$43,549	\$232,917	\$81,737
Net loss .....			(44,018)	
Declared dividends \$.59 per share .....			(9,481)	
Proceeds from sale of 600 shares under option plans .....	1	5		
Purchase of shares for treasury .....				137
Foreign currency translation adjustment .....			3	
BALANCES AT DECEMBER 31, 1991	21,163	43,554	179,421	81,874
Net income .....			10,500	
Declared dividends \$.26 per share .....			(4,184)	
Proceeds from sale of 16,900 shares under option plans .....	17	202		
Income tax benefit from employees' stock options .....	25			
BALANCES AT DECEMBER 31, 1992	21,180	43,781	185,737	81,874
Net income .....			6,458	
Declared dividends \$.20 per share .....			(3,217)	
Proceeds from sale of 900 shares under option plans .....	1	9		
BALANCES AT DECEMBER 31, 1993	\$21,181	\$43,790	\$188,978	\$81,874

See notes to consolidated financial statements.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Brush Wellman Inc. and Subsidiaries  
December 31, 1993

The Company is in the business of manufacturing and selling engineered materials to industrial customers throughout the world.

### NOTE A - ACCOUNTING POLICIES

**CONSOLIDATION:** The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly owned. Investments in affiliates (20% to 50% ownership) are accounted for by the equity method; other investments are carried at cost.

**CASH EQUIVALENTS:** All highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents.

**INVENTORIES:** Inventories are stated at the lower of cost or market. The cost of domestic inventories except ore and supplies is principally determined using the last-in, first-out (LIFO) method. The remaining inventories are stated principally at average cost.

**PROPERTY, PLANT AND EQUIPMENT:** Property, plant and equipment is stated on the basis of cost. Depreciation is computed principally by the straight-line method, except certain facilities for which depreciation is computed by the sum-of-the-years digits method. An impairment reserve is provided when a determination is made that the carrying value of an asset will not be realized based on estimated future cash flows.

**INTANGIBLE ASSETS:** The cost of intangible assets is amortized by the straight-line method over the periods estimated to be benefitted. Goodwill is amortized over periods ranging from ten to forty years.

**INCOME TAXES:** Effective January 1, 1993, the Company adopted Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes." This statement requires that deferred income taxes reflect the tax consequences on future years of differences between the tax bases of assets and liabilities and their financial reporting amounts. The adoption of this standard did not have a significant effect on the consolidated financial statements.

**RECLASSIFICATION:** Certain amounts in prior years have been reclassified to conform with the 1993 consolidated financial statement presentation.

**NET INCOME PER SHARE:** Net income per share is based on the weighted average number of outstanding shares of Common Stock including common stock equivalents (stock options) as appropriate under the treasury stock method.

### NOTE B - IMPAIRMENT AND RESTRUCTURING CHARGE

In 1991, the Company recorded a \$39,333,000 pre-tax charge (\$30,751,000 or \$1.91 per share after taxes) related to the write-down of asset values associated with prior acquisitions and provisions to cover costs associated with severance, early retirement, and environmental matters. The write-downs reflected changed market conditions and circumstances that permanently impaired asset carrying values. The restructuring actions were completed in 1992 with no further impact on net income.

### NOTE C - ACQUISITIONS

In January 1992, the Company acquired for cash and notes the remaining common stock of Tegmen Corporation. This transaction was accounted for as a purchase, and the pro forma financial effect was not material.

### NOTE D - INVENTORIES

Inventories in the consolidated balance sheets are summarized as follows:

(Dollars in thousands)	December 31	
	1993	1992
	----	----
Principally average cost:		
Raw materials and supplies .....	\$ 19,431	\$ 19,485
In process .....	50,349	56,025
Finished .....	33,720	35,445
	-----	-----
	103,500	110,955
Excess of average cost over LIFO		
inventory value .....	17,023	18,062
	-----	-----
	\$ 86,477	\$ 92,893

Inventories aggregating \$59,404,000 and \$58,632,000 are stated at LIFO at December 31, 1993 and 1992, respectively.

#### NOTE E - INTEREST

Interest expense associated with active construction and mine development projects is capitalized and amortized over the future useful lives of the related assets. Interest paid was \$3,184,000, \$3,861,000 and \$4,165,000 in 1993, 1992 and 1991, respectively. Interest costs capitalized and the amounts amortized are as follows:

(Dollars in thousands)	1993	1992	1991
	----	----	----
Interest incurred .....	\$3,177	\$3,837	\$4,409
Less capitalized interest .....	225	631	654
	-----	-----	-----
	\$2,952	\$3,206	\$3,755
	=====	=====	=====
Amortization, included principally in cost of sales .....	\$ 639	\$ 583	\$ 516
	=====	=====	=====

#### NOTE F - DEBT

A summary of long-term debt follows:

(Dollars in thousands)	December 31	
	1993	1992
	----	----
9.53% - 9.68% medium term notes, \$5,000,000 payable in each of 1995, 1997 and 2000 .....	\$15,000	\$15,000
4.4% notes payable to bank under revolving credit agreement .....	--	9,000
7.25% industrial development revenue bonds payable in installments beginning in 2005 .....	3,000	3,000
5.45% - 6.45% industrial development revenue bonds payable in equal installments in 1996 through 2000 .....	4,000	4,000
4.90% note payable in yen in equal installments through 1997 .....	2,000	2,370
Other .....	--	438
	-----	-----
	\$24,000	\$33,808
	=====	=====

The Company has a credit agreement with three banks which provides a maximum availability of \$40,000,000 on a revolving credit basis through March 31, 1995. Borrowings may be made under a number of rate options. Commitment fees are required to be paid on the unused portion of the credit at an annual rate of 0.25%.

The Company has a private placement agreement whereby the Company can issue up to an aggregate of \$75,000,000 of medium-term notes (\$15,000,000 outstanding at December 31, 1993). The notes bear a fixed interest rate and may have maturities from nine months to thirty years from date of issue as agreed upon in each case by the purchaser and the Company.

Included in short-term debt is \$15,786,000 outstanding under lines of credit totaling \$69,524,000. Of the amount outstanding, \$5,796,000 is payable in foreign currencies and \$9,990,000 is denominated in precious metal, primarily gold.

The loan agreements include certain restrictive covenants covering the incurrence of additional debt, interest coverage, and maintenance of working capital and tangible net worth (as defined).

The carrying amounts of the Company's short-term borrowings approximate their fair value. The fair value of the Company's long-term debt at December 31, 1993 is estimated to be \$25,900,000. This amount was determined using discounted cash flow analysis based on the Company's current incremental borrowing rates for similar types of borrowing arrangements.

## NOTE G - CAPITAL STOCK

The Company has 5,000,000 shares of Serial Preferred Stock authorized (no par value), none of which has been issued. Certain terms of the Serial Preferred Stock, including dividends, redemption and conversion, will be determined by the Board of Directors prior to issuance.

On January 26, 1988, the Company's Board of Directors declared a dividend of one preferred stock purchase right for each outstanding share of Common Stock. Each right entitles the shareholder to buy one one-hundredth of a share of Serial Preferred Stock, Series A, at an initial exercise price of \$100. 450,000 unissued shares of Serial Preferred Stock have been designated as Series A Preferred Stock. Each share of Series A Preferred Stock will be entitled to participate in dividends on an equivalent basis with one hundred shares of Brush Wellman Common Stock. Each share of Series A Preferred Stock will be entitled to one vote. The rights are not exercisable and will not be evidenced by separate right certificates until a specified time after any person or group acquires beneficial ownership of 20% or more (or announces a tender offer for 20% or more) of Brush Wellman Common Stock. The rights expire on January 26, 1998, and can be redeemed for 3 cents per right under certain circumstances.

The 1989 Stock Option Plan authorizes the granting of options for shares of Common Stock at not less than the fair market value of the shares at the date of grant. Options may be qualified or non-qualified, or a combination thereof. Options outstanding under the 1989 plan and previous plans generally become exercisable over a four-year period and expire ten years from the date of the grant.

The 1990 Stock Option Plan for Non-Employee Directors provides for a one-time grant of 5,000 options to each non-employee director at not less than the fair market value of the shares at the date of the grant. Options are non-qualified and become exercisable six months after the date of grant. The options generally expire ten years after the date they were granted.

The Company has a plan authorizing the granting of stock appreciation rights related to options granted under any stock option plan. Such rights permit an optionee, by surrendering all or a portion of an option, to receive an amount equal to 100% (or such lesser percentage as the Organization and Compensation Committee of the Board of Directors may determine) of the excess at date of exercise of the market price of the Common Stock over the option price. Such amount may be paid in cash, Common Stock or in such a manner as the Committee may determine. During 1993, 1992 and 1991 no stock appreciation rights were granted nor were exercised. At December 31, 1993 no stock appreciation rights were outstanding and 694,050 stock appreciation rights were available for future grants.

A summary of option activity during the years 1993, 1992 and 1991 follows:

	Shares	Option Prices
Outstanding at January 1, 1991 .....	1,375,715	\$10.34 to \$38.94
Granted .....	225,000	\$12.00 to \$16.25
Exercised .....	(600)	\$10.34
Cancelled .....	(50,000)	\$14.50 to \$38.94
Outstanding at December 31, 1991 .....	1,550,115	\$12.00 to \$38.94
Granted .....	252,000	\$14.00 to \$17.63
Exercised .....	(16,900)	\$12.00 to \$14.50
Cancelled .....	(17,400)	\$12.00 to \$38.94
Outstanding at December 31, 1992 .....	1,767,815	\$12.00 to \$38.94
Granted .....	257,250	\$11.81 to \$13.56
Exercised .....	(900)	\$12.00 to \$14.50
Cancelled .....	(280,075)	\$12.00 to \$38.94

	-----	
Outstanding at December 31, 1993 .....	1,744,090	\$11.81 to \$38.94
	=====	

At December 31, 1993, options for 1,377,160 shares (1,402,615 shares at December 31, 1992) were exercisable, and there were 112,275 shares (89,450 at December 31, 1992) available for future grants.

## NOTE H - INCOME TAXES

As discussed in Note A, the Company adopted SFAS No. 109, "Accounting for Income Taxes," effective January 1, 1993.

A reconciliation of the federal statutory and effective income tax rates follows:

	1993	1992	1991
	----	----	----
Federal statutory rate (benefit) .....	34.0%	34.0%	(34.0)%
State and local income taxes, net of federal tax effect .....	2.7	3.2	0.7
Effect of excess of percentage depletion over cost depletion .....	(15.3)	(9.5)	(3.5)
Company-owned life insurance .....	(7.2)	(3.4)	(1.2)
Difference due to book and tax basis of assets of acquired businesses .....	1.1	2.6	14.1
Taxes on foreign income - net .....	(1.9)	(4.1)	--
Other items .....	2.8	0.8	0.1
	-----	-----	-----
Effective tax rate (benefit) .....	16.2%	23.6%	(23.8)%
	=====	=====	=====

Included in income taxes currently payable, as shown in the Consolidated Statements of Income, are \$312,000, \$658,000 and \$415,000 of state and local income taxes in 1993, 1992 and 1991, respectively.

The Company made domestic and foreign income tax payments, net of refunds, of \$4,082,000, \$510,000, and \$4,581,000 in 1993, 1992 and 1991, respectively.

At December 31, 1993, the Company has net operating loss carryforwards of \$4,531,000 for income tax purposes that expire in years 1994 through 1997. For financial reporting purposes, a valuation allowance of \$1,540,000 has been recognized to offset the deferred tax assets related to those carryforwards.

Under Statement 109, deferred tax assets and liabilities are determined based on temporary differences between the financial reporting bases and the tax bases of assets and liabilities. Deferred tax assets and (liabilities) recorded in the Consolidated Balance Sheets consist of the following at December 31:

(Dollars in Thousands)	1993
-----	-----
Postretirement benefits other than pensions .....	\$11,758
Alternative minimum tax credit .....	5,825
Other deferred assets and reserves .....	4,676
Restructuring accrual .....	1,987
Net operating loss carryforwards .....	1,540
	-----
	25,786
Valuation allowance .....	(1,540)
	-----
Total deferred tax assets .....	24,246
	-----
Depreciation .....	(11,709)
Pensions .....	(3,547)
Mine development .....	(2,814)
Capitalized interest expense .....	(1,514)
Inventory .....	(740)
Other .....	(66)
	-----
Total deferred tax liabilities .....	(20,390)
	-----
Net deferred tax asset .....	\$ 3,856
	=====

During 1992 and 1991 deferred federal income taxes were provided for timing differences. These items consisted of the following:

(Dollars in Thousands)

	1992	1991
	-----	-----
Alternative minimum tax liability .....	\$ (876)	\$ (1,873)
Accelerated depreciation .....	(626)	(4,961)
Mine development .....	(381)	1,270
Employee benefits .....	(328)	(356)
Restructuring accrual .....	1,036	(3,471)
Difference due to book and tax basis of inventory .....	397	(472)
Difference due to book and tax basis of other assets .....	416	462
Other items .....	198	(674)
	-----	-----
Total deferred tax .....	\$ (164)	\$ (10,075)
	=====	=====

## NOTE I - PENSIONS

The Company and its subsidiaries have noncontributory pension plans covering substantially all U.S. employees. Plans provide benefits based on the participants' years of service and compensation or stated amounts for each year of service. The Company's funding policy is to make the minimum actuarially computed annual contributions required by applicable regulations. No contributions were made in 1993, 1992 or 1991.

A summary of the components of net periodic pension cost for pension plans follows (in thousands):

Defined benefit plans:	1993	1992	1991
	----	----	----
Service cost-benefits earned during the period .....	\$1,846	\$1,603	\$ 1,668
Interest cost on projected benefit obligation .....	4,035	3,932	3,215
Actual return on plan assets .....	(5,744)	(3,692)	(12,789)
Net amortization and deferral .....	(669)	(2,472)	7,389
	-----	-----	-----
Total (credit) expense .....	\$ (532)	\$ (629)	\$ (517)
	=====	=====	=====

The following table sets forth the funded status of the Company's plans and the amounts recognized in the consolidated balance sheets at December 31 (in thousands):

	Plans Whose Assets Exceed Accumulated Benefits	
	-----	
Actuarial present value of benefit obligations:	1993	1992
	----	----
Vested benefit obligation .....	\$ 42,986	\$ 36,496
	=====	=====
Accumulated benefit obligation .....	46,763	39,802
	=====	=====
Plan assets at fair value .....	72,652	70,404
Projected benefit obligation .....	(56,860)	(47,491)
	-----	-----
Plan assets in excess of projected benefit obligation .....	15,792	22,913
Unrecognized net gain .....	(1,579)	(8,754)
Unrecognized net assets, at date of adopting FAS 87, net of amortization .....	(6,137)	(6,844)
Unrecognized prior service cost .....	2,356	2,515
Tax effect of recording acquired excess pension assets .....	--	(667)
	-----	-----
Net pension asset recognized at December 31 .....	\$ 10,432	\$ 9,163
	=====	=====

Assumptions used in accounting for the pension plans were:

	1993	1992	1991
	----	----	----
Weighted-average discount rate .....	7.5%	8.5%	9%
Rate of increase in compensation levels .....	5%	5%	5%
Expected long-term rate of return on assets ...	9%	9%	8%

Plan assets consist primarily of listed common stocks, corporate and government bonds and short-term investments.

The Company also has accrued unfunded retirement arrangements for certain U.S. employees and directors. At December 31, 1993, the projected benefit obligation was \$1,213,000 (\$1,113,000 in 1992) and is included in other long-term liabilities. Certain foreign subsidiaries have funded and accrued unfunded retirement arrangements which are not material to the consolidated financial statements.

In connection with a voluntary early retirement program, the Company incurred a loss on the settlement of vested benefit obligations in the amount of \$1,872,000 which was fully provided for in the restructuring charge taken in 1991.

The Company also sponsors a defined contribution plan available to substantially all U.S. employees. Company contributions to the plan are based on matching a percentage of employee savings up to a specified savings level. The Company's contribution was \$1,528,708 in 1993, \$1,447,000 in 1992 and \$1,445,000 in 1991.

#### NOTE J - OTHER POSTRETIREMENT BENEFIT PLANS

In addition to the Company's defined benefit pension plans, the Company currently provides postretirement medical and death benefits to certain full-time employees and spouses, excluding those of subsidiaries. The Company also provides medical benefits to certain retired employees and spouses from an operation that was divested in 1985.

In 1991, the Company revised its health care plan for certain employees, excluding those of subsidiaries, who retired after June 30, 1992. Employees become eligible at age 55 with 10 years of service. Under the revised plan, employees and spouses receive credits, based on years of service up to 30, to be used toward the purchase of medical benefits. Contributions toward the cost of medical benefits are required from retirees with less than 30 years of service and also for increases in the cost of medical benefits due to inflation. Employees who retired prior to July 1, 1992 generally had less stringent eligibility criteria and contribution rates, and account for the majority of the postretirement benefit obligation.

In 1991, the Company adopted FASB Statement No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The transition obligation of \$24,956,000 as of January 1, 1991 was recorded as a one-time charge in the first quarter of 1991 and reduced net income by \$16,471,000, or \$1.02 per share. The ongoing effect of adopting the new standard increased 1991 net periodic postretirement benefit cost by \$1,596,000 and decreased 1991 net income by \$1,216,000, or \$.08 per share.

The following table presents the plan's funded status and the amounts recognized in the Company's consolidated balance sheets (in thousands):

	December 31,	
	1993	1992
	-----	-----
Accumulated postretirement benefit obligation:		
Retirees .....	\$28,388	\$32,519
Fully eligible active plan participants .....	3,816	2,885
Other active plan participants .....	3,816	2,842
	-----	-----
	36,020	38,246
Plan assets .....	0	0
Unrecognized net loss .....	(1,437)	(3,102)
	-----	-----
Accrued postretirement benefit obligation .....	\$34,583	\$35,144
	=====	=====

Net periodic postretirement benefit cost includes the following components (in thousands):

	1993	1992	1991
	-----	-----	-----
Service cost .....	\$ 282	\$ 320	\$ 356
Interest cost .....	2,826	3,061	2,732
Adjustment to benefit obligation .....	(1,227)	--	--
	-----	-----	-----
Net periodic postretirement benefit cost .....	\$1,881	\$3,381	\$3,088
	=====	=====	=====



The weighted-average annual assumed rate of increase in the per capita cost of covered benefits (i.e., health care cost trend rate) used in determining the accumulated postretirement benefit obligation as of December 31, 1993 is 7.25% for retirees age 65 and over and 10% for retirees under age 65 in 1994, and both are assumed to decrease gradually to 5.5% until 2003 and remain at that level thereafter. The health care cost trend rate assumption has a significant effect on the amounts reported. For example, increasing the assumed health care cost trend rates by one percentage point in each year would increase the accumulated postretirement benefit obligation as of December 31, 1993 by \$2,447,000 and the aggregate of the service and interest cost components of net periodic postretirement benefit cost for 1993 by \$237,000. This increase would apply only to employees who retired prior to July 1, 1992.

The weighted-average discount rate used in determining the accumulated postretirement benefit obligation was 7.5% at December 31, 1993, 8.5% at December 31, 1992 and 9% at December 31, 1991.

In connection with a voluntary early retirement program, the Company incurred a loss of \$1,745,000 which was fully provided for in the restructuring charge taken in 1991.

#### **NOTE K - OTHER POSTEMPLOYMENT BENEFITS**

In November 1992, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 112, "Employers' Accounting for Postemployment Benefits." This Standard will require accrual accounting for benefits to former or inactive employees after employment but before retirement. The Company will adopt this Standard in the first quarter of 1994. The cumulative effect of adoption will not have a material impact on the consolidated financial statements.

## NOTE L - CONTINGENCIES

The Company is from time to time involved in various legal and other proceedings that relate to the ordinary course of operating its business, including, but not limited to: employment-related actions; product liability claims; and workers' compensation claims.

While the Company is unable to predict the outcome of current proceedings, based upon the facts currently known to it, the Company does not believe that resolution of these proceedings will have a material adverse effect on the financial condition or operations of the Company.

The Company has an active program for environmental compliance which includes the identification of environmental projects and estimating their impact on the Company's financial performance and available resources. Environmental expenditures that relate to current operations, such as wastewater treatment and control of airborne emissions, are either expensed or capitalized as appropriate. For projects involving remediation, estimates of the probable costs are made and the Company has set aside a reserve of \$4.4 million at December 31, 1993 (\$4.9 million at December 31, 1992). This reserve covers existing or currently foreseen projects. Expenditures are charged to the reserve which is adjusted from time to time as additional projects are identified and for which probable costs of remediation can be estimated.

### NOTE M - OPERATIONS BY GEOGRAPHIC AREA

Years ended December 31, 1993, 1992 and 1991  
(Dollars in thousands)

	1993			
	OPERATIONS IN THE UNITED STATES	INTERNATIONAL DISTRIBUTION SUBSIDIARIES	ADJUSTMENTS & ELIMINATIONS	CONSOLIDATED
Sales to unaffiliated customers .....	\$244,394	\$51,084		\$295,478
Transfers between operations .....	32,339		(\$32,339)	
Net Sales .....	\$276,733	\$51,084	(\$32,339)	\$295,478
Operating profit (loss) .....	\$15,986	\$1,034	\$369	\$17,389
Corporate expense .....				(6,731)
Interest expense .....				(2,952)
Income before income taxes .....				\$7,706
Identifiable assets at December 31, 1993 .....	\$259,839	\$30,894	(\$2,927)	\$287,806
Corporate assets .....				5,566
Total assets at December 31, 1993 .....				\$293,372
	1992			
Sales to unaffiliated customers .....	\$219,443	\$45,591		\$265,034
Transfers between operations .....	28,550		(\$28,550)	
Net Sales .....	\$247,993	\$45,591	(\$28,550)	\$265,034
Operating profit .....	\$21,992	\$1,496	\$587	\$24,075
Corporate expense .....				(7,126)
Interest expense .....				(3,206)
Income before income taxes .....				\$13,743
Identifiable assets at December 31, 1992 .....	\$258,316	\$30,081	(\$2,126)	\$286,271
Corporate assets .....				23,768
Total assets at December 31, 1992 .....				\$310,039
	1991			
Sales to unaffiliated customers .....	\$219,351	\$48,122		\$267,473
Transfers between operations .....	31,219		(\$31,219)	
Net Sales .....	\$250,570	\$48,122	(\$31,219)	\$267,473
Operating profit (loss) - after the restructuring charge and cumulative effect of accounting change .....	(\$51,957)	\$2,231	\$1,116	(\$48,610)
Corporate expense .....				(8,744)
Interest expense .....				(3,755)

Loss before income taxes .....				----- (\$61,109) =====
Identifiable assets at December 31, 1991 .....	\$259,582 =====	\$31,847 =====	(\$2,513) =====	\$288,916
Corporate assets .....				18,380 -----
Total assets at December 31, 1991 .....				\$307,296 =====

Transfers between operations are accounted for in the same manner as sales to unaffiliated customers. Corporate assets are principally cash and cash equivalents and other assets such as investments and the cash surrender value of the Company-owned life insurance policies. Total international sales were \$86,334,000 in 1993, \$70,922,000 in 1992, and \$76,090,000 in 1991. These are comprised of exports from United States operations and direct sales by international distribution subsidiaries. Most of these sales represent products manufactured in the United States.

Export sales from United States operations amounted to \$35,101,000 in 1993, \$25,331,000 in 1992, and \$27,968,000 in 1991.

## NOTE N - QUARTERLY DATA (UNAUDITED)

### Years ended December 31, 1993 and 1992

(Dollars in thousands except per share amounts)

1993					
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net Sales .....	\$69,380	\$70,852	\$76,816	\$78,430	\$295,478
Gross Margin .....	15,846	15,589	16,831	19,526	67,792
Percent of Sales .....	22.8%	22.0%	21.9%	24.9%	22.9%
Net Income .....	1,154	158	1,663	3,483	6,458
Per Share of Common Stock:					
Net Income .....	0.07	0.01	0.10	0.22	0.40
Dividends .....	0.05	0.05	0.05	0.05	0.20
Stock price range					
High .....	17.50	13.63	12.38	14.38	
Low .....	13.25	11.38	11.38	11.88	
1992					
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net Sales .....	\$67,804	\$67,325	\$63,058	\$66,847	\$265,034
Gross Margin .....	20,292	18,653	15,355	17,790	72,090
Percent of Sales .....	29.9%	27.7%	24.4%	26.6%	27.2%
Net Income .....	4,224	3,062	1,127	2,087	10,500
Per Share of Common Stock:					
Net Income .....	0.26	0.19	0.07	0.13	0.65
Dividends .....	0.05	0.05	0.05	0.11	0.26
Stock price range					
High .....	19.00	18.00	18.25	16.88	
Low .....	12.25	16.00	15.63	14.75	

## REPORT OF ERNST & YOUNG INDEPENDENT AUDITORS

Board of Directors and Shareholders  
Brush Wellman Inc.

We have audited the accompanying consolidated balance sheets of Brush Wellman Inc. and subsidiaries as of December 31, 1993 and 1992, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 1993. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Brush Wellman Inc. and subsidiaries at December 31, 1993 and 1992, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 1993 in conformity with generally accepted accounting principles.

As discussed in Note J to the consolidated financial statements, in 1991 the Company changes its method of accounting for other postretirement benefits.

*/s/ ERNST & YOUNG*

*Cleveland, Ohio  
January 25, 1994*

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## REPORT OF MANAGEMENT

The management of Brush Wellman Inc. is responsible for the contents of the financial statements which are prepared in conformity with generally accepted accounting principles. The financial statements necessarily include amounts based on judgments and estimates. Financial information elsewhere in the annual report is consistent with that in the financial statements.

The Company maintains a comprehensive accounting system which includes controls designed to provide reasonable assurance as to the integrity and reliability of the financial records and the protection of assets. However, there are inherent limitations in the effectiveness of any system of internal controls and, therefore, it provides only reasonable assurance with respect to financial statement preparation. An internal audit staff is employed to regularly test and evaluate both internal accounting controls and operating procedures, including compliance with the Company's statement of policy regarding ethical and lawful conduct. The role of Ernst & Young, the independent auditors, is to provide an objective review of the financial statements and the underlying transactions in accordance with generally accepted auditing standards.

The Audit Committee of the Board of Directors, comprised of directors who are not members of management, meets regularly with management, the independent auditors and the internal auditors to ensure that their respective responsibilities are properly discharged. Ernst & Young and the internal audit staff have full and free access to the Audit Committee.

*/s/ Clark G. Waite*

*Clark G. Waite  
Senior Vice President and Chief Financial Officer*

SELECTED FINANCIAL DATA  
Brush Wellman Inc. and Subsidiaries  
(Dollars in thousands except per share amounts)

	1993	1992	1991	1990	1989
	-----	-----	-----	-----	-----
FOR THE YEAR					
Net Sales .....	\$295,478	\$265,034	\$267,473	\$297,390	\$317,828
Cost of sales .....	227,686	192,944	202,080	212,841	233,165
Interest expense .....	2,952	3,206	3,755	3,359	2,860
Income (loss) from continuing operations					
before income taxes .....	7,706	13,743	(61,109)	24,773	26,335
Income taxes (benefit) .....	1,248	3,243	(17,091)	7,214	7,793
Income (loss) from continuing operations .....	6,458	10,500	(44,018)	17,559	18,542
Net income (loss) .....	6,458	10,500	(44,018)	17,559	18,542
Per share of Common Stock:					
Income (loss) from continuing operations .....	0.40	0.65	(2.74)	1.09	1.10
Net income (loss) .....	0.40	0.65	(2.74)	1.09	1.10
Cash dividends declared .....	0.20	0.26	0.59	0.71	0.67
Depreciation and amortization .....	21,720	20,180	22,759	24,070	24,077
Capital expenditures .....	11,901	13,604	13,605	16,160	19,946
Mine development expenditures .....	814	848	6,389	5,699	259
YEAR-END POSITION					
Working Capital .....	105,272	88,616	80,427	87,570	78,346
Ratio of current assets to current liabilities .....	3.1 to 1	2.5 to 1	2.2 to 1	2.4 to 1	2.1 to 1
Property and equipment:					
At cost .....	337,342	332,971	321,981	307,088	292,708
Cost less depreciation and impairment .....	118,926	127,991	132,579	143,635	141,639
Total assets .....	293,372	310,039	307,296	338,982	338,279
Other long-term liabilities .....	40,663	40,332	38,029	9,356	9,087
Long-term debt .....	24,000	33,808	34,946	26,673	21,076
Shareholders' equity .....	172,075	168,824	162,264	215,891	211,769
Book value per share .....	10.70	10.49	10.10	13.43	13.10
Number of shares of stock outstanding .....	16,087,415	16,086,515	16,069,615	16,077,723	16,166,611
Shareholders of record .....	2,566	2,762	3,116	3,446	3,820
Number of employees .....	1,803	1,831	1,943	2,079	2,160

See notes to consolidated financial statements.

Impairment and restructuring charges reduced net income by \$30,751,000 in 1991 and \$8,400,000 in 1989.

The cumulative effect of a change in accounting for postretirement benefits reduced net income by \$16,471,000 in 1991.

In December 1986, a business acquisition was made; the pro forma effect would have increased 1986 net sales by \$35,000,000.

Share and per share amounts have been adjusted to reflect a 2-for-1 stock split in June 1984 and a 3-for-2 stock split in January 1983.

Provisions for the discontinuance of the friction products and quartz businesses reduced net income by \$10,025,000 in 1985.

1988	1987	1986	1985	1984	1983
-----	-----	-----	-----	-----	-----
\$345,838	\$307,571	\$241,428	\$242,902	\$281,142	\$210,192
239,554	211,885	161,392	158,216	176,264	134,739
2,843	2,965	2,148	1,176	2,795	4,019
51,861	45,823	40,253	48,160	69,088	41,945
19,344	19,658	17,578	20,248	27,856	17,317
32,517	26,165	22,675	27,912	41,232	24,628
32,517	26,165	22,675	17,887	41,539	25,697
1.79	1.38	1.20	1.48	2.19	1.33
1.79	1.38	1.20	0.95	2.20	1.39
0.63	0.59	0.55	0.51	0.47	0.42
23,405	22,098	17,903	15,710	15,292	14,513
22,645	18,464	25,239	44,211	29,626	19,805
503	581	3,451	7,548	215	151
92,530	109,063	103,416	96,480	107,506	88,166
2.4 to 1	2.6 to 1	2.9 to 1	3.6 to 1	3.4 to 1	3.8 to 1
279,927	266,543	254,276	222,617	208,459	180,861
143,180	144,829	144,107	125,643	110,925	97,728
357,751	367,473	341,210	299,049	294,196	251,655
9,547	10,333	8,270			
29,908	25,481	26,563	26,263	27,627	31,650
232,840	242,673	234,725	220,453	210,550	176,240
13.49	13.17	12.48	11.77	11.31	9.54
17,262,311	18,431,703	18,815,799	18,723,013	18,623,780	18,482,412
4,014	4,212	4,522	4,916	4,739	4,548
2,602	2,564	2,266	1,860	2,190	1,906

## EXHIBIT 21

### Subsidiaries of Registrant -----

The Company has the following subsidiaries, all of which are wholly owned and included in the consolidated financial statements.

Name of Subsidiary -----	State or Country of Incorporation -----
Brush Wellman GmbH	Germany
Brush Wellman (Japan), Ltd.	Japan
Brush Wellman Limited	England
Technical Materials, Inc.	Ohio
Tegmen Corp.	New York
Williams Advanced Materials Inc.	New York
Williams Advanced Materials PTE Ltd.	Singapore



## CONSENT OF INDEPENDENT AUDITORS EXHIBIT 23

Board of Directors and Shareholders  
Brush Wellman Inc.

We consent to the incorporation by reference in this Annual Report (Form 10-K) of Brush Wellman Inc. of our report dated January 25, 1994, included in the 1993 Annual Report to Shareholders of Brush Wellman Inc.

Our audits also included the financial statement schedules listed in Item 14(a). These schedules are the responsibility of the Company's management. Our responsibility is to express an opinion based on our audits. In our opinion, the financial statement schedules, referred to above, when considered in relation to the basic financial statements taken as a whole, present fairly in all material respects the information set forth therein.

We also consent to the incorporation by reference in the following Registration Statements and Post-Effective Amendments of our report dated January 25, 1994, with respect to the consolidated financial statements and schedules of Brush Wellman Inc. included or incorporated by reference in this Form 10-K for the year ended December, 31, 1993:

Registration Statement Number 33-488866 on Form S-8 dated June 27, 1992;

Registration Statement Number 33-45323 on Form S-8 dated February 3, 1992;

Post-Effective Amendment Number 1 to Registration Statement Number 33-28950 on Form S-8 dated February 3, 1992

**Registration Statement Number 33-35979 on Form S-8 dated July 20, 1990;**

**Registration Statement Number 33-28950 on Form S-8 dated May 26, 1989;**

**Registration Statement Number 33-28605 on Form S-8 dated May 5, 1989;**

Registration Statement Number 33-23896 on Form S-8 dated August 22, 1988;

**Registration Statement Number 2-90724 on Form S-8 dated April 27, 1984;**

Post-Effective Amendment Number 4 to Registration Statement Number 2-64080 on Form S-8 dated April 22, 1983;

**ERNST & YOUNG**

*/S/ Ernst & Young*

*Cleveland, Ohio*

*March 23, 1994*

## EXHIBIT 24

### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned directors and officers of BRUSH WELLMAN INC., an Ohio corporation (the "Corporation"), hereby constitutes and appoints Gordon D. Harnett, Clark G. Waite, Michael C. Hasychak, Leigh B. Trevor and Louis Rorimer, and each of them, their true and lawful attorney or attorneys-in-fact, with full power of substitution and revocation, for them and in their names, place and stead, to sign on their behalf as a director or officer, or both, as the case may be, of the Corporation, an Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 on Form 10-K for the fiscal year ended December 31, 1993, and to sign any and all amendments to such Annual Report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorney or attorneys-in-fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they might or could do in person, hereby ratifying and confirming all that said attorney or attorneys-in-fact or any of them or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands as of the 1st day of March, 1994.

/s/ Gordon D. Harnett

-----  
Gordon D. Harnett, Chairman, President,  
Chief Executive Officer and Director  
(Principal Executive Officer)

/s/ Gerald C. McDonough

-----  
Gerald C. McDonough, Director

/s/ Albert C. Bersticker

-----  
Albert C. Bersticker, Director

/s/ Robert M. McInnes

-----  
Robert M. McInnes, Director

/s/ Charles F. Brush, III

-----  
Charles F. Brush, III, Director

/s/ Henry G. Piper

-----  
Henry G. Piper, Director

-----  
Frank B. Carr, Director

/s/ John Sherwin, Jr.

-----  
John Sherwin, Jr., Director

/s/ William P. Madar

-----  
William P. Madar, Director

/s/ Clark G. Waite

-----  
Clark G. Waite, Director and Senior  
Vice President, Finance and  
Administration, Chief Financial  
Officer and Secretary  
(Principal Financial and Accounting  
Officer)

/s/ Julien L. McCall

-----  
Julien L. McCall, Director

**Exhibit 99(a)**

**FORM 11-K**

**FOR ANNUAL REPORTS OF EMPLOYEE STOCK PURCHASE, SAVINGS  
AND SIMILAR PLANS PURSUANT TO SECTION 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES**

**EXCHANGE ACT OF 1934 [FEE REQUIRED]**

For the fiscal year ended December 30, 1993

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934 [NO FEE REQUIRED]**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-7006

**BRUSH WELLMAN INC.  
SAVINGS AND INVESTMENT PLAN**  
(Full Title of the Plan)

**BRUSH WELLMAN INC.**  
17876 St. Clair Avenue  
Cleveland, Ohio 44110

(Name of issuer of the securities held  
pursuant to the plan and the address  
of its principal executive office.)

**BRUSH WELLMAN INC.  
SAVINGS AND INVESTMENT PLAN**

REQUIRED INFORMATION

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a. Schedule of Assets held for Investment Purposes.	13
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Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on the 17th day of March, 1994.

**BRUSH WELLMAN INC.  
SAVINGS AND INVESTMENT PLAN**

*By /s/ Dennis L. Habrat*

-----

*Member of the Administrative  
Committee*

**RICHARD A. WRIGHT**  
**ANTHONY J. WESLEY**  
**MARK G. MILLS**  
**WILLIAM M. POTOCZAK KENNETH E. NOWAK**

**REPORT OF INDEPENDENT AUDITORS**

Administrative Committee of  
Brush Wellman Inc. Savings  
and Investment Plan

We have audited the financial statements of Brush Wellman Inc. Savings and Investment Plan listed in the Annual Report on Form 11-K as of and for the years ended December 30, 1993 and 1992. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Brush Wellman Inc. Savings and Investment Plan for 1991 as listed in the Annual Report on Form 11-K were audited by other auditors whose report dated April 1, 1992, expressed an unqualified opinion on those statements.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements listed in the Annual Report on Form 11-K present fairly, in all material respects, the financial position of Brush Wellman Inc. Savings and Investment Plan at December 30, 1993 and 1992, the results of its operations and changes in its plan equity for the years then ended in conformity with generally accepted accounting principles.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedules of assets held for investment purposes as of December 30, 1993 and reportable transactions for the year ended December 30 1993 are presented for purposes of complying with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, and are not a required part of the financial statements. The supplemental schedules have been subjected to the auditing procedures applied in our audit of the financial statements and, in our opinion, are fairly stated in all material respects in relation to the financial statements taken as a whole.

Wright, Wesley & Mills, P.C.

*/S/ Wright, Wesley & Mills, P.C.*

*March 17, 1994*

**BRUSH WELLMAN INC.**  
**SAVINGS AND INVESTMENT PLAN**  
**STATEMENT OF FINANCIAL CONDITION**  
**DECEMBER 30, 1993**

ASSETS	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND
-----	-----	-----	-----	-----	-----
Brush Wellman Inc. Common Stock (cost \$17,033,792)					\$11,631,149
Managed Guaranteed Investment Contract Fund (cost \$13,295,724)	\$14,307,606				
Fidelity Equity Index Portfolio (cost \$5,223,194)		\$5,826,691			
Fidelity Fund Inc. (cost \$2,023,888)			\$2,115,389		
Fidelity Puritan Fund (cost \$3,671,135)				\$4,013,010	
Participant Promissory Notes (cost \$2,416,728)					
Employee Benefits Money Market Fund (cost \$324,800)		14,906	4,885	8,104	180,974
	-----	-----	-----	-----	-----
	14,307,606	5,841,597	2,120,274	4,021,114	11,812,123
Contribution Receivable:					
Company					120,329
401(k)	132,822	49,240	25,214	44,991	40,651
Participant	12,738	7,106	4,004	5,943	3,125
	-----	-----	-----	-----	-----
	145,560	56,346	29,218	50,934	164,105
Interest Receivable	92	102	49	80	383
Dividends Receivable		46,228			40,331
Other	316	93	33	69	(4,075)
	-----	-----	-----	-----	-----
	408	46,423	82	149	36,639
	-----	-----	-----	-----	-----
TOTAL ASSETS	\$14,453,574	\$5,944,366	\$2,149,574	4,072,197	\$12,012,867
	=====	=====	=====	=====	=====
LIABILITIES & PLAN EQUITY					
-----					
Liabilities:					
Benefits Payable	\$115,265	\$50,153	\$13,895	\$28,410	\$109,161
Other	(123,891)	18,184	(8,995)	(20,680)	133,377
Plan Equity	14,462,200	5,876,029	2,144,674	4,064,467	11,770,329
	-----	-----	-----	-----	-----
TOTAL LIABILITIES & PLAN EQUITY	\$14,453,574	\$5,944,366	\$2,149,574	\$4,072,197	\$12,012,867
	=====	=====	=====	=====	=====

ASSETS	PAYSOP FUND	LOAN FUND	TOTAL
-----	-----	-----	-----
Brush Wellman Inc. Common Stock (cost \$17,033,792)	\$206,511		\$11,837,660
Managed Guaranteed Investment Contract Fund (cost \$13,295,724)			14,307,606
Fidelity Equity Index Portfolio (cost \$5,223,194)			5,826,691
Fidelity Fund Inc. (cost \$2,023,888)			2,115,389
Fidelity Puritan Fund (cost \$3,671,135)			4,013,010
Participant Promissory Notes (cost \$2,416,728)		\$2,416,728	2,416,728
Employee Benefits Money Market Fund (cost \$324,800)	22,712	93,219	324,800
	-----	-----	-----
	229,223	2,509,947	40,841,884
Contribution Receivable:			
Company			120,329
401(k)			292,918
Participant			32,916
	-----	-----	-----
			446,163
Interest Receivable	66	398	1,170
Dividends Receivable	725		87,284
Other	1		(3,563)
	-----	-----	-----

	792	398	84,891
	-----	-----	-----
TOTAL ASSETS	\$230,015	\$2,510,345	\$41,372,938
	=====	=====	=====
LIABILITIES & PLAN EQUITY			
-----			
Liabilities:			
Benefits Payable	\$2,525		\$319,409
Other		\$185,564	183,559
Plan Equity	227,490	2,324,781	40,869,970
	-----	-----	-----
TOTAL LIABILITIES & PLAN EQUITY	\$230,015	\$2,510,345	\$41,372,938
	=====	=====	=====

See accompanying notes to financial statements.

**BRUSH WELLMAN INC.**  
**SAVINGS AND INVESTMENT PLAN**  
**STATEMENT OF FINANCIAL CONDITION**  
**DECEMBER 30, 1992**

ASSETS	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND
-----	-----	-----	-----	-----	-----
Brush Wellman Inc. Common Stock (cost \$15,665,630)					\$10,463,564
Managed Guaranteed Investment Contract Fund (cost \$12,828,874)	\$12,954,848				
Fidelity Equity Index Portfolio (cost \$4,926,268)		\$5,293,097			
Fidelity Fund Inc. (cost \$1,386,712)			\$1,464,623		
Fidelity Puritan Fund (cost \$2,225,922)				\$2,409,947	
Participant Promissory Notes (cost \$2,456,585)					
Employee Benefits Money Market Fund (cost \$102,001)					7,478
	-----	-----	-----	-----	-----
	12,954,848	5,293,097	1,464,623	2,409,947	10,471,042
Contributions Receivable:					
Company					116,647
401(k)	131,561	50,542	21,349	27,862	50,218
Participant	11,386	3,906	2,717	4,015	3,203
	-----	-----	-----	-----	-----
	142,947	54,448	24,066	31,877	170,068
Interest Receivable	64	27	12	16	236
Dividends Receivable					73,764
Other			57,359		
	-----	-----	-----	-----	-----
	64	27	57,371	16	74,000
	-----	-----	-----	-----	-----
TOTAL ASSETS	\$13,097,859	\$5,347,572	\$1,546,060	\$2,441,840	\$10,715,110
	=====	=====	=====	=====	=====
LIABILITIES & PLAN EQUITY					
-----					
Liabilities:					
Benefits Payable	\$67,775	\$5,890			\$67,999
Other	(83,693)	(27,253)	(\$10,601)	(\$13,122)	(26,209)
Plan Equity	13,113,777	5,368,935	1,556,661	2,454,962	10,673,320
	-----	-----	-----	-----	-----
TOTAL LIABILITIES & PLAN EQUITY	\$13,097,859	\$5,347,572	\$1,546,060	\$2,441,840	\$10,715,110
	=====	=====	=====	=====	=====

ASSETS	PAYSOP FUND	LOAN FUND	TOTAL
-----	-----	-----	-----
Brush Wellman Inc. Common Stock (cost \$15,665,630)	\$230,271		\$10,693,835
Managed Guaranteed Investment Contract Fund (cost \$12,828,874)			12,954,848
Fidelity Equity Index Portfolio (cost \$4,926,268)			5,293,097
Fidelity Fund Inc. (cost \$1,386,712)			1,464,623
Fidelity Puritan Fund (cost \$2,225,922)			2,409,947
Participant Promissory Notes (cost \$2,456,585)		\$2,456,585	2,456,585
Employee Benefits Money Market Fund (cost \$102,001)	18,846	75,677	102,001
	-----	-----	-----
	249,117	2,532,262	35,374,936
Contributions Receivable:			
Company			116,647
401(k)			281,532
Participant			25,227
	-----	-----	-----
			423,406
Interest Receivable	56	253	664
Dividends Receivable	749		74,513
Other			57,359



	-----	-----	-----
	805	253	132,536
	-----	-----	-----
TOTAL ASSETS	\$249,922	\$2,532,515	\$35,930,878
	=====	=====	=====
LIABILITIES & PLAN EQUITY			
-----			
Liabilities:			
Benefits Payable			\$141,664
Other		\$160,878	
Plan Equity	\$249,922	2,371,637	35,789,214
	-----	-----	-----
TOTAL LIABILITIES & PLAN EQUITY	\$249,922	\$2,532,515	\$35,930,878
	=====	=====	=====

See accompanying notes to financial statements.

**BRUSH WELLMAN INC.**  
**SAVINGS AND INVESTMENT PLAN**  
**STATEMENT OF INCOME AND CHANGES IN PLAN EQUITY**  
**YEAR ENDED DECEMBER 30, 1993**

	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND
	-----	-----	-----	-----	-----
Investment Income:					
Dividends		\$147,967	\$55,706	\$149,603	\$151,251
Interest	\$1,538	855	356	645	4,058
Other Income (Expense)	316	83,419	289,270	298,154	(4,095)
	-----	-----	-----	-----	-----
	1,854	232,241	345,332	448,402	151,214
Realized Gain (Loss) on Investments--Note E	51,272	62,269	7,206	1,872	(408,791)
Unrealized Appreciation (Depreciation) on Investments--Note F	885,906	236,668	13,589	157,850	(221,083)
Contributions--Note B					
Company					1,395,917
401(k)	1,605,914	637,468	304,300	492,810	532,998
Participant	84,978	36,623	23,534	50,897	18,253
	-----	-----	-----	-----	-----
	1,690,892	674,091	327,834	543,707	1,947,168
Investment Election Change	(186,881)	(385,063)	(47,361)	549,349	70,025
Loan Transfers	(18,661)	12,715	19,866	(10,472)	(8,236)
Unallocated Loan Payments					
Withdrawals and Terminations--Note C	1,075,959	325,827	78,453	81,203	433,288
	-----	-----	-----	-----	-----
Income and Changes in Plan Equity	1,348,423	507,094	588,013	1,609,505	1,097,009
Plan Equity at Beginning of the Year	13,113,777	5,368,935	1,556,661	2,454,962	10,673,320
	-----	-----	-----	-----	-----
Plan Equity at End of the Year	\$14,462,200	\$5,876,029	\$2,144,674	\$4,064,467	\$11,770,329
	=====	=====	=====	=====	=====

	PAYSOP FUND	LOAN FUND	TOTAL
	-----	-----	-----
Investment Income:			
Dividends	\$3,839		\$508,366
Interest	716	\$125,191	133,359
Other Income (Expense)	(5,753)		661,311
	-----	-----	-----
	(1,198)	125,191	1,303,036
Realized Gain (Loss) on Investments--Note E	(6,552)		(292,724)
Unrealized Appreciation (Depreciation) on Investments--Note F	(3,252)		1,069,678
Contributions--Note B			
Company			1,395,917
401(k)			3,573,490
Participant			214,285
	-----	-----	-----
			5,183,692
Investment Election Change	(69)		
Loan Transfers		4,788	
Unallocated Loan Payments		(154,297)	(154,297)
Withdrawals and Terminations--Note C	11,361	22,538	2,028,629
	-----	-----	-----
Income and Changes in Plan Equity	(22,432)	(46,856)	5,080,756
Plan Equity at Beginning of the Year	249,922	2,371,637	35,789,214

	-----	-----	-----
Plan Equity at End of the Year	\$227,490	\$2,324,781	\$40,869,970
	=====	=====	=====
See accompanying notes to financial statements.			

**BRUSH WELLMAN INC.**  
**SAVINGS AND INVESTMENT PLAN**  
**STATEMENT OF INCOME AND CHANGES IN PLAN EQUITY**  
**YEAR ENDED DECEMBER 30, 1992**

	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND
	-----	-----	-----	-----	-----
Investment Income:					
Dividends		\$157,070	\$21,551	\$111,835	\$169,846
Interest	\$791,319	660	299	351	3,619
Other Income (Expense)	121	42,950	44,830	197,846	(237,076)
	-----	-----	-----	-----	-----
	791,440	200,680	66,680	310,032	(63,611)
Realized Gain (Loss) on Investments--Note E	594	258,428	5,987	1,733	(296,620)
Unrealized Appreciation (Depreciation) on Investments--Note F	125,974	167,326	26,892	73,350	1,704,543
Contributions--Note B					
Company					1,330,429
401(k)	1,578,966	608,692	272,530	310,258	611,096
Participant	70,386	24,255	19,682	19,538	18,438
	-----	-----	-----	-----	-----
	1,649,352	632,947	292,212	329,796	1,959,963
Investment Election Change	158,034	(14,041)	21,598	131,443	(11,316)
Loan Transfers	(237,004)	(61,407)	(15,463)	(1,708)	(44,026)
Unallocated Loan Payments					
Withdrawals and Terminations--Note C	1,293,005	346,010	54,853	52,293	863,743
	-----	-----	-----	-----	-----
Income and Changes in Plan Equity	1,195,385	837,923	343,053	792,353	2,385,190
Plan Equity at Beginning of the Year	11,918,392	4,531,012	1,213,608	1,662,609	8,288,130
	-----	-----	-----	-----	-----
Plan Equity at End of the Year	\$13,113,777	\$5,368,935	\$1,556,661	\$2,454,962	\$10,673,320
	=====	=====	=====	=====	=====

	PAYSOP FUND	LOAN FUND	TOTAL
	-----	-----	-----
Investment Income:			
Dividends	\$3,108		\$463,410
Interest	681	\$117,168	914,097
Other Income (Expense)	(4,463)		44,208
	-----	-----	-----
	(674)	117,168	1,421,715
Realized Gain (Loss) on Investments--Note E	(15,647)		(45,525)
Unrealized Appreciation (Depreciation) on Investments--Note F	54,463		2,152,548
Contributions--Note B			
Company			1,330,429
401(k)			3,381,542
Participant			152,299
	-----	-----	-----
			4,864,270
Investment Election Change			285,718
Loan Transfers		359,608	
Unallocated Loan Payments		89,263	89,263
Withdrawals and Terminations--Note C	20,261	11,498	2,641,663
	-----	-----	-----
Income and Changes in Plan Equity	17,881	554,541	6,126,326

Plan Equity at Beginning of the Year	232,041	1,817,096	29,662,888
	-----	-----	-----
Plan Equity at End of the Year	\$249,922	\$2,371,637	\$35,789,214
	=====	=====	=====

See accompanying notes to financial statements.

**BRUSH WELLMAN INC.**  
**SAVINGS AND INVESTMENT PLAN**  
**STATEMENT OF INCOME AND CHANGES IN PLAN EQUITY**  
**YEAR ENDED DECEMBER 30, 1991**

	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND
	-----	-----	-----	-----	-----
Investment Income:					
Dividends		\$190,637	\$27,486	\$85,048	\$318,604
Interest	\$867,386	1,251	542	626	5,412
Other Income (Expense)		1,300	68,727	461	(193,443)
	-----	-----	-----	-----	-----
	867,386	193,188	96,755	86,135	130,573
Realized Gain (Loss) on Investments--Note E		(9,205)	6,516	3,641	(139,815)
Unrealized Appreciation (Depreciation) on Investments--Note F		776,082	98,130	214,639	(251,166)
Contributions--Note B					
Company					1,337,295
401(k)	1,643,696	579,193	247,951	260,638	677,764
Participant	75,605	32,872	19,014	12,455	17,553
	-----	-----	-----	-----	-----
	1,719,301	612,065	266,965	273,093	2,032,612
Investment Election Change	87,850	(82,173)	21,841	12,194	(39,712)
Loan Transfers	(49,672)	11,885	11,465	5,069	15,036
Unallocated Loan Payments					
Withdrawals and Terminations--Note C	536,227	132,568	72,868	97,460	451,394
	-----	-----	-----	-----	-----
Income and Changes in Plan Equity	2,088,638	1,369,274	428,804	497,311	1,296,134
Plan Equity at Beginning of the Year	9,829,754	3,161,738	784,804	1,165,298	6,991,996
	-----	-----	-----	-----	-----
Plan Equity at End of the Year	\$11,918,392	\$4,531,012	\$1,213,608	\$1,662,609	\$8,288,130
	=====	=====	=====	=====	=====

	PAYSOP FUND	LOAN FUND	TOTAL
	-----	-----	-----
Investment Income:			
Dividends	\$9,772		\$631,547
Interest	689	\$152,308	1,028,214
Other Income (Expense)	(18,488)		(141,443)
	-----	-----	-----
	(8,027)	152,308	1,518,318
Realized Gain (Loss) on Investments--Note E	(4,828)		(143,691)
Unrealized Appreciation (Depreciation) on Investments--Note F	14,908		852,593
Contributions--Note B			
Company			1,337,295
401(k)			3,409,242
Participant			157,499
	-----	-----	-----
			4,904,036
Investment Election Change			
Loan Transfers		6,217	
Unallocated Loan Payments		(3,790)	(3,790)
Withdrawals and Terminations--Note C	11,340	83,568	1,385,425
	-----	-----	-----
Income and Changes in Plan Equity	(9,287)	71,167	5,742,041

Plan Equity at Beginning of the Year	241,328 -----	1,745,929 -----	23,920,847 -----
Plan Equity at End of the Year	\$232,041 =====	\$1,817,096 =====	\$29,662,888 =====

See accompanying notes to financial statements.

**NOTES TO FINANCIAL STATEMENTS  
BRUSH WELLMAN INC.  
SAVINGS AND INVESTMENT PLAN**

**DECEMBER 30, 1993, 1992 AND 1991**

NOTE A - The accounting records of the Brush Wellman Inc. Savings and Investment Plan (Plan) are maintained on the accrual basis. Investments are stated at current market value. Investment in securities traded on national securities exchanges are valued at the latest reported closing price. Investment in participant units of the Managed Guaranteed Investment Contract Fund and the Employee Benefits Money Market Fund are stated at market value as determined by the Trustee. Cost is determined by the average cost method.

NOTE B - The Plan is a defined contribution plan which covers certain eligible employees with one year of eligibility service with Brush Wellman Inc. (Company). An employee shall be credited with a year of eligibility service if he is credited with at least 1,000 hours of service in any twelve consecutive month period beginning with date of hire or rehire of the employee (or an anniversary of the latest such date).

The Plan provides for basic contributions on behalf of employees up to 6% of their earnings through either salary reduction or employee after-tax contributions. Basic contributions were matched by the Company at the rate of 50% of such contributions. The rate at which such basic contributions are matched by the Company may be decreased or increased (up to 100%) by action of the Company's Board of Directors.

An employee who makes basic contributions of 6% of earnings may also make supplemental contributions of up to 9% of earnings which are not matched by Company contributions and which may be made in any combination of salary reduction and/or after-tax contributions.

An employee's contributions made to the Plan on a salary reduction basis may not exceed certain maximum amounts. The maximum amounts were \$8,994 in 1993, \$8,728 in 1992 and \$8,475 in 1991. All employee and Company matching contributions are fully vested at all times.

Participants may direct that their basic, supplemental and transfer contributions (as described in the Plan) be invested in one or more of the Income Fund, Equity Fund A, Equity Fund B, Equity Fund C, and the Company Stock Fund in increments of 10%. Prior to July 1, 1991, such direction was able to be revised by participants on April 1 or October 1. Beginning July 1, 1991 revisions may also be made on July 1 and December 31. All Company matching contributions are invested in the Company Stock Fund except with respect to Participants age 59 1/2 or older who may transfer such contributions to other investment funds.



The Income Fund invests primarily in the Managed Guaranteed Investment Contract Fund, the objective of which is to achieve high current income with stability of principal. The fund is primarily invested in Guaranteed Investment Contracts.

Equity Fund A began investing primarily in the Fidelity U.S. Equity Index Portfolio April 1, 1992. This fund is a growth and income fund. It seeks a yield that corresponds with the total return of the S&P 500 Index. The fund's share price will fluctuate and dividend amounts will vary. Prior to that, Equity Fund A invested primarily in the Fidelity Equity Income Fund.

Equity Fund B invests primarily in the Fidelity Fund. This fund seeks long-term capital growth and current return on capital and will select some securities for their income characteristics, which may limit the potential for growth. The fund's share price and dividend income will fluctuate as the value and yields of the securities in its investment portfolio fluctuate.

Equity Fund C invests primarily in Fidelity Puritan Fund. This fund is a growth and income fund. It seeks capital growth in addition to regular quarterly dividends. It invests in a broadly diversified portfolio of common stocks, preferred stocks and bonds, including lower- quality, high yield debt securities. The fund's share price will fluctuate and dividend amounts will vary.

The Company Stock Fund invests primarily in Brush Wellman Inc. Common Stock.

The Plan, as originally adopted, included a Payroll Stock Ownership Plan (PAYSOP) feature that applied through 1986. Under the PAYSOP, the Company made contributions based upon a percentage of payroll and was afforded an additional credit against federal income tax up to the amount allowable by the Internal Revenue Code. The PAYSOP contribution by the Company, which could be in Common Stock of the Company or cash used to purchase Common Stock of the Company, was a percentage of the compensation paid to all employees who made salary reduction contributions to the Plan at any time during the year and who were members of the Plan as of the last pay period of such year. The shares of Common Stock of the Company contributed or purchased were allocated equally to all eligible participants.

A participant may borrow funds from his account, excluding his interest in the PAYSOP Fund, provided such loan is secured by the participant's interest in his account and evidenced by a promissory note executed by the participant. The promissory notes are held in trust as a separate fund, Loan Fund, of the Plan.

All costs and expenses incurred in connection with the administration of the Plan for 1993, 1992, and 1991 were paid by the Company.

Information concerning the Plan agreement and the vesting and benefit provisions is contained in the Summary Plan Description. Copies of this pamphlet are available from the Plan administrator.

NOTE C - At retirement, death or other termination, a participant (or his death beneficiary) is eligible to receive a distribution of all employee, Company matching and PAYSOP contributions credited to the employee's account plus or minus any net gain or loss thereon.

The value of distributions and withdrawals is based on the value of a participant's account on the valuation date immediately preceding the date of distribution or withdrawal and is deducted from the participant's account as of such valuation date.

Distribution to a participant or a person designated by the participant as his death beneficiary is made under one of the following methods as elected by the participant:

- (i) Lump sum payment in cash; or
- (ii) Lump sum payment in cash, except that a participant's interest in the Company Stock Fund and the PAYSOP Fund will be paid in full shares of Common Stock of the Company, with any fractional shares being paid in cash.

NOTE D - Shares or face value by investment as of December 30, 1993 and 1992 are as follows:

Investment -----	Shares by Investment -----	
	1993 ----	1992 ----
Managed Guaranteed Investment Contract Fund	13,230,630	12,827,852
Fidelity U.S. Equity Index Portfolio	337,388	323,144
Fidelity Fund Inc.	109,776	77,330
Fidelity Puritan Fund	254,794	163,497
Brush Wellman Inc. Common Stock	830,713	695,534
Employee Benefit Money Market Fund	324,800	102,001

In addition, \$2,416,728 and \$2,456,585 were invested in Participant Promissory Notes as of December 30, 1993 and 1992, respectively.

NOTE E - The net realized gain (loss) on sales of investments for the Plan years ended December 30, 1993, 1992 and 1991 is as follows:

1993				
Investment	Shares	Cost	Proceeds	Gain(Loss)
Managed Guaranteed				
Investment Contract Fund	1,126,525	\$1,134,389	\$1,185,729	\$ 51,340
Fidelity U.S. Equity Index				
Portfolio	38,291	588,895	651,164	62,269
Fidelity Fund Inc.	3,620	65,964	73,170	7,206
Fidelity Puritan Fund	872	12,037	13,909	1,872
Brush Wellman Inc. Common				
Stock	14,468	580,968	165,557	(415,411)
				-----
				\$ (292,724)
				=====
1992				
Investment	Shares	Cost	Proceeds	Gain(Loss)
Managed Guaranteed				
Investment Contract Fund	1,456,625	\$1,456,626	\$1,457,220	\$ 594
Fidelity U.S. Equity Index				
Portfolio	20,801	316,274	325,795	9,521
Fidelity Equity Income Fund	176,581	4,449,932	4,698,839	248,907
Fidelity Fund Inc.	6,546	117,082	123,069	5,987
Fidelity Puritan Fund	1,703	22,889	24,622	1,733
Brush Wellman Inc. Common				
Stock	34,441	871,980	559,713	(312,267)
				-----
				\$ (45,525)
				=====
1991				
Investment	Shares	Cost	Proceeds	Gain(Loss)
Fidelity Equity Income	9,879	\$ 248,745	\$ 239,540	\$ (9,205)
Fidelity Fund Inc.	4,750	83,242	89,758	6,516
Fidelity Puritan Fund	10,251	134,554	138,195	3,641
Brush Wellman Inc. Common Stock	14,644	387,656	243,013	(144,643)
				-----
				\$ (143,691)
				=====

The Department of Labor requires that realized gains and losses be calculated using current cost (cost at the beginning of the Plan year) rather than historical cost. Realized gains under the current cost method for the year ended December 30, 1993 are as follows:

	Realized Gain(Loss)
Managed Guaranteed Investment Contract Fund	\$41,848
Fidelity U.S. Equity Index Portfolio	22,953
Fidelity Fund Inc.	4,183
Fidelity Puritan Fund	1,004
Brush Wellman Inc. Common Stock	(46,477)
	-----
	\$23,511
	=====

NOTE F - The unrealized appreciation (depreciation) of investments for the Plan years ended December 30, 1993, 1992 and 1991 is as follows:

	Balance December 31 1992	Change	Balance December 30 1993
	-----	-----	-----
Managed Guaranteed Investment			
Contract Fund	\$ 125,974	\$ 885,906	\$1,011,880
Fidelity U.S. Equity			
Index Portfolio	366,829	236,668	603,497
Fidelity Fund Inc.	77,911	13,589	91,500
Fidelity Puritan Fund	184,025	157,850	341,875
Brush Wellman Inc. Common Stock	(4,971,795)	(224,335)	(5,196,130)
		-----	
		\$1,069,678	
		=====	
	Balance December 31 1991	Change	Balance December 30 1992
	-----	-----	-----
Managed Guaranteed Investment			
Contract Fund	-	\$ 125,974	\$ 125,974
Fidelity U.S. Equity			
Index Portfolio	-	366,829	366,829
Fidelity Equity Income Fund	\$ 199,503	(199,503)	-
Fidelity Fund Inc.	51,019	26,892	77,911
Fidelity Puritan Fund	110,675	73,350	184,025
Brush Wellman Inc. Common Stock	(6,730,801)	1,759,006	(4,971,795)
		-----	
		\$2,152,548	
		=====	
	Balance December 31 1990	Change	Balance December 30 1991
	-----	-----	-----
Fidelity Equity Income Fund	\$ (576,579)	\$ 776,082	\$ 199,503
Fidelity Fund Inc.	(47,111)	98,130	51,019
Fidelity Puritan Fund	(103,964)	214,639	110,675
Brush Wellman Inc. Common Stock	(6,494,543)	(236,258)	(6,730,801)
		-----	
		\$ 852,593	
		=====	

The Department of Labor requires that unrealized appreciation and depreciation be calculated using current cost rather than historical cost. Unrealized gains and losses under the current cost method for the year ended December 30, 1993 are as follows:

	Change in Unrealized Gain(Loss)
Managed Guaranteed Investment Contract Fund	\$895,398
Fidelity U.S. Equity Index Portfolio	275,984
Fidelity Fund Inc.	16,612
Fidelity Puritan Fund	158,718
Brush Wellman Inc. Common Stock	(593,269)
	-----
	\$753,443
	=====

NOTE G - The Internal Revenue Service has determined that the Plan is qualified under Internal Revenue Code Section 401(a) and that the related trust is, therefore, tax-exempt under Code Section 501(a).

Continued qualification of the Plan depends upon timely adoption and operational application of certain amendments required as a result of the Tax Reform Act of 1986 (Act). In the Company's opinion, the Plan is operating in compliance with the applicable provisions of the Act.

The Company is allowed a federal income tax deduction for its employer matching contributions to the Plan.

The Plan provides, among other things, for contributions to be made to the Plan pursuant to a qualified cash or deferred arrangement (CODA) under Section 401(k) of the IRC. CODA contributions made to the Trust for a participant will reduce a participant's current compensation and will not be included in the gross income of the participant for federal income tax purposes in the year made. Such amounts will, however, be considered as part of the participant's gross income for purposes of Social Security taxes.

Non-CODA contributions withheld under the Plan from a participant through payroll deductions will be included in the gross income of the participant in the year withheld and are not deductible by the participant for federal income tax purposes.

A participant does not become subject to federal income taxes as a result of their participation in the Plan until the assets in their account are withdrawn by, or distributed to, the participant.

NOTE H - The Plan was amended on October 22, 1991. Amendment No. 3 provides for administration of accounts and distributions under qualified domestic relations orders and defines the term immediate and heavy financial need for purposes of hardship withdrawals.

On October 1, 1992, the plan assets of the Electrofusion Corporation 401(k) Tax Deferred Savings Plan were merged into the Plan. The market value of the merged assets was \$285,718 and has been reflected in the Statement of Changes in Plan Equity as an Investment Election Change.

**EIN-34-0119320**  
**PN 003**  
**BRUSH WELLMAN INC.**  
**SAVINGS & INVESTMENT PLAN**  
**DECEMBER 30, 1993**

**Item 30a - SCHEDULE OF ASSETS HELD FOR INVESTMENT PURPOSES:**

INVESTMENTS -----	DESCRIPTION -----	COST -----	CURRENT VALUE -----
Brush Wellman Inc. Common Stock	Common Stock	\$17,033,792	\$11,837,660
Managed Guaranteed Investment Contract Fund	Bank Common/ Collective Trust	\$13,295,724	\$14,307,606
Fidelity U.S. Equity Index Portfolio	Mutual Fund	\$5,223,194	\$5,826,691
Fidelity Fund Inc.	Mutual Fund	\$2,023,888	\$2,115,389
Fidelity Puritan Fund	Mutual Fund	\$3,671,135	\$4,013,010
Participant Promissory Notes	Participant Loans	\$2,416,728	\$2,416,728
Employee Benefits Money Market Fund	Bank Common/ Collective Trust	\$324,800	\$324,800

DECEMBER 31, 1993 R-773

**SOCIETY NATIONAL BANK  
BRUSH WELLMAN INC SAV/INV CONS**

**THE BEGINNING PLAN VALUE AGAINST WHICH TRANSACTIONS WERE TESTED FOR  
PURPOSES OF THIS SET OF REPORTS WAS \$35,569,198.02**

**30896100 BRUSH WELLMAN INC SAV/INV STOCK FD  
30896106 BRUSH WELLMAN INC SAV/INV INCOME FD**

30896109	BRUSH WELLMAN INC PAYSOP	S/V/P
30896112	BRUSH WELLMAN INC CONT ACCT	S/P/P
30896115	BRUSH WELLMAN SAV/INC LOAN FD	S/P/P
30896118	BRUSH WELLMAN INC SVGS INVT EQ FD A	
30896121	BRUSH WELLMAN INC SVGS INVT EQ FD B	
30896124	BRUSH WELLMAN INC SVGS INVT EQ FD C	

**PSN 1**

BRUSH WELLMAN INC SAV/INV CONS DECEMBER 31, 1993 R-776

SUMMARY OF PURCHASES AND/OR SALES IN SAME ISSUE IN EXCESS OF 5% OF BEGINNING PLAN VALUE

TRANSACTION DESCRIPTION =====	-----PURCHASES-----		-----SALES-----		
	# TRANS =====	COST =====	# TRANS =====	PROCEEDS =====	GAIN OR LOSS =====
BRUSH WELLMAN INC. COM & RT PUR PFD STK EXP 01-26-98	25	1,954,901.59	0	0.00	0.00
EMPLOYEE BENEFITS MONEY RETIREMENT TRUST SHORT TERM FUND	303	12,263,523.22	324	12,040,724.26	0.00
SOCIETY NATIONAL BANK RETIREMENT TRUST AMERITRUST MAGIC FUND	31	1,601,238.99	16	1,185,730.06	51,340.91
GRAND TOTAL:	359	15,819,663.80	340	13,226,454.32	51,340.91

PSN 2 R-776-0001



[LOGO]

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**RICHARD A. WRIGHT**  
**ANTHONY J. WESLEY**  
**MARK G. MILLS**  
**WILLIAM M. POTOCZAK KENNETH E. NOWAK**

### **CONSENT OF INDEPENDENT AUDITORS**

We consent to the incorporation by reference in the Annual Report on Form 10-K under the Securities Exchange Act of 1934 of Brush Wellman Inc. for the year ended December 31, 1993 of our report dated March 17, 1994, with respect to the financial statements and schedules of the Brush Wellman Inc. Savings and Investment Plan included in this Annual Report (11-K) for the year ended December 30, 1993.

Wright, Wesley & Mills, P.C.

*/S/ Wright, Wesley & Mills, P.C.*

*Cleveland, Ohio*  
*March 17, 1994*

**Exhibit 99(b)**

**FORM 11-K**

**FOR ANNUAL REPORTS OF EMPLOYEE STOCK PURCHASE, SAVINGS  
AND SIMILAR PLANS PURSUANT TO SECTION 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES**

**EXCHANGE ACT OF 1934 [FEE REQUIRED]**

For the fiscal year ended December 30, 1993

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934 [NO FEE REQUIRED]**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-7006

**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN**  
(Full Title of the Plan)

**BRUSH WELLMAN INC.**  
17876 St. Clair Avenue  
Cleveland, Ohio 44110

(Name of issuer of the securities held  
pursuant to the plan and the address  
of its principal executive office.)

**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN**

REQUIRED INFORMATION

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2. Statements of Financial Condition - December 30, 1993 and 1992.	2-3
3. Statements of Income and Changes in Plan Equity - Plan years ended December 30, 1993, 1992 and 1991.	4-6
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5. Schedules required to be filed under ERISA.	
a. Schedule of Assets held for Investment Purposes.	13
b. Schedule of Reportable Transactions.	14-15
6. Consent of Independent Auditors.	16

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on the 17th day of March, 1994.

**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN**

*By /s/ Dennis L. Habrat*

-----  
*Member of the Administrative  
Committee*

[LOGO]

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Richard A. Wright  
Anthony J. Wesley  
Mark G. Mills  
William M. Potoczak  
-----  
Kenneth E. Nowak

### **Report of Independent Auditors**

Administrative Committee of  
Williams Advanced Materials Inc.  
Savings and Investment Plan

We have audited the financial statements of Williams Advanced Materials Inc. Savings and Investment Plan listed in the Annual Report on Form 11-K as of and for the years ended December 30, 1993 and 1992. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Williams Advanced Materials Inc. Savings and Investment Plan for 1991 as listed in the Annual Report on Form 11-K were audited by other auditors whose report dated April 1, 1992, expressed an unqualified opinion on those statements.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements listed in the Annual Report on Form 11-K present fairly, in all material respects, the financial position of Williams Advanced Materials Inc. Savings and Investment Plan at December 30, 1993 and 1992, the results of its operations and changes in its plan equity for the years then ended in conformity with generally accepted accounting principles.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedules of assets held for investment purposes as of December 30, 1993 and reportable transactions for the year ended December 30, 1993 are presented for purposes of complying with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, and are not a required part of the financial statements. The supplemental schedules have been subjected to the auditing procedures applied in our audit of the financial statements and, in our opinion, are fairly stated in all material respects in relation to the financial statements taken as a whole.

Wright, Wesley & Mills, P.C.

*/S/ Wright, Wesley & Mills, P.C.*

*March 17, 1994*

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**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN  
STATEMENT OF FINANCIAL CONDITION  
DECEMBER 30, 1993**

ASSETS	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND	LOAN FUND	TOTAL
-----	-----	-----	-----	-----	-----	-----	-----
Brush Wellman Inc. Common Stock (cost \$533,504)					\$471,248		\$471,248
Managed Guaranteed Investment Contract Fund (cost \$1,818,095)	\$1,954,893						1,954,893
Fidelity Equity Index Portfolio (cost \$161,556)		\$176,436					176,436
Fidelity Fund Inc. (cost \$213,147)			\$216,602				216,602
Fidelity Puritan Fund (cost \$269,942)				\$277,245			277,245
Participant Promissory Notes (cost \$82,993)						\$82,993	82,993
Employee Benefits Money Market Fund (cost \$14,654)					10,620	4,034	14,654
	1,954,893	176,436	216,602	277,245	481,868	87,027	3,194,071
Contribution Receivable Company					12,184		12,184
401(k)	23,413	2,563	2,975	3,973	762		33,686
Participant	515	144	216	216			1,091
	23,928	2,707	3,191	4,189	12,946		46,961
Interest Receivable	5	5	6	8	30	18	72
Dividends Receivable		1,384			1,623		3,007
Other	40	4	4	7	(277)		(222)
	45	1,393	10	15	1,376	18	2,857
	-----	-----	-----	-----	-----	-----	-----
TOTAL ASSETS	\$1,978,866	\$180,536	\$219,803	\$281,449	\$496,190	\$87,045	\$3,243,889
	=====	=====	=====	=====	=====	=====	=====
LIABILITIES & PLAN EQUITY							
-----							
Liabilities:							
Benefits Payable	\$46,312						\$46,312
Other	(5,218)	\$1,605	(\$464)	(\$2,177)	\$8,113	\$8,141	10,000
Plan Equity	1,937,772	178,931	220,267	283,626	488,077	78,904	3,187,577
	-----	-----	-----	-----	-----	-----	-----
TOTAL LIABILITIES & PLAN EQUITY	\$1,978,866	\$180,536	\$219,803	\$281,449	\$496,190	\$87,045	\$3,243,889
	=====	=====	=====	=====	=====	=====	=====

See accompanying notes to financial statements.

**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN  
STATEMENT OF FINANCIAL CONDITION  
DECEMBER 30, 1992**

ASSETS -----	INCOME FUND -----	EQUITY FUND A -----	EQUITY FUND B -----	EQUITY FUND C -----	STOCK FUND -----	LOAN FUND -----	TOTAL -----
Brush Wellman Inc. Common Stock (cost \$419,545)					\$372,521		\$372,521
Managed Guaranteed Investment Contract Fund (cost \$1,731,927)	\$1,748,919						1,748,919
Fidelity Equity Index Portfolio (cost \$121,008)		\$129,454					129,454
Fidelity Fund Inc. (cost \$119,142)			\$122,818				122,818
Fideltiy Puritan Fund (cost \$95,838)				\$100,731			100,731
Participant Promissory Notes (cost \$95,001)						\$95,001	95,001
Ameritrust Retirement Short Term Fund (cost \$4,193)					645	3,548	4,193
	-----	-----	-----	-----	-----	-----	-----
Contribution Receivable:	1,748,919	129,454	122,818	100,731	373,166	98,549	2,573,637
Company					10,816		10,816
401(k)	20,983	2,359	3,134	1,776	1,348		29,600
Participant	271						271
	-----	-----	-----	-----	-----	-----	-----
	21,254	2,359	3,134	1,776	12,164		40,687
Interest Receivable	5	3	5	3	25	13	54
Dividends Receivable					2,590		2,590
Other		264	1,268	5,902			7,434
	-----	-----	-----	-----	-----	-----	-----
	5	267	1,273	5,905	2,615	13	10,078
	-----	-----	-----	-----	-----	-----	-----
TOTAL ASSETS	\$1,770,178	\$132,080	\$127,225	\$108,412	\$387,945	\$98,562	\$2,624,402
	=====	=====	=====	=====	=====	=====	=====
LIABILITIES & PLAN EQUITY -----							
Liabilities:							
Benefits Payable			\$2,650	\$2,680	\$112		\$5,442
Other	(\$13,173)	(\$305)	(8,701)	(582)	15,496	\$7,265	
Plan Equity	1,783,351	132,385	133,276	106,314	372,337	91,297	2,618,960
	-----	-----	-----	-----	-----	-----	-----
TOTAL LIABILITIES & PLAN EQUITY	\$1,770,178	\$132,080	\$127,225	\$108,412	\$387,945	\$98,562	\$2,624,402
	=====	=====	=====	=====	=====	=====	=====

See accompanying notes to financial statements.

**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN  
STATEMENT OF INCOME AND CHANGES IN PLAN EQUITY  
YEAR ENDED DECEMBER 30, 1993**

	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND	LOAN FUND	TOTAL
	-----	-----	-----	-----	-----	-----	-----
Investment Income:							
Dividends		\$4,131	\$3,827	\$8,339	\$5,781		\$22,078
Interest	\$223	103	51	78	289	\$4,548	5,292
Other Income (Expense)	(6,974)	2,304	24,051	19,883	(277)		38,987
	-----	-----	-----	-----	-----	-----	-----
	(6,751)	6,538	27,929	28,300	5,793	4,548	66,357
Realized Gain (Loss) on Investments--Note E	6,654	1,882	163	780	(86)		9,393
Unrealized Appreciation (Depreciation) on Investments--Note F	119,805	6,435	(220)	2,410	(15,233)		113,197
Contributions--Note B:							
Company					132,536		132,536
401(k)	257,827	33,855	32,550	37,632	10,563		372,427
Participant	5,022	168	252	252			5,694
	-----	-----	-----	-----	-----	-----	-----
	262,849	34,023	32,802	37,884	143,099		510,657
Investment Election Change	(131,103)	2,077	26,037	102,578	411		
Loan Transfers	21,631	(4,231)	460	5,481	(13,417)	(9,924)	
Unallocated Loan Payments						(7,017)	(7,017)
Withdrawals and Terminations--Note C	118,664	178	180	121	4,827		123,970
	-----	-----	-----	-----	-----	-----	-----
Income and Changes in Plan Equity	154,421	46,546	86,991	177,312	115,740	(12,393)	568,617
Plan Equity at Beginning of the Year	1,783,351	132,385	133,276	106,314	372,337	91,297	2,618,960
	-----	-----	-----	-----	-----	-----	-----
Plan Equity at End of the Year	\$1,937,772	\$178,931	\$220,267	\$283,626	\$488,077	\$78,904	\$3,187,577
	=====	=====	=====	=====	=====	=====	=====

See accompanying notes to financial statements.

**WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN  
STATEMENT OF INCOME AND CHANGES IN PLAN EQUITY  
YEAR ENDED DECEMBER 30, 1992**

	INCOME FUND -----	EQUITY FUND A -----	EQUITY FUND B -----	EQUITY FUND C -----	STOCK FUND -----	LOAN FUND -----	TOTAL -----
Investment Income:							
Dividends		\$3,411	\$2,638	\$4,856	\$5,886		\$16,791
Interest	\$101,681	46	49	25	278	\$5,623	107,702
Other Income (Expense)	(6,139)		3,561	4,338	(1,213)		547
	-----	-----	-----	-----	-----	-----	-----
	95,542	3,457	6,248	9,219	4,951	5,623	125,040
Realized Gain (Loss) on Investments--Note E	19	(5)	106	286	(1,715)		(1,309)
Unrealized Appreciation (Depreciation) on Investments--Note F	16,992	9,413	2,249	2,823	42,580		74,057
Contributions--Note B							
Company					115,079		115,079
401(k)	231,597	24,735	34,461	19,618	13,220		323,631
Participant	4,750						4,750
	-----	-----	-----	-----	-----	-----	-----
	236,347	24,735	34,461	19,618	128,299		443,460
Investment Election Change	(5,250)	17,466	15,805	9,257	(37,278)		
Loan Transfers	12,442	(2,998)	1,358	690	(24,440)	12,948	
Unallocated Loan Payments						4,886	4,886
Withdrawals and Terminations--Note C	76,102	299	4,069	2,972	19,835	874	104,151
	-----	-----	-----	-----	-----	-----	-----
Income and Changes in Plan Equity	279,990	51,769	56,158	38,921	92,562	22,583	541,983
Plan Equity at Beginning of the year	1,503,361	80,616	77,118	67,393	279,775	68,714	2,076,977
	-----	-----	-----	-----	-----	-----	-----
Plan Equity at End of the Year	\$1,783,351	\$132,385	\$133,276	\$106,314	\$372,337	\$91,297	\$2,618,960
	=====	=====	=====	=====	=====	=====	=====
See accompanying notes to financial statements.							



**WILLIAMS ADVANCED MATERIALS INC.**  
**SAVINGS AND INVESTMENT PLAN**  
**STATEMENT OF INCOME AND CHANGES IN PLAN EQUITY**  
**YEAR ENDED DECEMBER 30, 1991**

	INCOME FUND	EQUITY FUND A	EQUITY FUND B	EQUITY FUND C	STOCK FUND	LOAN FUND	TOTAL
	-----	-----	-----	-----	-----	-----	-----
Investment Income:							
Dividends		\$3,556	\$1,850	\$3,179	\$8,479		\$17,064
Interest	\$117,533	69	90	62	425	\$4,878	123,057
Other Income (Expense)	(2,695)	120	4,254	32	3,074		4,785
	-----	-----	-----	-----	-----	-----	-----
	114,838	3,745	6,194	3,273	11,978	4,878	144,906
Realized Gain (Loss) on Investments--Note E		(2,145)	1,115	(153)			(1,183)
Unrealized Appreciation (Depreciation) on Investments--Note F		17,485	7,276	7,526	(28,396)		3,891
Contributions--Note B							
Company					107,481		107,481
401(k)	222,522	15,883	22,191	20,054	18,144		298,794
Participant	4,366	26	26	26	26		4,470
	-----	-----	-----	-----	-----	-----	-----
	226,888	15,909	22,217	20,080	125,651		410,745
Investment Election Change	(18,895)	(3,246)	(13,228)	968	34,401		
Loan Transfers	(9,330)	235	378	309	(15,392)	23,800	
Unallocated Loan Payments						78	78
Withdrawals and Terminations--Note C	165,479	20,119	7,148	3,463	19,292	14,144	229,645
	-----	-----	-----	-----	-----	-----	-----
Income and Changes in Plan Equity	148,022	11,864	16,804	28,540	108,950	14,612	328,792
Plan Equity at Beginning of the Year	1,355,339	68,752	60,314	38,853	170,825	54,102	1,748,185
	-----	-----	-----	-----	-----	-----	-----
Plan Equity at End of the Year	\$1,503,361	\$80,616	\$77,118	\$67,393	\$279,775	\$68,714	\$2,076,977
	=====	=====	=====	=====	=====	=====	=====

See accompanying notes to financial statements.

**NOTES TO FINANCIAL STATEMENTS  
WILLIAMS ADVANCED MATERIALS INC.  
SAVINGS AND INVESTMENT PLAN**

**DECEMBER 30, 1993, 1992 AND 1991**

NOTE A - The accounting records of the Williams Advanced Materials Inc. Savings and Investment Plan (Plan) are maintained on the accrual basis. Investments are stated at current market value. Investment in securities traded on national securities exchanges are valued at latest reported closing price. Investment in participant units of the Managed Guaranteed Investment Contract Fund and the Employee Benefits Money Market Fund are stated at market value as determined by the Trustee. Cost is determined by the average cost method.

NOTE B - The Plan is a defined contribution plan which covers certain eligible employees with one year of eligibility service with Williams Advanced Materials Inc. (Company), a wholly owned subsidiary of Brush Wellman Inc. (Parent Company). An employee shall be credited with a year of eligibility service if he is credited with at least 1,000 hours of service in any twelve consecutive month period beginning with a date of hire or rehire of the employee (or an anniversary of the latest such date).

The Plan provides for basic contributions on behalf of employees up to 6% of their earnings through either salary reduction or employee after-tax contributions. Basic contributions were matched by the Company at the rate of 50% of such contributions. The rate at which such basic contributions are matched by the Company may be decreased or increased (up to 100%) by action of the Company's Board of Directors.

An employee who makes basic contributions of 6% of earnings may also make supplemental contributions of up to 9% of earnings which are not matched by Company contributions and which may be made in any combination of salary reduction and/or after-tax contributions.

An employee's contributions made to the Plan on a salary reduction basis may not exceed certain maximum amounts. The maximum amounts were \$8,994 in 1993, \$8,728 in 1992 and \$8,475 in 1991. All employee and Company matching contributions are fully vested at all times.

Participants may direct that their basic, supplemental and transfer contributions (as described in the Plan) be invested in one or more of the Income Fund, Equity Fund A, Equity Fund B, Equity Fund C, and the Company Stock Fund in increments of 10%. Prior to July 1, 1991, such direction was able to be revised by participants on April 1 or October 1. Beginning July 1, 1991 revisions may also be made on July 1 and December 31. All Company matching contributions are invested in the Company Stock Fund except with respect to participants age 59 1/2 or older who may transfer such contributions to other investment funds.

The Income Fund invests primarily in the Managed Guaranteed Investment Contract Fund, the objective of which is to achieve high current income with stability of principal. The fund is primarily invested in Guaranteed Investment Contracts.

Equity Fund A began investing primarily in Fidelity U.S. Equity Index Portfolio April 1, 1992. This fund is a growth and income fund. It seeks a yield that corresponds with the total return of the S&P 500 Index. The fund's share price will fluctuate and dividend amounts will vary. Prior to that, Equity Fund A invested primarily in Fidelity Equity Income Fund.

Equity Fund B invests primarily in the Fidelity Fund. This fund seeks long-term capital growth and current return on capital and will select some securities for their income characteristics, which may limit the potential for growth. The fund's share price and dividend income will fluctuate as the value and yields of the securities in its investment portfolio fluctuate.

Equity Fund C invests primarily in Fidelity Puritan Fund. This fund is a growth and income fund. It seeks capital growth in addition to regular quarterly dividends. It invests in a broadly diversified portfolio of common stocks, preferred stocks and bonds, including lower-quality, high yield debt securities. The fund's share price will fluctuate and dividend amounts will vary.

The Company Stock Fund invests primarily in Brush Wellman Inc. Common Stock.

Prior to June 1, 1989, participants could have directed a portion of their contributions to be used to purchase insurance policies that were excluded from Plan assets. Life insurance policies on the lives of participants, purchased under the Plan prior to July 1, 1989, may continue to be held.

A participant may borrow funds from their account, provided the loan is secured by the participant's interest in their account and evidenced by a promissory note executed by the participant. The promissory notes are held in trust as a separate fund, Loan Fund, of the Plan.

All costs and expenses incurred in connection with the administration of the Plan for 1993, 1992 and 1991 were paid by the Company.

Information concerning the Plan agreement and the vesting and benefit provisions is contained in the Summary Plan Description. Copies of this pamphlet are available from the Plan administrator.

NOTE C - At retirement, death or other termination, a participant (or his death beneficiary) is eligible to receive a distribution of all employee and Company matching contributions credited to the employee's account plus or minus any net gain or loss thereon.

The value of distributions and withdrawals is based on the value of a participant's account on the valuation date immediately preceding the date of distribution or withdrawal and is deducted from the participant's account as of such valuation date.

Distribution to a participant or a person designated by the participant as his death beneficiary is made under one of the following methods as elected by the participant:

- (i) lump sum payment in cash; or
- (ii) lump sum payment in cash, except that a participant's interest in the Company Stock Fund will be paid in full shares of Common Stock of the Parent Company, with any fractional shares being paid in cash.
- (iii) under either method (i) or (ii) with respect to that portion of the participant's benefit under the provisions of the Plan in effect after June 30, 1989, and in an annuity contract with respect to that portion of the participant's benefit under the provisions of the Plan in effect prior to July 1, 1989 if the distribution is greater than \$3,500.

NOTE D - Shares or face value by investment as of December 30, 1993 and 1992 are as follows:

Investment -----	Shares by Investment -----	
	1993 ----	1992 ----
Managed Guaranteed Investment Contract Fund	1,807,743	1,731,774
Fidelity U.S. Equity Index Portfolio	10,216	7,903
Fidelity Fund Inc.	11,240	6,485
Fidelity Puritan Fund	17,603	6,834
Brush Wellman Inc. Common Stock	33,070	24,229
Employee Benefit Money Market Fund	14,654	4,193

In addition, \$82,993 and \$95,001 were invested in Participant Promissory Notes as of December 30, 1993 and 1992, respectively.

NOTE E - The net realized gain (loss) on sales of investments for the Plan years ended December 30, 1993, 1992 and 1991 is as follows:

1993				
Investment -----	Shares -----	Cost -----	Proceeds -----	Gain(Loss) -----
Managed Guaranteed				
Investment Contract Fund	157,790	\$158,059	\$164,713	\$6,654
Fidelity U.S. Equity Index Portfolio	1,250	19,599	21,481	1,882
Fidelity Fund Inc.	134	2,481	2,644	163
Fidelity Puritan Fund	705	9,954	10,734	780
Brush Wellman Inc. Common Stock	67	1,158	1,072	(86)
				-----
				\$9,393
				=====

1992				
Investment -----	Shares -----	Cost -----	Proceeds -----	Gain(Loss) -----
Managed Guaranteed				
Investment Contract Fund	141,510	\$141,510	\$141,529	\$ 19
Fidelity U.S. Equity Index Portfolio	570	8,686	8,767	81
Fidelity Equity Income Fund	3,161	84,221	84,135	(86)
Fidelity Fund Inc.	248	4,552	4,658	106
Fidelity Puritan Fund	400	5,615	5,901	286
Brush Wellman Inc. Common Stock	1,977	34,556	32,841	(1,715)
				-----
				\$(1,309)
				=====

1991				
Investment -----	Shares -----	Cost -----	Proceeds -----	Gain(Loss) -----
Fidelity Equity Income Fund	953	\$25,617	\$23,472	\$(2,145)
Fidelity Fund Inc.	1,229	22,204	23,319	1,115
Fidelity Puritan Fund	580	7,956	7,803	(153)
				-----
				\$(1,183)
				=====

The Department of Labor requires that realized gains and losses be calculated using current cost (cost at the beginning of the Plan year) rather than historical cost. Realized gains under the current cost method for the year ended December 30, 1993 are as follows:

	Realized Gain -----
Managed Guaranteed Investment Contract Fund	\$5,204
Fidelity U.S. Equity Index Portfolio	881
Fidelity Fund Inc.	93
Fidelity Puritan Fund	323
Brush Wellman Inc. Common Stock	42
	-----
	\$6,543
	=====

NOTE F - The unrealized appreciation (depreciation) of investments for the Plan years ended December 30, 1993, 1992 and 1991 is as follows:

	Balance December 31 1992	Change	Balance December 30 1993
	-----	-----	-----
Managed Guaranteed Investment			
Contract Fund	\$ 16,992	\$119,805	\$136,797
Fidelity U.S. Equity			
Index Portfolio	8,446	6,435	14,881
Fidelity Fund Inc.	3,676	(220)	3,456
Fidelity Puritan Fund	4,893	2,410	7,303
Brush Wellman Inc.			
Common Stock	(47,024)	(15,233)	(62,257)
		-----	
		\$113,197	
		=====	
	Balance December 31 1991	Change	Balance December 30 1992
	-----	-----	-----
Managed Guaranteed Investment			
Contract Fund	-	\$ 16,992	\$ 16,992
Fidelity U.S. Equity			
Index Portfolio	-	8,446	8,446
Fidelity Equity Income Fund	\$ (967)	967	-
Fidelity Fund Inc.	1,427	2,249	3,676
Fidelity Puritan Fund	2,070	2,823	4,893
Brush Wellman Inc.			
Common Stock	(89,604)	42,580	(47,024)
		-----	
		\$ 74,057	
		=====	
	Balance December 31 1990	Change	Balance December 30 1991
	-----	-----	-----
Fidelity Equity Income Fund	\$ (18,452)	\$ 17,485	\$ (967)
Fidelity Fund Inc.	(5,849)	7,276	1,427
Fidelity Puritan Fund	(5,456)	7,526	2,070
Brush Wellman Inc.			
Common Stock	(61,208)	(28,396)	(89,604)
		-----	
		\$ 3,891	
		=====	

The Department of Labor requires that unrealized appreciation and depreciation be calculated using current cost rather than historical cost. Unrealized gains and losses under the current cost method for the year ended December 30, 1993 are as follows:

	Change in Unrealized Gain(Loss)
Managed Guaranteed Investment Contract Fund	\$121,255
Fidelity U.S. Equity Index Portfolio	7,436
Fidelity Fund Inc.	(150)
Fidelity Puritan Fund	2,867
Brush Wellman Inc. Common Stock	(15,361)
	-----
	\$116,047
	=====

NOTE G - The Internal Revenue Service has determined that the Plan is qualified under Internal Revenue Code Section 401(a) and that the related trust is, therefore, tax-exempt under Code Section 501(a).

Continued qualification of the Plan depends upon timely adoption and operational application of certain amendments required as a result of the Tax Reform Act of 1986 (Act). In the Company's opinion, the Plan is operating in compliance with the applicable provisions of the Act.

The Company is allowed a federal income tax deduction for its employer matching contributions to the Plan.

The Plan provides, among other things, for contributions to be made to the Plan pursuant to a qualified cash or deferred arrangement (CODA) under Section 401(k) of the IRC. CODA contributions made to the Trust for a participant will reduce a participant's current compensation and will not be included in the gross income of the participant for federal income tax purposes in the year made. Such amounts will, however, be considered as part of the participant's gross income for purposes of Social Security taxes.

Non-CODA contributions withheld under the Plan from a participant through payroll deductions will be included in the gross income of the participant in the year withheld and are not deductible by the participant for federal income tax purposes.

A participant does not become subject to federal income taxes as a result of their participation in the Plan until the assets in their account are withdrawn by, or distributed to, the participant.

EIN 16-0690610  
PN 002  
**WILLIAMS ADVANCED MATERIALS INC.**  
**SAVINGS & INVESTMENT PLAN**  
DECEMBER 30, 1993

**Item 30a - SCHEDULE OF ASSETS HELD FOR INVESTMENT PURPOSES:**

INVESTMENTS -----	DESCRIPTION -----	COST -----	CURRENT VALUE -----
Brush Wellman Inc. Common Stock	Common Stock	\$533,504	\$471,248
Managed Guaranteed Investment Contract Fund	Bank Common/ Collective Trust	\$1,818,095	\$1,954,893
Fidelity U.S. Equity Index Portfolio	Mutual Fund	\$161,556	\$176,436
Fidelity Fund Inc.	Mutual Fund	\$213,147	\$216,602
Fidelity Puritan Fund	Mutual Fund	\$269,942	\$277,245
Participant Promissory Notes	Participant Loans	\$82,993	\$82,993
Employee Benefits Money Market Fund	Bank Common/ Collective Trust	\$14,654	\$14,654



DECEMBER 31, 1993 R-773

**SOCIETY NATIONAL BANK  
TRUSTEE FOR  
WILLIAMS GOLD REFINING COMPANY  
SAVINGS AND INVESTMENT PLAN  
CONSOLIDATED ERISA**

**THE BEGINNING PLAN VALUE AGAINST WHICH TRANSACTIONS WERE TESTED FOR  
PURPOSES OF THIS SET OF REPORTS WAS \$2,583,714.59**

31649900 WILLIAMS ADV MATERIALS EQ FD A SVP  
31649903 WILLIAMS ADV MATERIALS EQ FD B SVP  
31649906 WILLIAMS ADV MATERIALS EQ FD C SVP  
31649909 WILLIAMS ADV MATERIALS INCOME S/V/P  
31649912 WILLIAMS ADV MATERIALS CO STOCK SVP  
31649915 WILLIAMS ADV MATERIALS CONTRIB SVP  
31649918 WILLIAMS ADV MATERIALS LOAN S/V/P  
31649921 WILLIAMS ADV MATERIALS LIFE INS SVP

**PSN 4**

WILLIAMS ADV MATERIALS VAL CONS DECEMBER 31, 1993 R-776

SUMMARY OF PURCHASES AND/OR SALES IN SAME ISSUE IN EXCESS OF 5% OF BEGINNING PLAN VALUE

TRANSACTION DESCRIPTION =====	-----PURCHASES-----		-----SALES-----		
	# TRANS =====	COST =====	# TRANS =====	PROCEEDS =====	GAIN OR LOSS =====
EMPLOYEE BENEFITS MONEY RETIREMENT TRUST SHORT TERM FUND	247	984,998.80	173	974,537.71	0.00
FIDELITY PURITAN FUND SH BEN INT NO PAR	20	164,182.04	2	10,734.22	780.37
SOCIETY NATIONAL BANK RETIREMENT TRUST AMERITRUST MAGIC FUND	23	244,229.10	10	164,713.61	6,654.29
GRAND TOTAL:	290	1,393,409.94	185	1,149,985.54	7,434.66

PSN 5 R-776-0001

Richard A. Wright  
Anthony J. Wesley  
Mark G. Mills  
William M. Potoczak  
Kenneth E. Nowak

### CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Annual Report on Form 10-K under the Securities Exchange Act of 1934 of Brush Wellman Inc. for the year ended December 31, 1993 of our report dated March 17, 1994, with respect to the financial statements and schedules of the Williams Advanced Materials Inc. Savings and Investment Plan included in this Annual Report (11-K) for the year ended December 30, 1993.

Wright, Wesley & Mills, P.C.

*/S/ Wright, Wesley & Mills, P.C.*

*Cleveland, Ohio  
March 17, 1994*