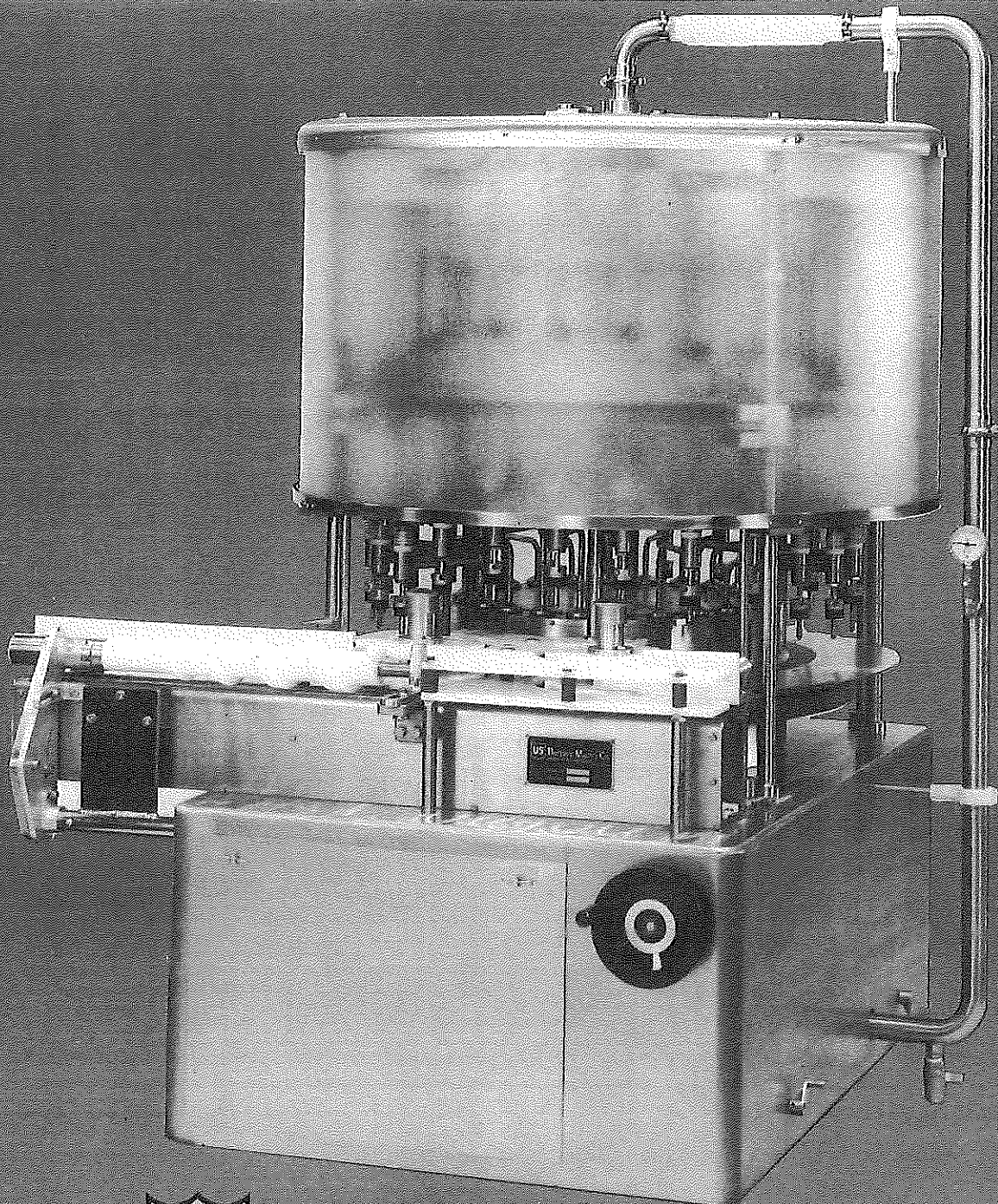


Automatic High Speed Rotary Filler



Bottlers Machinery Company



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For over seventy years,

U. S. Bottlers Machinery Company has been designing and manufacturing equipment for the drug, pharmaceutical, food, beverage and chemical industries.

In a continuing effort to better serve its customers, U. S. Bottlers Machinery Company has been a consistent leader in the development of rotary filling machinery. Depending upon the customer's needs and desires, current technology can utilize sophisticated electronic and computer hardware, or a simple gravity feed system. Unlike many manufacturers, "gingerbread features" are not added to U.S.B. equipment for effect. Our machinery is simple, basic, concise. With over 1000 high speed rotary fillers in the field, U. S. Bottlers knows how to build a "proper machine."

The new 50,000 square foot Charlotte facility of U. S. Bottlers reflects the employees' pride in this well-run organization. Using the latest available computerized design-assist equipment together with numerically-controlled machine tools and an outstanding group of employees, U. S. Bottlers produces some of the industry's finest machinery.

U.S.B. employs its own field sales personnel, service technicians and field engineers in order to provide the customer with the most technically competent assistance. During initial discussions, design development, laboratory testing, manufacturing, and field installation, a select group of U.S.B. personnel will be involved with the customer. This team of experts works closely with the customer to define the exact job. When the filler is finally installed and operating properly, the U.S.B. spare parts and service department will be available to help in maintaining that "like new" condition. Rapid



shipment of standard spare parts can be made from the \$2 million U.S.B. stock inventory. Customized parts usually are designed, built and shipped within four weeks.

All of these services are directed toward customer relationships guaranteed to assure peace of mind and satisfaction. The U.S.B. filler is a very special machine. You will not find one on every filling line, but satisfied customer confidence in U.S.B. is reflected by a repeat order ratio of nearly 85% for first-time customers.

When the customer has more than one type of U.S.B. machine in his packaging line, standardization of parts between machines assures easier maintenance of equipment, interchangeability of parts and stocking of fewer spares. Maintenance personnel can better perform their jobs when there are fewer design variations. All U.S.B. machines apply the same standard concepts and make use of similar hardware when possible. Service personnel costs are reduced since one U.S.B. engineer can analyze several machines during his visit to your plant.

Engineering Design Concepts;



No matter what style, type, or size of filler being considered, certain engineering concepts apply to all U.S.B. rotary fillers:

1. Rotary bottle movement on fixed horizontal plane.

All U.S.B. fillers are designed with the rotary platform in a fixed horizontal plane. Engineering studies have proven this to be a better system for high speed bottle handling than with one using a raising table concept.

2. Efficient station use.

There are more filling heads on every U.S.B. rotary automatic that actually dispense product in the containers because fewer stations are out of action during the infeed and discharge of containers.

3. Superior bottle control.

U.S.B. fillers offer the finest bottle control. No tipping, no slipping, no damage due to sloppy bottle handling. The stem penetrates the bottles before they emerge from the infeed star. Most fillers are built on a pitch line for controlled tube penetration. U.S.B. uses computer-assisted bottle handling attachment designs. The parts are produced on numerical control machine tools capable of position accuracy of .001 inch. Several models of fillers for large mouth containers can be produced with a tangential discharge system or an extra large discharge star.

4. Hose-down construction.

With the "easy access" streamline weldment base completely enclosing the motor drive mechanism and auxiliary equipment, these important parts are better protected. All U.S.B. fillers can be hosed down for clean-up and product change-over without fear of damaging the mechanical parts. If required, steam clean-up can be incorporated.

Since 1912

U. S. Bottlers Machinery Company develops, designs, and manufactures the most flexible basic series of automatic filling machines and systems. Changes in packaging line requirements are no problem as custom-engineering each filler for users' needs allows for versatility of operation and flexibility of use.

5. Customized construction.

Common to all machinery is strength in machine design and heavy-duty construction built to last. Corporate philosophy dictates designs stressing customer ease of operation, maintenance, and clean-up. Many semi-custom design variations can be added due to the background experience available to U.S.B. engineers. These special modifications can be provided to develop a competitively priced custom machine.

6. Less waste.

The easily accessible drainage system on U.S.B. fillers improves clean-up and the flushing of the liquid system in preparation for change-over to new products. Current models are constantly being revised to provide new hardware capable of using new "clean in place" technology.

7. High speeds.

Few packaging lines can fully utilize U.S.B. rotary automatic filler super-speeds. Basic designs contribute to excellent handling efficiency which permit higher speeds with lower costs per package. Better package control and efficient product flow are the key elements. U.S.B. fillers are easily synchronized into your line operations. All U.S.B. machinery is designed to withstand the unique problems present in high-speed packaging lines. Speeds in excess of 500 B.P.M. are possible on larger models. All models can be provided with split conveyor sections to allow better control of the critical conveyor speed needed for higher line speeds.

8. Versatility.

Gravity, pressure, vacuum, volume, weight, or level-sensing filling systems can handle the widest range of glass, plastic, fiber or metal containers for liquids and semi-liquids. Each standard model is custom-engineered to your packaging line requirements. All frame sizes can handle containers up to 6½" in diameter and up to 12" in height. Special models are available for use with containers outside of these ranges.

9. Reduced maintenance.

Latest industry requirements emphasize ease of maintenance and the use of as much stainless steel and chrome as possible to reduce maintenance. U.S.B. is capable of providing the customer an almost "paint-free" machine. In addition, simplifications in machine design provide for ease of maintenance by all service personnel. U.S.B. design engineers are required to provide routine service on field machines that utilize their design concepts. This field work results in equipment which is simpler for the customer to service.

Customizing Your Machine

U.S.B. fillers are bought by discriminating packagers. Repeat business accounts for 80-85% of our annual filler sales.

Choosing the proper machine for your application: With the experience of over 1000 rotary fillers in the field, U.S.B. is in the unique position of being able to say, "We have seen that problem before."

Some of the more common variations include:

Manufacturing variables allow for providing material substitutions: steel, stainless steel, nickel, titanium, hastalloy. U.S.B. machinists have broad experience working with the most exotic materials.

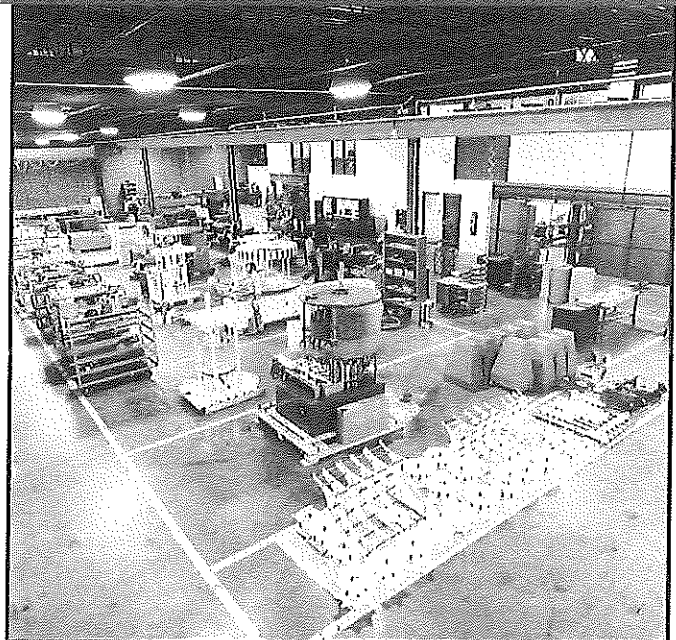
Evaluate a single machine or consider a complete turn-key operation including cleaner, filler, capper, conveyor equipment, synchronization and electronic controls.

Attachments (stars and worms) are designed by computer-assisted engineering techniques. They are sized and shaped to the contours of your bottle or package.

Various filling systems: gravity, pressure, vacuum, volumetric, weight, level-sensing.

Synchronization with other U.S.B. equipment or with the equipment of other suppliers.

Frame sizes can be selected to accommodate the needs of your product and packaging line.



Ability to adjust design due to special problems that arise related to the type or shape of the container, product being filled, viscosity, fill temperature, foam, speed of fill.

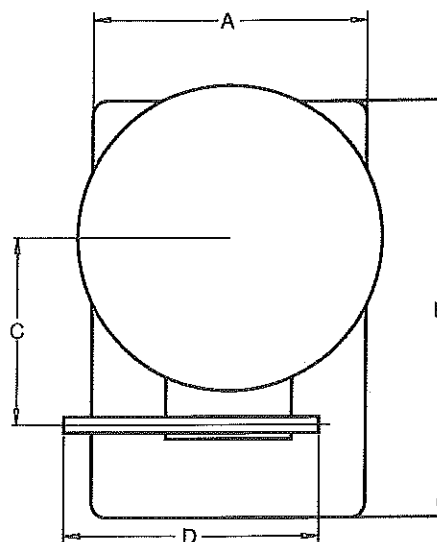
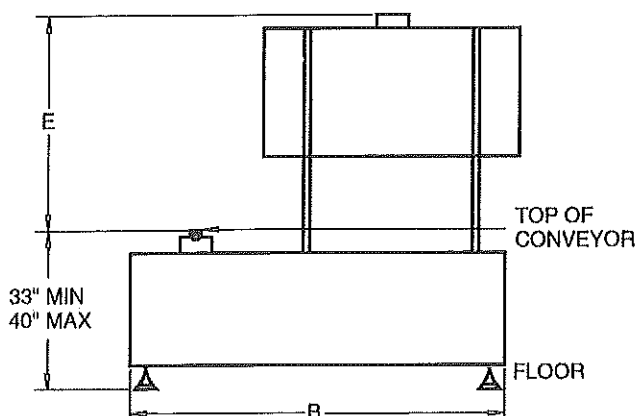
For every liquid bottling need

Choose from U. S. Rotary Automatic Fillers—Pressure, Gravity Vacuum, Level, Weight, Volume



U. S. Rotary Fillers are built on four Frame Sizes, A, C, E, F with 8 to 80 Filling Heads

"W" = ESTIMATED DOMESTIC SHIPPING WEIGHT IN LBS.



NOTE: All dimensions subject to change.

Model No.	A	B	C	D	E	W
A-16, 20, 24, 28, 32, 36	42"	57"	27.3"	54.75"	61" *	3350
C-28, 32, 36, 40, 44, 48	58"	79"	39.1"	66.6"	64" *	4500
E-24, 30, 33, 36, 39, 42, 45, 48, 54, 60	68"	100"	51.4"	76.25"	64" *	6000
F-36, 40, 44, 48, 52, 56, 60, 64, 72, 80	82"	112"	84.0"	91.6"	66" *	8000

* Approximate, depends on bottle height requirements

ALL STANDARD FILLER MODELS WILL HANDLE FILL HEIGHTS FROM A MINIMUM OF 4.5" TO A MAXIMUM OF 12" SPECIAL DESIGN EQUIPMENT IS AVAILABLE UPON DISCUSSIONS WITH ENGINEERING DEPARTMENT.

When writing to us for information or quotations, your interests will be served best by sending a complete set of containers to be filled. We can then determine your exact requirements, make the proper recommendations

and quote accordingly.

Our engineering department offers this service without any obligation on your part. Container samples should be sent to the main office in Charlotte, North Carolina.



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