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).*

■ SURFACE-TEMPERATURE TRANSDUCER is said to be accurate between −320° and 950°F. The transducer consists of a woven grid of fine platinum wire. A resistance change of 100 ohms or more can be obtained for a temperature span of as little as 100°F. Response time is 0.5 sec. A special cement is used to attach the transducer to the surface to be measured. (Charles Engelhard Inc., Dept. S425)

■ REPEAT-CYCLE TIMER uses resistance-capacitance networks for timing. Each timing cycle initiates the next. On-time is adjustable from 0.2 to 200 sec, off-time from 0.1 to 60 sec. The intervals are interchangeable. (G. C. Wilson and Co., Dept. S296)

■ ELECTROLYTIC HYGROMETER automatically and continuously measures water concentration in vapor samples with 5 percent accuracy in the 0- to 1000-ppm range. The measurement is made by passing the sample-gas stream through an analytic element that absorbs and electrolyzes water present in the stream. The electrolysis current is a measure of the rate of absorption of water. The instrument will measure samples at temperatures up to 100°C. An incorporated alarm system can be set at any point in the instrument's range. Output will operate a 10 or 50 mv recorder. (Beckman Instruments, Inc., Dept. S434)

■ PRESSURE PICKUP may be installed in the body of a standard spark plug. It permits retention of the original thermal, ignition, and physical characteristics of the spark plug, and provides a tool for research on internal combustion engines. A pressure-sensitive diaphragm in the electrode cavity of the spark plug is linked with an unbonded strain gage contained in the outer plug body to provide an electric signal. Pressure range is 0 to 1000 lb/in². Full-scale output with 22-v excitation is 20 to 30 mv. (Dynamic Instruments Co., Inc., Dept. S435)

■ PORTABLE POTENTIOMETER covers the range of 0 to 100 mv with a single ten-turn dial. Sensitivity is 0.05 mv and accuracy is given as ±0.1 mv. The galvanometer is of the torque suspension type and does not require locking in transit. Its low resistance makes the instrument suitable for use with thermocouples. (Williamson Development Co., Inc., Dept. S426)

■ RADAR RESTITUTER automatically computes the errors that give rise to the distortions present in radar photography and produces a new photograph on which ground objects are accurately located. The chief distortions eliminated arise from the observation of slant distance rather than ground distance and from the motion of the radar. The corrected photographs are suitable for compilation of maps. (Fairchild Camera and Instrument Corp., Dept. S427)

■ MAGNETIC DRUM MEMORY stores more than 12,000 bits and associated clock and reference information in 14 channels. Each channel is 0.070 in. wide and has a capacity of 1024 bits. The drum is 3.5 in. in diameter, and the case is 6 in. in diameter and 3.25 in. wide. The drum is belt-driven at speeds up to 15,000 rev/min. Access time is approximately 1.25 msec. Other models with up to 36 channels will be produced. (Borg-Warner Corp., Dept. S436)

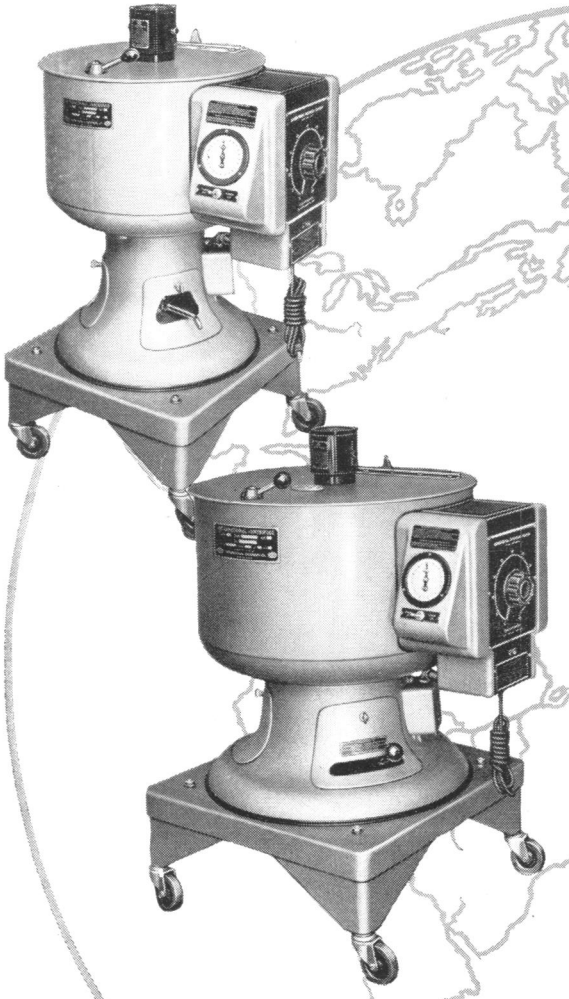
■ TENSION METER has a range of 1 to 20 lb, with greatest resolution at the low tension end. During operation, the material under test—for example, a wire—runs between two rollers and a third roller. The rollers deflect the material from a straight line and the meter measures the force required. Readings are made while the material moves at production speeds. (Tensitron, Inc., Dept. S429)

■ COUNTER with a range of 100,000 counts is battery operated. A self-contained battery charger permits the instrument to be kept in readiness for field use. Five glow-tube decades perform the counting, with push-button reset and a spring-wound timer providing a predetermined time counting range from 0.25 to 6 min. A stop switch is also provided. (Nuclear-Chicago Corp., Dept. S440)

■ SINGLE CRYSTALS as well as large-grain polycrystals are offered in most metals. A broad range of metal purity, crystal orientation, and overall size is available. The crystals may be obtained with the surface etched or electropolished, or with the surface unchanged from its condition at the end of growth. (Flow Corporation, Dept. S445)

JOSHUA STERN
National Bureau of Standards

International STANDARDS



SIZE 1, MODEL SBV CENTRIFUGE

VERSATILITY — accommodates
11 Horizontal swinging heads
15 Angle heads
2 Multispeed attachment heads
4 Basket style heads

SPEEDS and FORCES —
Adjustable speeds up to 5600 r.p.m.
R.C.F. — up to 5100 G.
Multispeed attachment provides up to 20,000 r.p.m. and 27,500 G.

CAPACITY —
Standard glass and plastic containers from 10 ml. to 250 ml.
Total maximum capacity — 1000 ml.

SIZE 2, MODEL V CENTRIFUGE

VERSATILITY — accommodates
14 Horizontal swinging heads
16 Angle heads
2 Multispeed attachment heads
4 Basket style heads

SPEEDS and FORCES —
Adjustable speeds up to 5100 r.p.m.
R.C.F. — up to 4060 G.
Multispeed attachment provides up to 19,000 r.p.m. and 25,000 G.

CAPACITY —
Standard glassware from 10 ml. to 650 ml.
Plastic containers up to 1000 ml.
Total maximum capacity — 4 liters.

Throughout the world there are standards of comparison for many products. For Laboratory Centrifuges that standard of comparison is, invariably, International's Size 1 or Size 2. These Centrifuges are truly *International Standards.*

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Vertical fine controls permit accurate movements of 0.5 to 650 microns.

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