### EQUIPMENT

# Processing Mill For Laboratory Use

A processing mill for laboratory processing and control work is announced by Morehouse Industries. This mill, smallest in the company's lines, stands 21.25 in. high, is 8.25 in. in diameter, and weighs 41 lb. It operates on the principle of a Carborundum stone revolving at high speed against a stationary Carborundum stone.



Throughput rates vary from 1 to 3 gal. per hour, depending on the material. Power is supplied by a 0.75 hp. motor.

# Volumetric Feeder for Small Quantities of Vitamins, Minerals

A volumetric feeder for feeding small quantities of dry materials such as vitamin concentrates and mineral supplements has been developed by Omega Machine Co.

Called the model 50 Vitamizer Volumetric, it occupies 14 by 21 by 20 inches of space. A uniform rate of feed is maintained by a 40 w. synchronous motor driving the slow-moving feed disc. Changes in feed rates are obtained by a micrometer gate adjustment knob, permitting duplication of previously obtained feeds. An accuracy of 3% by weight over a 20-to-1-range is obtained by a large feeding orifice and gate adjustment calibrated to 0.001 in., Omega claims.

The company points out that the feeding mechanism features a controlled angle of repose of the material, which assures uniform feeding regardless of changing flow characteristics.

Platform scales can be furnished to check actual weight loss and eliminate the necessity of catching samples. It can also be arranged to feed automatically in proportion to the output of a primary pacer in a continuous process system. Flow measuring devices can also be used.

#### Laboratory Shaker

A laboratory shaker that will handle a variety of glassware, test tubes, flasks, petri dishes, slides, and other types, is introduced by New Brunswick Scientific Co. Called the Gyrotory shaker, model S-3, the machine is 23 in. long, 16 in. wide, and 12.5 in. high. Seven interchangeable tables are offered along with the unit and other tables can be made to fit special requirements.

The machine is said to be quiet and smooth during operation. Speed range is from 85 to 285 oscillations per minute. An automatic timing device can be set from 0 to 55 min. or to run continuously.

#### Weight Recorder

Howe Scale Co. has introduced a mechanical weight recorder called the Howe Mechnoprint which can be incorporated as an integral part into the company's tape-drive dial head.

The recorder is furnished with a variety of adaptations: for standard straight ticket, for ticket and tape, for odd-size tickets and with indentifiers, manual or electric time and date stamp, consecutive numbering devices, and others.

Accuracy is said to be within 0.1% of the dial chart capacity.

It can be used with an electric motor or with a hand crank in localities without electric power or with explosion hazards.

# Automatic Fumigant Dispenser for Package Line

An automatic fumigant dispenser has been introduced by National Instrument Co. Called the Fillamatic AB-F, it will automatically deliver a single shot of a preset volume of fumigant into packaged food containers as they move along the conveyor just prior to sealing. After the carton is sealed, the fumigant gasifies.

The dispenser utilizes National Instrument's vial filler as the basic pumping mechanism, coupled with a photoelectric sensing relay and an electronic cycling controller. As the containers

pass along the conveyor, they break the light beam, actuating the pumping mechanism. A single shot of liquid is then dispensed into the open container. Volume of fumigant is variable from 0.10 ml. to 8.0 ml. with an accuracy of 1% by means of a graduated micrometer adjustment. An electronic motor control permits filling speed to be varied from 6 to 90 strokes per minute. Liquid-contacting parts are fabricated of stainless steel or Teflon.

#### Fork Lift Trucks

Two fork lift trucks with capacities of 3000 and 4000 lb. have been announced by Hyster Co. Both models, YC-40 and UC-30, are powered by heavy-duty, water-cooled industrial engines and mounted on cushion-type tires.

The YC-40, with the 4000-lb. capacity at 24-in. load centers, is 38 in. wide and 78.5 in. long. Its low collapsed height on 82.5 in. permits it to pass through ordinary doors and under low ceilings. The load can be raised 30 in. before the minimum height is affected. It can climb a 20% grade loaded or empty.

The UC-30 is basically the same, but with 600 pounds less counterweight and a capacity of 3000 lb. at 24-in. load centers. Over-all length is 74 3/8 in., and it can climb a 24% grade loaded or empty.

Both trucks have a sharp turning radius of 75 in. and 30 in. of free lift on the standard 9-ft. upright.

### Disposable Cups for Measuring Radioactivity

Plastic cups for measuring radioactivity are available from Falge Engineering Corp. According to Falge, the cups are priced low enough to permit disposal after use.

The cups are suitable for use with weak acids or bases and can be used for drying liquid samples slowly under heat lamps, according to Falge.

### Bulk Packer for 2000-Lb. Boxes

An inaccuracy in the April 1 issue, page 100, caused the impression that Richardson Scale Co.'s bulk packing machine could be used only with 100-or 200-lb. bags. Actually, the bulk packer is usable, with or without an auger, for packing 2000-lb. cardboard boxes.



