Films of Interest to Ceramists

Report to The American Ceramic Society of the Ceramic Film Committee of the Missouri Chapter of Keramos.

The following is the revised list of films pertaining to ceramic and related fields. This is a continuing project of the Missouri Chapter of Keramos. Every few years, this list is prepared and published in the BULLETIN OF THE AMERICAN CERAMIC SOCIETY.

Several additions and revisions have been made to the previous lists, including a few films that have only recently become available for distribution. A system of numbers has been used to designate the distributors of the films; the number following each film corresponds to the distributor listed at the end of the report. All the listed films are free except for transportation charges.

The committee wishes to acknowledge the cooperation received from the many industries contacted, and if there are any omissions of films or errors in those listed, the committee would appreciate being informed.

> Ceramic Film Committee Albert N. Copp, *Chairman*

Abrasives

- Grits That Grind—A Story of Modern Abrasives: 30 min; 16mm; sound; color. This film shows the manufacture of grinding wheels—from the bauxite mines to the finished wheels. (1)
- Lessons In Grinding (Training Films): 16mm; sound; color. A series of eight training films on grinding methods. "The Grinding Wheel, Its Care and Use," "How to Select the Right Grinding Wheel," "The Cylindrical Grinder," "The Surface Grinder," "Cutter Sharpening," "Grinding Wheel Safety," "The Diamond Wheel, Its Care and Use," and "Grinding Carbide Tools." (1)
- Norton Abrasives In Tool Grinding: 10 min; 16mm; sound; color. A film that illustrates many everyday operations performed in the tool room, such as grinding of a counterbore, face mill, metal cutting saw, taper reamer, angular cutter, formed cutter, drills, lathe and planer tools. (1)
- Offhand Grinding With Norton Abrasives: 10 min; 16mm; sound; color. This film presents operations of removing risers, gates and pads from steel castings, billet grinding with swing frame and small portable machines, and various other rough grinding jobs. (1)
- **Precision With Norton Abrasives:** 15 min; 16mm; sound; color. The many precision instruments now in use in measuring accuracy are featured. There is a practical demonstration with precision gage blocks; illustration of operations with the electrolimit gage, the dial indicator, optimeter, profilometer, comparison microscope, epimicro-scope, Zeiss microscope and cam measuring machine are shown. (1)
- Prescription For Grinding Progress: 28 min; 16mm; color; sound. Latest developments achieved by Bay State in order processing and manufacturing techniques. Shows all steps leading to the finished product. (2)
- **The Revolutionary Single Crystal Abrasive—32 Alundum:** 25 min; sound; color; 16mm. Demonstration of the

inherent characteristics of the abrasive itself, followed by actual demonstrations on the grinding machine of the four outstanding qualities and results achieved. (1)

- Romance Of Industry: 40 min; 16mm; sound; b/w. Shows the invention of "Carborundum" silicon carbide (first man-made abrasive), the development of the abrasive industry; how abrasives are manufactured and their many applications throughout industry. (3)
- **Tomorrow's Abrasive Tools Today:** 22 min; 16mm; color; sound. The real industrial need behind the development and engineering of strong and safe abrasive wheels. Bayflex, Saf-T-Cut, and DuraCut, is emphasized. Vividly portrayed is the manufacturing process by which each of these three abrasive production tools is made, followed by actual operation shots taken in industrial production plants. (2)
- **Training Films:** 16mm; sound; b/w. A series of training films showing the principles of centerless grinding, cylindrical grinding, internal grinding, tool and cutter grinding, surface grinding, carbide tool grinding. (2)

Chemistry and Physics

Chemistry Of Aluminum: 16 min; 16mm; sound; color. Mining bauxite, refining to alumina, reduction to aluminum, production of aluminum chemicals and mill products. (4)

Exploration With The High Temperature Microscope: 22 min; 16mm; sound; color. Story of the development of a high temperature microscope. Shows crystals forming at temperatures up to 4700°F. (3)

- Heat—The Science And Economics Of Its Control: 26 min; 16mm; sound; color. Explains and illustrates the problems of heat transfer as well as solutions based on modern insulation research. One section deals with the correct method of selecting insulation of the proper economic thickness. (5)
- **The Ultimate Structure:** 1 reel, 26 min; 16mm; sound; b/w. Story of what X-ray diffraction and X-ray spectrography can do for American industry. (6)

Glass

- Glass and You: 28 min; 16mm; sound; color. The story of glass, from its beginnings 75,000 years ago as a molten volcanic mass, and its tremendous contributions to art, the sciences, industry and to countless world civilizations ever since. (7)
- In Glasstown, USA: 26 min; 16mm; sound; color. (8) Magic Fiber: 14 min; 16mm; sound; color. The
- manufacture of fiberglas reinforced plastics. (9)

Nucerite: 16 min; 16mm; sound; color. Report on

- lab demonstrations showing properties of new family of ceramic-metal composites for high temperature corrosion service. (10)
- Old **To New In Glass:** 22 min; 16mm; sound; color. Glass industry from beginning—products and major companies. (9)
- **Reaching For The Stars** : 13V2min; 16mm; sound; color. Story of scientific achievement—the role glass has played in man's conquest of the unknown. (11)

- Sealed In Glass: 1 reel, 27 min; 16mm; sound; color. History of glass from its discovery, through development as a container to fill man's needs, to modern manufacturing methods and current usage. (12)
- Success Story: 28 min; 16mm; sound; b/w. Facilities and products of Owens-Corning Fiberglas. (9)
- The Nature Of Glass: 37 min; 16mm; sound; color. The unique fundamental structure of glass is shown, major types of glasses are described and their characteristics pictured. Shows how these properties can be varied and controlled. Some of the manifold end uses of glass are illustrated in new products for such applications as atomic reactor "hot cell" windows and electronic components for computers and missile systems. (11)
- **To Greater Vision:** 28 min; 16mm; sound; b/w. The story of the manufacture of glass for use in optical instruments and eyewear; it demonstrates the optical principles involved; and it shows many applications of instruments in science, industry, peace and war. (13)

Refractories

- Asbestos ... A Matter Of Time: 23 min; 16mm; sound; color. The theory of how asbestos fibre came into being and shows today's modern mining and milling methods. (5)
- **Celite, The Story Of The Diatom:** 33 min; 16mm; sound; color. Describes the mining operations and the processing of diatomaceous silica together with a brief description of the manner in which the Lompoc, Calif., diatomaceous earth deposits were formed. The entire mining and processing operations are depicted. Research facilities at the Johns-Manville Research Center are depicted. (5)
- Master Of Fire—Servant Of Industry: 36 min; 16mm; sound; color. A film which shows the complete operation of the A.P. Green Fire Brick Co., Mexico, Mo. (14)
- **Modern Steel Making:** 23 min; 16mm; sound; color; Tells the basic steel story. It shows the tremendous activity, investment, manpower, and skill that precede the making of automobiles, stainless steel and tin plate, wire and fencing, bridges and buildings the multitude of objects, structures, and things that shape and make possible today's modern world. (15)
- **Progress In Modern Basic Refractories:** 26 min; 16mm; sound; color. Describes and explains chemical and physical properties of modern basic refractories, the reasons for their increased use, how they are produced, and where and how they are used to line the many types of furnaces that produce steel, copper, glass and cement. (16)
- **Refractories—Nucleus Of Industry:** 29 min; 16mm; sound; color. A general film story on refractories and their application, with emphasis on the manufacture of basic refractories and research. (17)
- **The Wayward BTU**: 10 min; 16mm; sound; color. Properties of thermal insulation. (9)

Structural Clay

- Brick-How They Are Made and Used In Great Britain:
- 40 min; 16mm; sound; color. Illustrates the manufacturing processes, color and textures produced in England, and many illustrations of brick buildings of yesterday and today. (18)
- **Building Dreams**: 25 min; 16mm; sound; color. Tells story of man's use of clay from ancient times to today. Shows manufacturing processes and use of structural clay products. (18)

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- Man And Masonry: 20 min; 16mm; sound; b/w. A striking story of the aesthetic elements of brick and tile design. These elements illustrate the relationship of masonry in terms of scale, nature, light, form, screens, pattern, texture, sculpture and emotion. (18)
- Manufacturing Of Brick: 1 reel, 25 min; 16mm; sound; color. Film is about brick manufacturing at General Clay Products Co. No. 1 plant, Baltic, Ohio. (19)

Whitewares

- **Everything Under Control: 1** reel, 30 min; 35mm; sound; color. Manufacture of porcelain enamel and glaze frit in a large commercial frit plant. (20)
- Progress Through Research: 14 min; 16mm; sound;
- color. Electronics—How research helps to provide required spark plugs for today's and tomorrow's automobile, truck, outboard, inboard and industrial engines. (21)
- The Second 50 Million: 27 min; 16mm; sound; color. Describes in detail the manufacturing and testing of ceramic suspension insulators for power transmission lines. (22)
- The Story Of The Modern Spark Plug: 1 reel, 27 min; 16mm; sound; color. Electronics and raw material processing equipment. (21)
- What's The Difference: 1 reel, 28 min; 16mm; sound; color. How vitrified hotel and restaurant china is made at Buffalo China Inc. factory by comparison with other factories. (23)

Addresses of Distributors

(1) Norton Company, Worcester 6, Mass.

(2) Bay State Film Production, Inc., P.O. Box 129, Springfield, Mass.

(3) The Carborundum Co., Public Relations Branch, Niagara Falls, N. Y.

(4) Reynolds Metals Co., Richmond 18, Va.

(5) Johns-Manville Sales Corp., 22 East 40th St., New York 16, N. Y.

(6) Philips Electronics Instruments, Norelco Products, 750 South Fulton Ave., Mount Vernon, N. Y.

(7) Association Films, Inc., 79 East Adams St., Chicago, 111.

(8) Owens-Illinois Technical Center, 1700 North Westwood, Toledo 7, Ohio

(9) Owens-Corning Fiberglas Corp., National Bank Bldg., Toledo 1, Ohio

(10) Pfaudler Division, Pfaudler-Permutit, Inc., 1000 West Ave., Rochester, N. Y.

(11) Association Films, Inc., 561 Hillgrove Ave., La Grange, 111.

(12) Sterling Movies USA, Inc., 43 West 61st St., New York 23, N. Y.

(13) Bausch and Lomb, Inc., 635 St. Paul St., Rochester 2, N. Y.

(14) A. P. Green Fire Brick Co., Mexico, Mo.

(15) United States Steel Film Distribution Center,

Public Relations Dept., 208 South LaSalle St., Chicago 90, 111. (16) Kaiser Refractories, 300 Lakeside Drive, Oakland

- 12, Calif.
- (17) Harbison-Walker Refractories Co., 307 Fifth Ave., Pittsburgh 22, Pa.

(18) Structural Clay Products Institute, 228 North LaSalle St., Chicago 1, 111.

(19) General Clay Products Co., 1445 West Goodale Blvd., Columbus, Ohio

(20) PEMCO Division of The Glidden Co., 5601 Eastern Ave, Baltimore 24, Md.

(21) Champion Spark Plug Co., Toledo 1, Ohio

(22) Ohio Brass Co., 380 North Main St., Mansfield, Ohio

(23) Buffalo China, Inc., Buffalo 10, N.Y.