EXACT CONTROL of Moisture Content
To Improve your Product or Protect Your Materials or for Processes or Tests

NIAGARA BLOWER COMPANY
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District Engineers
In Principal Cities of U. S. & Canada

EQUIPMENT NEWS

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science does not assume responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to Science, Room 740, 11 W. 42 St., New York 36, N.Y. Include the name(s) of the manufacturer(s) and the department number(s).

• Power supply for 14-stage multiplier phototubes furnishes sufficient current for a number of tubes. Output is from 600 to 3110 v at currents up to 15 ma. Regulation is ±0.01 percent for a 20-percent change in line voltage and ±0.005 percent for a load change of 10 ma. Stability is 0.005 percent per hour and 0.05 percent per day. A 1.02 v sample of the output is available at the front panel for monitoring. (John Fluke Manufacturing Co., Inc., Dept. S403)

• Pulse generator provides repetition rates from 10 cy to 100 kcy/sec, variable advance or delay operation, 0 to 100 μsec, variable pulse width from less than 0.1 to 100 μsec, and variable-amplitude, low-impedance output. (Electro-Pulse, Inc., Dept. S404)

• Air-sampling kit permits detection of toluene deisocyanate and toluene disocyanate urea vapors in manufacture of polyurethane plastics. Concentrations less than 0.1 ppm are detected. The vapors are detected by hydrolysis to amine and conversion to a diazo amine compound. (Mine Safety Appliance Company, Dept. S395)

• Paper-chromatogram scanner is a windowless model suitable for counting C14 and S35. The chromatogram is mounted on a drum which rotates in front of the detector. Count rate is recorded by a rectilinear-type recording millimeter. The scanner and recorder motions are mechanically related. Chromatograms measuring up to 56 by 3.5 cm are accommodated. (Radiological Service Co., Inc., Dept. S400)

• Frequency multiplier is designed to reduce the time necessary for measurement of frequency in the range of 390 to 410 cy/sec. Used with electronic counters, the frequency multiplier cuts down by one decade the sampling time required for a given precision. Multipliers for other frequencies can also be supplied. (The Gyrex Corp., Dept. S401)

• Digital printer operates from four-line 1-2-2-4 binary code to print up to 12 digits on standard adding-machine tape. Minimum display time is 0.2 sec. Dimensions are 14 by 8 by 10 in. (Computer Measurements Corp., Dept. S396)

• Demineralization unit furnishes water with a resistivity greater than 10 Mohm at rates up to 40 gal/hr. The mixed-bed cation and anion resins are regenerated, seven canisters at a time, in auxiliary equipment. Regeneration requires 1½ hr. (Penfield Manufacturing Co., Inc., Dept. S405)

• Neutron detector, a boron polymer with ZnS(Ag) activator, measures thermal neutrons in the presence of high gamma flux. Detection efficiency ranges up to 35 percent and can be further increased by the use of enriched boron-10. The detector is supplied in disks 1.2 mm thick and of various diameters. (Nuclear Enterprises, Ltd., Dept. S406)

• Recording balance is suitable for a total load of 100 g. For thermal work, the balance is surmounted by a nichrome-wound furnace. Furnace temperatures and loss of weight are recorded, side-by-side, on a twin pen electronic recorder. A capacitance sensor follows the movement of the balance beam to provide observation of weight. The balance is air damped. Sensitivity may be either 1 mg or 0.1 mg. At the end of each full beam movement, a weight-loading mechanism is actuated. In this way, changes of weight up to 1 g can be followed automatically on the 1-mg sensitivity model. A single-recorder model that records weight against time is also available. (Stanton Instruments Ltd., Dept. S424)

• Level switches are glass tubing arcs filled with a special electrolyte. One hollow platinum electrode and two solid platinum electrodes make contact with the electrolyte to provide the output signal. The switches can withstand temperatures up to 200°C and operate below -60°C. Level and deviations from level are indicated to within tenths of a degree. (Corning Glass Works, Dept. S413)

• Temperature transducers for tele-metering applications are of resistance type, giving outputs up to 5 v for charge of 150°F. Standard units cover the range from -320° to +500°F, with ±2 percent linearity. Special units can be had for use up to 1600°F. Resistances of the units range from 100 to 20,000 ohms. (Arnoux Corporation, Dept. S409)

• Power absorber, operating at 13,500 w, continuous duty, has a weight of 1 lb per kilowatt absorbed. Air, drawn through circumferential slots by a fan, flows over V-section resistors to dissipate the heat produced. Overload protection is provided. (Sun Electric Corp., Dept. S412)

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