



INDUSTRIAL DATA

Yours for the asking

AN EDITORIAL CLEARINGHOUSE FOR READERS DESIRING MORE INFORMATION ABOUT NEW PRODUCTS AND SERVICES FOR THE CHEMICAL PRODUCING AND CHEMICAL CONSUMING INDUSTRIES.

MANUFACTURERS' LITERATURE

CHEMICALS & MATERIALS

SYNTHETIC RESINS. Booklet, "The Uformites for Paper," discusses synthetic resins in modern paper-making procedure. Gives history of wet strength in paper and value in such applications as waterproof maps, paper towels, bags for chopped ice, moist fruit or vegetables, frozen foods, etc. Treats specific data on preparation, operating conditions, dilution of resin and broke recovery with resins. Resinous Products & Chemical Co. 1

TEMPER DESIGNATIONS. Booklet, "Alcoa Temper Designations for Cast and Wrought Products," effective on and after Jan. 1, 1948. Contains tables on designations for strain hardened tempers of nonheat-treatable alloys; and designations for heat-treated products including: wrought alloys; sheet and plate; extrusions; wire, rod, and bar; tubing, forgings, and rivets. Aluminum Co. of America. 2

LININGS. Bulletins illustrating chemical- and abrasion-resistant linings in thicknesses of $\frac{1}{8}$ to $\frac{1}{4}$ in. or more, and describing lined drums. Rubber, damaged by sharp objects, may be repaired by purchaser on site. Heil Process Equipment Corp. (Bulletins 46 and 525) 3

ION EXCHANGE RESINS. Booklet, "The Role of the Amberlites," describing role in water treatment and chemical processing. Lists contributions in transportation, chemical, canning, paper, textile, dye, and pigment industries. Discusses processes including deionization of locomotive water, isolation of rare earth metal salts, control of alkalinity, concentration of chemical elements, recovery of acids, prevention of scale in heat transfer processes, liberation of weak bases, and adjustment of salt content. Resinous Products & Chemical Co. 4

ORGANIC INSECTICIDE. Report by Connecticut Agricultural Experiment Station on "Direct Control of Ants" by

chlordan. May be applied with hose and garden nozzle by spot treatment to nests or thorough watering with solution. Application and dosages mentioned. Julius Hyman & Co. (Technical Supplement 202) 5

WATER TREATMENT. Bulletin, "Alkalies and Chlorine in the Treatment of Municipal and Industrial Water," discusses softening, purification, taste and odor removal, corrosion control, boiler feed water treatment, use of alkalies, chlorine, and other chemicals and equipment, as well as lists of standard reference works on many of subjects covered. Solvay Process Co. (Bulletin 8) 6

ENTHALPIES. Bulletin, "Tentative Partial Enthalpies of the Lighter Hydrocarbons," authored by B. H. Sage, R. H. Olds, and W. N. Lacey. Tables consist of: partial enthalpies of methane, ethane, propane, *n*-butane, and *n*-pentane in the gas and liquid phases. Clark Bros. Co., Inc. 7

FLUIDS AND LUBRICANTS. Bulletin, "Ucon Fluids and Lubricants," describ-

ing use of new polyalkylene glycols and their derivatives for: general industrial lubrication, textile lubricants and conditioners, rubber lubrication, hydraulic applications, plasticizers and softeners, and heat-transfer media. Carbide & Carbon Chemicals Corp. 8

CARBON TETRACHLORIDE. Booklet containing technical and general data on carbon tetrachloride intended to serve as reference book. Discusses specifications, physical and chemical properties, azeotropic mixtures, vapor pressure-temperature relationship of the liquid and other chlorinated hydrocarbons, solubility of water in carbon tetrachloride, stability, action on metals, non-flammability, solvent power, binary mixtures, etc. Describes uses and applications and gives approved instructions for safe handling. Stauffer Chemical Co. 9

EQUIPMENT & SUPPLIES

MAGNETS. Catalog describing rectangular double-gap electro-magnetic, suspended, spout, and plate magnets, and wet type magnets for submerged installations. Applied for removal of tramp iron to protect equipment, purification of nonmagnetic products, pre-

⑥ Circle Desired Items

INDUSTRIAL DATA DEPARTMENT INDUSTRIAL AND ENGINEERING CHEMISTRY

I am interested in the following items:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67								

NAME _____ POSITION _____

COMPANY _____

STREET _____ CITY _____ STATE _____

(NOVEMBER 1947)

PLEASE TYPE OR PRINT

vention of fires and explosions from sparks, and recovery of tools and magnetic scrap. Describes applications of magnets in mining, food, process, metalworking, rubber, textile, grain, and other industries. Includes drawings, illustrations of installations, specification data, etc. Dings Magnetic Separator Co. (Catalog 301-A) 10

PROTECTIVE APPAREL. Bulletin describing and illustrating aprons and sleeves of clear and frosted plastic for protection against various acids, caustics, oils, and solvents. Seams electronically sealed. 3 weights. Also discusses synthetic, neoprene coated, and work gloves for similar service. Industrial Products Co. 11

TURBO-SUPERCHARGER RINGS. Reprint describing roll bending and flash welding stainless steel turbo-supercharger rings, by P. B. Scharf. Dresser Mfg. Division. 12

PROPANE-BUTANE HOSE. Folder describing suitability of hose for handling highly volatile petroleum gases in liquefied form from bulk storage to tank car, and from tank car to home storage tanks. Made of multiple plies of high-tensile, closely woven cotton duck bonded by layers of oil-resisting rubber. Withstands high pressures encountered in propane-butane service. Contains spiral of static dissipating steel wire embedded in wall, and extending through length. Hewitt-Robins Inc. 13

FATIGUE TEST MACHINES. Six bulletins describing and illustrating 8 fatigue test machines, containing detailed specifications. Baldwin Locomotive Works. (Bulletins 256 to 260) 14

COATED UPOLSTERY FABRICS. Folder illustrating and describing types of pyroxylin, vinyl plastic, and synthetic rubber coated fabrics. E. I. du Pont de Nemours & Co., Inc. 15

AUDIO-VISUAL REFERENCE LISTS. Three publications, "Selected Indexes and Sources of Photographic Visual Aids," "Selected References on Audio-Visual Education and Training," and

"Some Sources of Educational 2 X 2-in. Slides." Booklets respectively list major sources of motion pictures, slide films, and slides available for educational, industrial training, medical, and other purposes; most of significant articles and books concerned with production and utilization of photographic audio-visual aids since 1940, plus some of earlier origin; and partial list of largest producers and suppliers of 2 X 2-in. slides on various subjects. Eastman Kodak Co. 16

DEWATERING ROTOSCOOP. Booklet describing and illustrating sand dewatering device capable of recovering available sand grains and similar materials and discharging product dry enough for truck transportation, or mechanical conveying to and from storage. Saves grain sizes lost in overflow water. 4 sizes: 6, 9, 12, and 15-ft. diameters; capacities from 20 to 150 tons/hr. Includes dimensions, hp., and weights. Link-Belt Co. (Folder 2263) 17

ELEVATOR BELTING. Folder describing belting constructed of rubber compounds bonded to high-tensile cotton carcasses. Supplied in standard and shock-pad construction in all widths and plies; special construction for hot materials handling. Hewitt-Robins Inc. 18

CONVEYOR BELTING. Booklet describing following features: rubber compounds supply resistance to abrasion, aging, weathering, heat, and sun-checking; cotton reinforcements provide added strength, reduce stretch; scientific treatment against mildew; flexibility; resilient rubber frictioning between plies for adhesion; layers of skim rubber provide added cushioning to withstand shock loads. Available in straight-ply, stepped-ply, and shock-pad construction in all widths and plies; special construction for handling hot materials. Hewitt-Robins Inc. 19

CENTRIFUGAL PUMPS. Bulletin illustrating corrosion-resistant aluminum bronze pump. Replaceable wearing ring centrifugally cast, and heat treated to provide toughness and hardness. Complete series available in close coupled

and pedestal types. Discusses design, construction, and drives. Ampco Metal Inc. (Bulletin 85) 20

VOLTAGE CONTROL. Data on variable transformers, voltage regulators, instantaneous electronic models, and electromechanical models, illustrating types. Lists adaptations, connections, and ratings including all standard types for single- or 3-phase operation. Available with or without motor drive. Superior Electric Co. (Bulletin 547 and Price List) 21

ENGINEERING DATA. Guide for engineer and draftsman in design of pipe coils and fin coils. Treats heat transfer "K" factors for all ranges of heating and cooling from -60 to +350° F., gives recommended air velocities and fin spacing for fin coils, and shows in detail how to calculate and design pipe and fin coils for all generally encountered heating and cooling loads. Discusses inspecting, testing and finishing coils, calculation of heating and cooling coils, methods of computing fin coil surfaces, application of coils to particular types of heating and cooling units, and gives properties of saturated steam. Rempe Co. (Form 547-SM. Price, \$1.50) 22

EXTRUSION TAKEUP EQUIPMENT. Brochure, Part IV of series "Blueprint for Industry," containing technical engineering drawings and specification tables and analytical descriptions of modern methods in continuous extrusion takeup operations; treats wire, cable, plastic monofilaments, and tubing systems. High production extrusion system speed range up to 2000 ft./min. or higher. Industrial Ovens Inc. 23

COMMODITY SPECIFICATIONS SUPPLEMENT. Supplement to 1945 edition of National Directory of Commodity Specifications prepared by P. A. Cooley. With 1945 edition, provides complete listing, by name, designating number and issuing or sponsoring organization, of all standards, specifications, and methods of test in general use for commodities produced in or purchased by U. S. Government. National Bureau of Standards. (Miscellaneous Publication M178 and Supplement. Prices, \$4.00 and \$2.25, respectively) 24

STAINLESS AND ALLOY STEEL VALVES. Booklet describing use of valves for chemical, industrial, processing, and refinery services. Lists dimensions of numerous corrosion-resistant models for high temperature and high pressure requirements. Kerotest Mfg. Co. (Catalog 47-A-S) 25

SCIENTIFIC EQUIPMENT. Booklet, "Announcer of Scientific Equipment," illustrating and describing recent developments of apparatus and supplies for laboratory work, including laboratory glassware, vacuum pump, variable transformers, rotary vane pump, gas drying unit, multiple pipette shaker, thermoswitch, and aluminum steel hot air sterilizers. Eberbach & Son Co. (House Magazine 47-10-28) 26

PLACE
1c STAMP
HERE

INDUSTRIAL DATA DEPARTMENT
Industrial and Engineering Chemistry
332 WEST 42nd ST.
NEW YORK 18, N. Y.

CONTINUOUS BLOWOFF SYSTEMS. Publication illustrating 5 flash-tank and heat-exchanger systems for recovering wasted heat in boiler blowoff water. Flash principle permits regeneration of low pressure steam for feedwater or plant heating. Remaining heat in concentrated blowoff water transferred to incoming feedwater through heat exchanger. Chart shows simplified savings estimate. Cochrane Corp. (*Publication 4410*) 27

RUBBER MATS AND MATTING. Catalog section dealing with rubber mats and matting, and describing in detail function, construction, and specifications of each type. Includes: platform and standard perforated mats, runner, multi-link matting, molded and perforated door mats, shower stall, bath, stove, drainboard, and office chair floor mats. B.F. Goodrich Co. (*Catalog Section 6100*) 28

INSTRUMENTS

ELECTRONIC SCRIBER. Booklet describing and explaining scriber functions for measurement, indication control, and permanent record of variables in process industries. Design, operating, and specification data contained. Deviation of 0.004 in. to 0.006 in. of detector of measuring system sufficient to cause pen response. Tamperproof housing, automatic chart reroll and tear-off, back-lash reaker, voltage selector plug, multi-tube safety factor, and direct reading are features. Wheelco Instruments Co. (*Bulletin C2*) 29

STIFFNESS TESTER. Bulletin describing motor-operated tester illustrates applications in paper, textiles, leather, plastics, metal foil and finishes; range and capacity given for standard sizes. Not recommended for heavy, limp materials. Height, 17 in., base, 7 in. \times 10.5 in. Weight, 14 lb. Motors supplied for use on 115 v., 60 cycles a.c., 25 or 50 cycles. W. & L. E. Gurley. (*Bulletin 1430*) 30

MICRO-GAS ANALYZER. Folder illustrating analyzer for determination and analysis of gases and vapors within toxic range. Principle: electrical conductivity of solutions. Includes toxicity table for 73 gases, specifying maximum allowable concentration for each. Specifications: 110 a.c., 60 cycles; dimensions, 8.5 \times 20 \times 12.25 in., weight, 33 lb. Davis Emergency Equipment Co., Inc. (*Technical Bulletin 1143*) 31

FLOW RATE MEASUREMENT. Bulletin, "A New Era in Liquid & Gas Flow Measurement," describing and illustrating flowmeter. Discusses basic principles, flexibility, accuracy, calibration linearity and range, immunity to variations in fluid viscosity, etc. Meter consists of: tapered borosilicate glass tube set vertically in fluid piping system with large end at top, and metering float free to move vertically in tapered glass tube. Fischer & Porter Co. (*Catalog Section 10-D*) 32

NEW PRODUCTS

CHEMICALS & MATERIALS

SHINGLE COATING. Coating of linseed oil material or rubber base paint. 2-coat application bonds chemically and physically to asbestos siding. Ready-mixed. 1 gal. covers 300 sq. ft. A.C. Horn Co., Inc. (*Horn-O-Kote*) 33

SYNTHETIC ADHESIVE. Resin-latex emulsion cement permanently adheres ungummed paper labels to electrolytic tin plate,terne plate, varnished, lacquered, painted, and enameled surfaces, etc. Suitable for bonding operations involving similar and dissimilar materials. Labels retain adherence to surface after aging at 225° F. for 7 days and exposure 100 hr. at 100% relative humidity at 100° F. No objectionable odor when paneled sealed in airtight container at 100° F. for 24 hr. Available in 1 to 55 gal. drums. Paisley Products Inc. (*No. 1707*) 34

FIRE-RESISTANT PAINT. Ready-mixed, self-sealing, covers wallpaper, plaster, brick, steel, composition, or wood in 1 coat. Washable. Picotite Inc. (*Fire Stop*) 35

BLOOM INHIBITOR. Data on bloom inhibitor for natural rubber and mixtures of natural rubber and GR-S compounds. Modified resin acid which is neutral with thiazole acceleration in natural rubber. Softening point 145° to 155° F. Shatters at room temperature; may be added to batch without melting. Specific gravity, 1.082. Recommended dosage 2 to 4 parts/100 rubber hydrocarbon. Applicable to tire coat and friction stocks, tire repair materials, laminated mechanical parts, footwear frictions and gum parts, etc. J. M. Huber Corp. (*Bulletin NATAC*) 36

NEOPRENE PAINT. Paint coating protects surfaces exposed to fats, oils, greases or corrosive chemical liquids, solids or fumes. Adheres to wood, metal, etc.; is odorless; resists abrasion. Rubberlike, aromatic solution with addition of materials forms chemically resistant paint. Translucent amber. May be sprayed or painted. Union Bay State Chemical Co. 37

EQUIPMENT & SUPPLIES

INDUSTRIAL APRON. Heavy-duty apron of Koroseal film. Resists acids, greases, caustics, gasoline, animal fats and blood, vegetable fats, solvents, and soaps. Available in sizes 29 \times 35 in., weight, 14 oz.; and 35 \times 45 in., weight, 1.5 lb. Tape, hem, and grommet construction. Reinforced points. B. F. Goodrich Co. 38

MAGNETIC HOLDING ASSEMBLIES. Alnico magnet assemblies, 5 types in 17 sizes from pull of 1 1/4 to 500 lb. Vacuum impregnated to prevent moisture

penetration, cadmium plated to prevent external corrosion. Smallest size 7/16 in. in diameter. General Electric Co. 39

ALL-ALUMINUM PREFAB. Quonset hut design building, suitable for extreme weather conditions. Size, 36 \times 60 ft. Standardized 6-ft. sections enable lengthening. Arches anchored to concrete foundation 1 ft. above ground. Reflects up to 95% of radiant heat. 5220 cu. ft. space, 2160 sq. ft. floor area. Sliding doors 11 ft. high, 16 ft. wide. Weight, 7000 lb. Cost, \$1.56 per sq. ft. Reynolds Metals Co. (*Alumi-Drome*) 40

PULP FILTER AND WASHER. Filter with stainless-steel shells and screens, nickel-alloy cocks and fittings, and streamlined design. Usual handwheel replaced by hydraulic cover-lift to reduce over-all height and simplify operation. Automatic cell lock prevents misalignment of pulp layers. Washer removes danger of "balling" pulp. Features welded tank eliminating gaskets, 5 ip. requirements, fast circulation at slow speeds, small floor space requirement, and nonclogging discharge valve. Niagara Filter Corp. 41

PNEUMATIC MATERIALS HANDLING SYSTEM. System reduces usual product loss through collector exhaust by 10%, eliminates need for second filter collector. Can exhaust in same room with collector. No residue; injurious dusts cannot escape through piping connections, as system is under reduced pressure; suction keeps system free from bugs or weevils. Sprout, Waldron & Co. (*Pneu-Vac*) 42

FLAT BELTING. Flat transmission belting of straight-edge construction for heavy-duty drives. Flexible, built of hard silver duck. Plies insulated with gum rubber compound. Available in 500- to 550-ft. rolls. Hewitt-Robins Inc. (*Monarch Amber*) 43

SPRAY HOSE. Two types of agricultural spray hose for pressures up to 800 lb./sq. in. One of oil-resisting synthetic tube to withstand emulsion sprays, other nonoil resisting for nonoil predominating conditions. Both resistant to insecticides, solvent solution, abrasion, weathering, and sun-checking. Hewitt-Robins Inc. (*Monarch and Ajax*) 44

FIRE AND CHEMICAL HOSE. Lightweight duck hose with high burst resistance. Duck protected against mildew deterioration by chemical treatment, and against acid fumes by rubber cover. Rubber tube and cover compounded to withstand oiling without cracking. Hewitt-Robins Inc. 45

OIL STANDBY EQUIPMENT. Available for use with gas burner equipment. Utilizes No. 3 furnace oil or lighter; provides same B.t.u. input/hr. as provided with gas burner equipment. Surface Combustion Corp. 46

AXIAL FLOW FANS. Available in 2 types: straight-through or convertible elbow. Furnished with 3-bladed aluminum alloy wheel or 8-bladed steel wheel. Applications include: air conditioning, dust and fume removal, machinery cooling, mechanical draft for combustion, and industrial drying and processing. Vertical or horizontal operation. Capacity to perform against resistance of wind and duct systems. Sizes, 18 to 72 in., displacement, 2000 to 115,000 cu. ft./min. at 3 to 10 in. static pressure. Westinghouse Electric Corp. 47

THERMOSTATIC VALVE. Expansion valve for refrigeration applications. Check valve incorporated in regular size body. Positive control without feeler bulb. Close maintenance of superheat control -5° F. superheat with $+5^{\circ}$ F. for control; saves space, compensation for pressure drop in evaporator designed into valve; no time lag in control; no special installation required. Tenney Engineering Inc. 48

PRESSURE REGULATOR. Automatic regulator operating on physical principle of Cartesian Diver. Self-contained. Heavy-duty, all metal unit. Maintains pressure or vacuum to within 0.1%. Corrosion-resistant unit measures 7.5 \times 3.25 in. Weight, 6.5 lb. Emil Greiner Co. (Bulletin ICM-96) 49

JACKHAMMER. Data on air-operated utility jackhammer. Rock drill, standard jackbits, automatic rotation. Oil reservoir in handle supplies lubrication. Weight, 14 lb.; length, 17 1/2 in.; shank, 7/8 \times 3 1/2 in. Hose, 3/4 to 1/2 in. Ingersoll-Rand Co. (Form 4065, J-10) 50

SILVER SOLDERING OUTFIT. Single-unit outfit for silver soldering together with silver solder brazing kit. For light bench work on metal up to 0.25 in. thickness. Unbreakable, noncorrosive burner with leakproof joints. American Products Corp. 51

WATER SUCTION HOSE. Smooth bore water suction hose of chernack loom type construction. Light weight. Can be reformed to shape if crushed or kinked. Hewitt-Robins Inc. 52

GAS COMBUSTION ASSEMBLIES. Pre-engineered, packaged units adaptable to firing boilers, air heaters, dryers, ovens, kilns, etc. Combine air handling, gas supply, mixing, and burning elements. Single burner or twin-nozzle burners. Capacities: 400,000 B.t.u./hr. rated at 8 boiler hp., with 1 1/2 in. gas inlet and 1/2 in. gas blower, to 3,300,000 B.t.u./hr. and 66 boiler hp., 3 in. gas inlet and 3 hp. blower. Burn low pressure gases from 400 B.t.u. upward, at 3 in. to 11 in. water pressure. 4 variations of control with each size. Bryant Heater Co. (Bryant Post-R-Ssemblies) 53

GAS ALARM SYSTEM. Continuous remote head type system detects presence of combustible vapor and/or gas, gives audible signal before mixtures become dangerous. Operating principle based on combustion of flammable

gas-air or vapor-air mixtures on heated filament in analyzer head. Control cabinet cover prevents tampering. Transparent words in cover become illuminated when respective relays close. Davis Emergency Equipment Co., Inc. 54

ELECTRODE. All position, mild steel electrode. A.c. and d.c. reverse polarity current. Preheating not required. Recommended applications: welding high sulfur, free machining steels, welding hardenable steels where no preheat is used, etc. Wilson Welder & Metals Co., Inc. (Wilson 512) 55

INDUSTRIAL WHEELS. Aluminum alloy wheels range from 4 to 12 in. in diameter. Available with molded-on Grade A rubber or all aluminum treads. Roller or ball bearings or bronze bushings. Aerol Co. 56

GERMICIDAL UNIT. Destroys air-borne bacteria in 8 sec. 2 types: to kill airborne bacteria through indirect radiation; to destroy molds, bacteria virus, and fungus through direct radiation on surfaces and in liquids. Lamps in units produced in 2 lengths—15 w. in 18 in., and 30 w. in 36 in. Lamp life 4000 hr. in 3-hr. cycles. Duro Test Corp. 57

BOTTLE OILER. Flat side shallow bottle oiler for tight quarters. Over-all length, 3 1/2 in. Automatic operation, visible oil supply. Circular shows typical installations, application methods, dimensions, and prices. Lunkenheimer Co. (Circular 500-RL) 58

INSTRUMENTS

AIR-FUEL RATIO CONTROLLER. Controller employing electric-motored valve drives and requiring no hydraulic piping. Rugged, balance-type, having ample flexibility for various operating conditions. Ratio adjustable manually. Maintains air-fuel ratio constant at desired point, as fuel flow changes, or can provide automatic variation of ratio. Leeds & Northrup Co. 59

ELECTRONIC REMOTE CONTROL UNIT. Control system for valves, dampers, and other mechanical mechanisms described in booklet containing complete performance and operational data. Consists of transmitter, control amplifier, and receiver. Dustproof cast metal cases. Askania Regulator Co. (Technical Bulletin 138) 60

ELECTRONIC AMPLIDYNE. Consists of high-gain balanced d.c. electronic amplifier and motor amplidyne. High-capacity amplifier useful in motor controls where precise regulation of current, voltage, and speed are required. Output, 1.5 kw., 250 v. Regulated adjustable-voltage power supply for d.c. motors up to 1.5 hp. and regulated exciter for larger drives up to 200 hp. Useful on 220- or 440-v., 3-phase, 60-cycle power supply. Speed range 20:1 or greater. General Electric Co. (Bulletin GEA-4889) 61

TESTING MACHINE. Precision tests physical properties of plastics, rubber, nonferrous metals, textiles, fibers, etc., with error not exceeding 0.5% of reading or 0.1% of range. Features: continuously-variable 400:1 positive speed range; horizontal rigidity; elimination of backlash; and accuracy in low ranges. Maximum capacity 5000 lb. Uses mechanical screw system. Loading speed steplessly variable from 0.05 in. to 20 in./min.; constant within $\pm 2\%$. Ranges: 5000 lb. in 5-lb. units, 0-1000 lb. in 1-lb. units, 0-200 lb. in units of 0.2 lb., and 0-50 lb. in units of 0.05 lb. Baldwin Locomotive Works. 62

GEIGER TUBE. Alpha or soft beta counter recording 25% of total disintegrations for alpha particles from uranium; and 36% disintegrations for soft beta such as from C^{14} , Fe^{59} , and S^{35} . Windows from 0.7 mg. to 2.3 mg./sq. cm. in thickness; life, 10⁶ counts. Mica window, 2.5 in. in diameter. Over-all dimensions, 3.5 and 5 in. in diameter and length, respectively. Cyclotron Specialties Co. (Tube 410-A) 63

OSCILLOGRAPH CAMERA. Continuous-recording camera for cathode-ray oscillograph images. Applicable to many standard 5-in. cathode-ray oscillographs. Single-frame exposures of stationary patterns or continuous recording of changing phenomena. Film speed variable from 1 in./min. to 5 ft./sec. Permits simultaneous viewing and recording on 35-mm. film or perforated sensitized paper. Magazines for 100- to 1000-ft. film available. A. B. Du Mont Labs. Inc. (Du Mont 314) 64

AUTOMATIC SCALING UNIT. Scaling device for use with Geiger-Müller counters in radioactivity research. Operates on impulses from Geiger-Müller tube and actuates register once for each group of impulses received. Scaling factors of 2, 16, 32, or 64. Switch allows selection of 10, 100, or 1000 times selected scaling factor for predetermined count. Automatically shuts off after number of counts is recorded. Indicates time required for counts if connected to electric timer. Self-contained high-voltage supply, 700 to 2500 v., with electronic regulation of 0.01% change in line voltage. Instrument Development Labs. 65

WRINKLE RECOVERY TESTER. Measuring device permits determination of amount of wrinkle resistance in woven fabrics. Permits reading of recovery angles from 0° to 180°. Monsanto Chemical Co. 66

ELECTRODE pH METER. Portable glass meter can be plugged into standard 110 v., 50/60 cycle a.c. line. Covers full scale of 0 to 14 pH, makes mv. readings within range 0 to ± 410 mv. pH measurements accurate to 0.03 pH, mv. readings to 2 mv. Built-in temperature compensator dial calibrated 0° to 100°C. Measures 12 \times 9.5 \times 8.5 in. over-all, net weight, 14 lb., power consumption, 35 w. National Technical Labs. (Model H pH Meter) 67