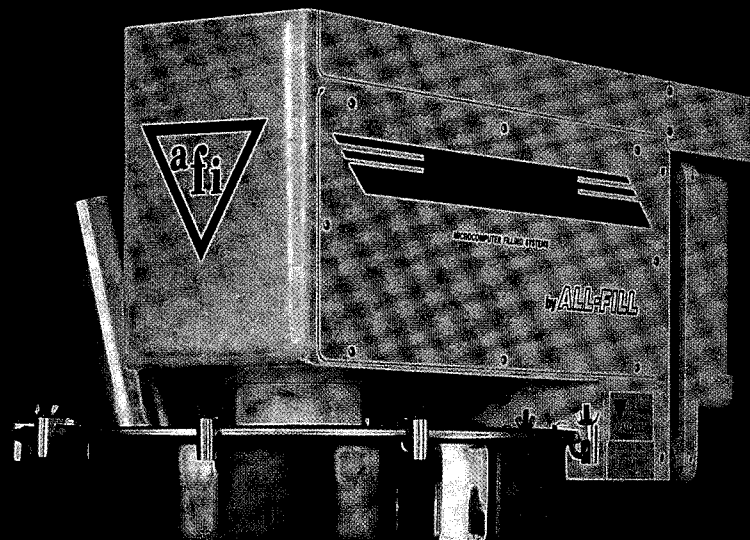
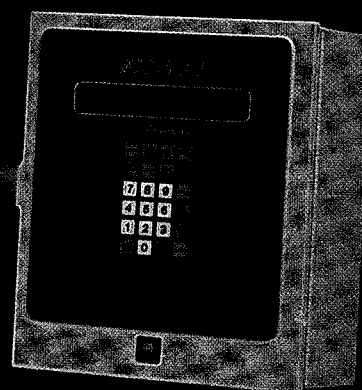


Filling Machines

Powders, free-flowing & non free-flowing/Flakes/Granules/Pastes/Creams



MODEL B-300

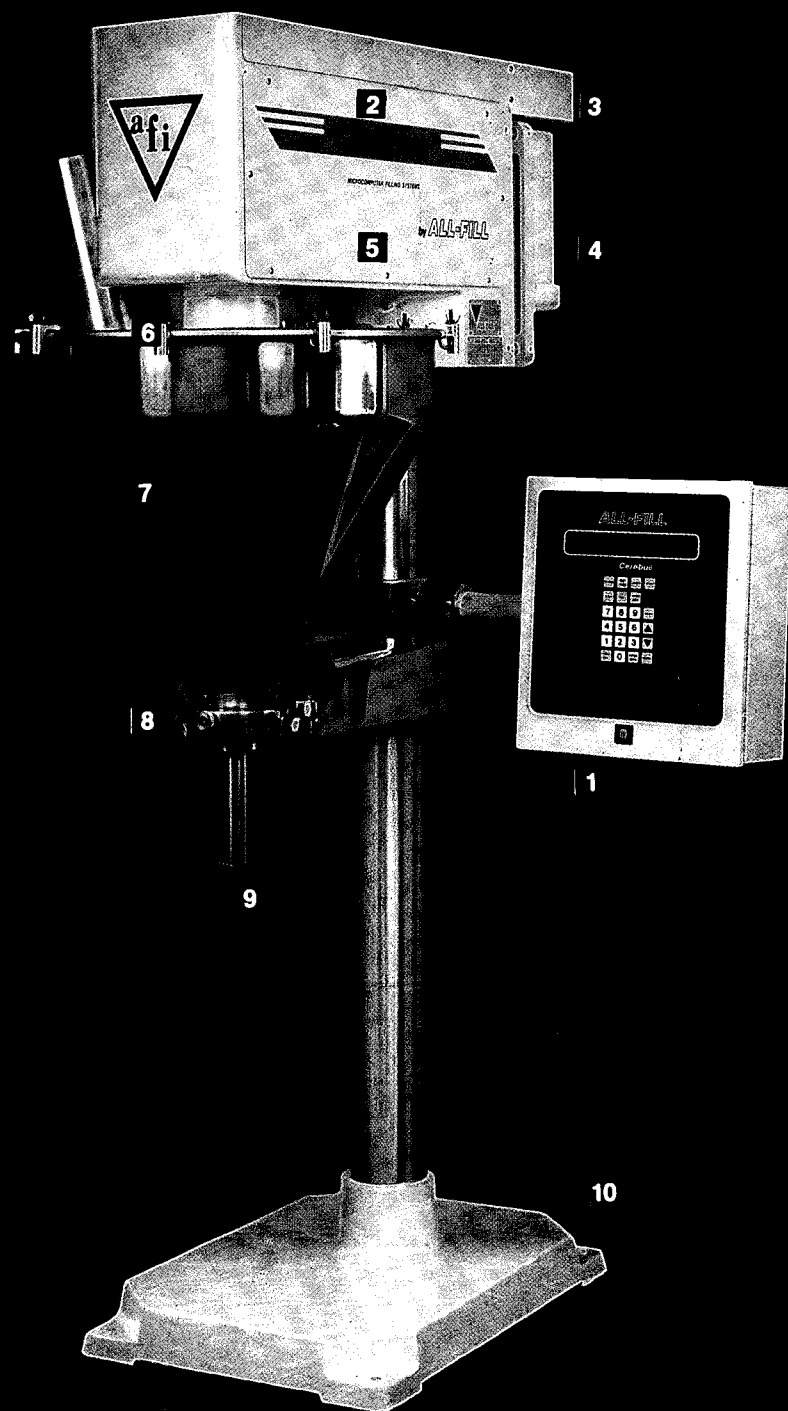


Cerebus™ II

THE SUPERIOR
COMPUTER CONTROLLED
AUGER FILLING SYSTEM



PACKAGING SYSTEM CONCEPTS for BETTER PRODUCTIVITY and ACCURACY



1 Cerebus™ II Computer Controller

A second generation achievement that reaches new horizons for auger filling machine performances.

2 Drive Belt

Completely enclosed.

3 Hinged Cover

For easy access to select any of three speeds of auger or pump to match product characteristic with container for perfect fills.

4 Drive Motor

Totally enclosed for heavy-duty industrial service.

5 Filling Head

Totally enclosed in rugged aluminum casting with gasketed cover plates for unrestricted maintenance access. Polyurethane finish.

6 Dust-tight Hopper Cover

Stainless steel. Features swing-release fasteners for quick disassembly; access cover-plate and large diameter infeed duct for connection to product infeed lines.

7 Stainless Steel Hopper

Spun, one-piece seamless hopper. All parts in contact with product are stainless. . . ideal for foods, chemicals, cosmetics and drugs.

8 Quick-Release Hopper Support

Requires no tools and provides self-centering of auger drive when reassembled after removal for clean-up or change of tooling.

9 Properly Sized Tooling

Selected for filling any product from 500 mg. to 500 lbs. or more; fill one at a time or multiples into any container. . . plastic, metal, glass, paper; bags, cans, canisters, pails, cartons, drums, bottles or jars.

10 Sturdy Cast Floor Base

Supplied with any length column.



**Fill any container.
Fill any product.**

The Model B-300 is an unquestioned leader in the packaging industry for its versatility.



Fig. 2

Innovative Design

All-Fill continues to lead the state of the art in applying Hi-Tech science to its comprehensive line of auger filling machines. Introducing the first micro-electronics systems in 1979, All-Fill's team of in-house engineers have now combined the micro-computer with the proven mechanical excellence of the machine. Cerebus II is a unique industrial-rated computer system.

Closer Target Weights

Now target weights can be set and maintained more closely to minimize costly over-fills. Not only does an optical encoder develop 200 pulses per auger revolution; but also, Cerebus II, through its user-friendly CALibration mode, permits direct settings in ounces, pounds, grams, kilos and revolutions (it will even make the measurement conversions!). Also, its closed-loop feedback will develop on-line Trend Averaging and calculate Standard Deviation data.

Greater Memory Capacity

Cerebus II has a large memory capacity: 25 product/container SETUPS (standard); up to 100 optional...each with 7-digit codes. All commands to the machine are accommodated for the requirements of each

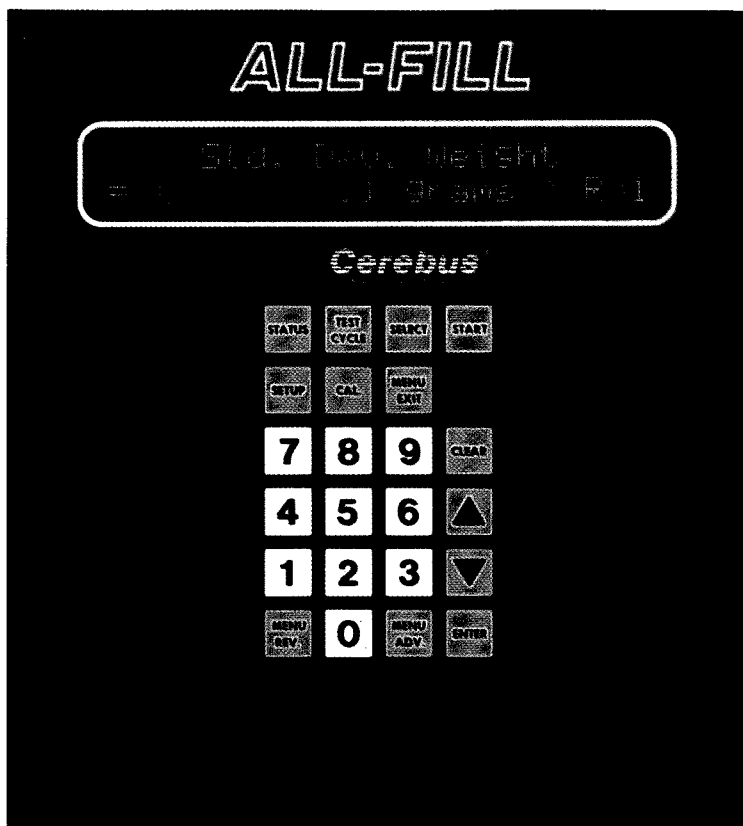


Fig. 3

product/container combination, including: fill weight, production count, agitation mode, vibration, cut-off, nozzle lowering, container clamp, lift for bottom-up filling, delay after fill, fill advancement time, etc. Setups are made easier and faster while lessening operator error—which means higher productivity on the packaging line.

Dynamic Updating

In the SELECT mode any program may be called up and any desired menu changes may be entered while running another. This dynamic updating characteristic vividly contributes to efficiency improvement. Further, entries are simplified by avoiding one-direction menu

scroll because Cerebus II can be either advanced or reversed to the specific display item for editing. There is no need to stop operations, call up the full menu, enter changes and then restart.

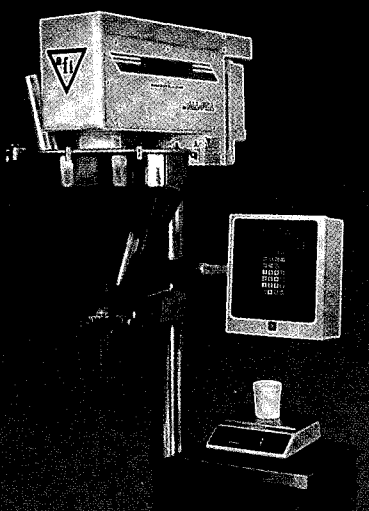
Ergonomic Design

The operator finds Cerebus II easy to use. The largest keypad is combined with audible and tactile feedback to him; and the plain language display has backlighted 8.44 mm characters on 2 lines x 24 character length. The control cabinet tilts to eye level and light intensity is adjustable.

Filling Production Display

The Cerebus II Filling Production Display provides a single, convenient summary of machine status, filling amounts, clutch/brake coast factor, and the production count, directly at the machine. This display appears automatically each time the machine runs. Numeric Run Codes in either one or two digits are included in this Display to provide an on-going, continuous updating indication of machine activity. Faults, potential problems, and assured correct operation of the filler can be quickly identified with a single glance at the large, illuminated front panel. As a maintenance aid this feature alone saves incalculable production time.

- See *Bulletin A-516 For Complete Data*



**Fig. 4 Model 8-300
with On-line Scale
Feedback to Carbus
II Computer Controller**

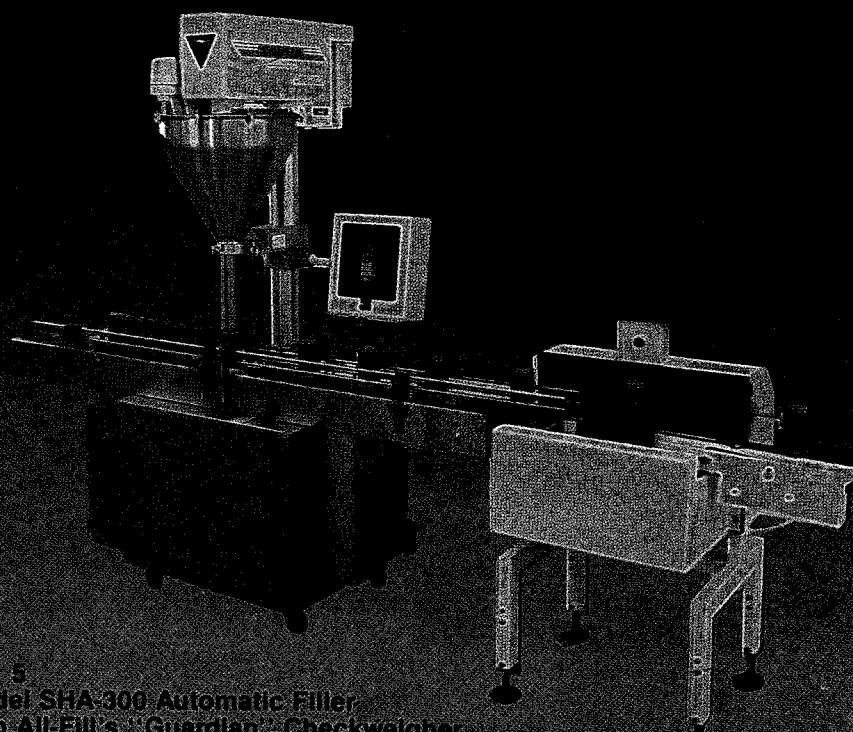


Fig. 5
Model SHA-300 Automatic Filler
with All-Fill's "Guardian" Checkweigher

DIMENSIONS: MODEL B-300 (Not for construction)

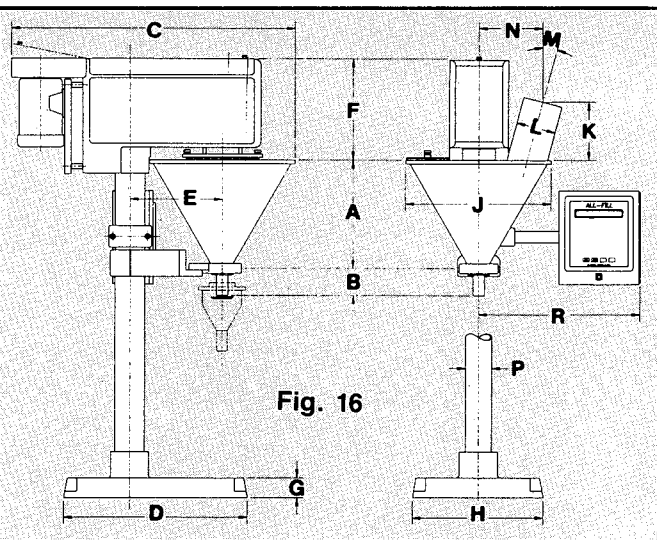


Fig. 16

A Hoppers

10 gals. (37.8 L) 16.4" (418mm)
16 gals. (60.5 L) 20.5" (521mm)

B Funnels

Short No. 4-34 4.5" (116mm)
Short No. 36-52 5.5" (141 mm)
Long No. 4-52 12.5" (319mm)

C

44" (1118mm)

D

28" (711mm)

E

14" (356mm)

F

15.6" (397mm)

G

3" (76mm)

H

20" (508mm)

J

22" Diam. (559mm)

K

8.8" (225mm)

L

6" Diam. (152mm)

M

15 Degrees

N

9.75" (248mm)

P

4.5" Diam. (114mm)

R

25" (635mm)

Weight

375 lbs. (170Kg.)

(Crated: 500 lbs; 230Kg.)

Crate Size: 48"H x 48" L x 96" W

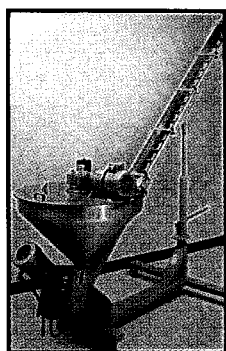


Fig. 17 Hopper Loader
Efficiently delivers powders and bulk solids to filling machine hopper. Portable; adjustable height; polished stainless steel. Has optional slow speed agitator in hopper. Feed rates to 180 cu. ft. per hour.

Bulletin AF-270.

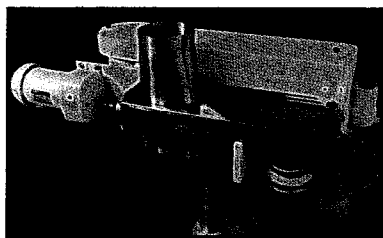


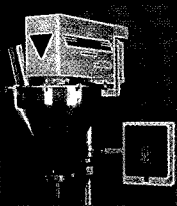
Fig. 18 Hopper Feeder Designed for integral saddle-mounting with filling machines for delivery of bulk supply to hopper. Stainless steel polished 5" pitch screw.

Bulletin AF-271.



Fig. 19 Fill Test Lab & Demonstration Facility

A Choice of Other Models from All-Fill



Weight Control
Bulletin AF-270



418 Creamery Way
(215) 524-7350 FAX (215) 524-7346 TX 902-642
Exton, PA 19341 USA

SPECIFICATIONS: Model B-300

FILLING HEAD

Auger Drive: 1½ H.P. TEFC 1200 RPM Motor

Slow Speed Agitation Drive: ½ H.P. totally enclosed, gear head motor. Includes selectable control on Cerebus II Panel for "Off"/"On With Fill"/"On Continuously"

Utility Requirements: Motor Controls: 208/230/460 V/3-Phase/60 Hz. Other ratings on application. Controls: 115 V., 50-60 Hz.

Clutch Brake: Electro-Magnetic heavy duty, modular, self-adjusting.

Speed Adjustment: V-Belt with Multi-Step Pulley; totally enclosed belt drive with easy access cover for belt and sheave adjustment of auger speeds to best suit application.

Encoder: 200-Counts/Rev., precisely monitors auger rotations.

Hopper Coupling: Has quick disconnect feature and self-aligns when re-installing hopper after clean-up.

Hoppers: Spun Stainless Steel; 22" diam.; 10 or 16 gal. capacity.

Hopper Covers: Stainless Steel; either split-cover design; or gasketed dust-tight cover with 6" diameter infeed duct. Has swing-release fasteners for quick disassembly.

Materials of Construction: Stainless Steel (augers, funnels, pump rotors, agitator blade, hopper, hopper cover and infeed duct, auger and pump shafts). Aluminum (floor base or bench base, column, brackets, head casting—polyurethane finish).

Mounting Base: Cast aluminum floor base or 10" diameter bench base for convenient mounting to f/f/s machines, conveyors or other packaging line equipment.

CONTROLS: CEREBUS™ II Computer Controller

Enclosure: Dust-tight NEMA 12; NEMA 4 available; tilts to convenient eye-level.

Power Indicator Light: Red illumination when "On."

Keypad: Splashproof, dust-tight membrane has tactile and audible feed-back.

Plain Language Display: Large 1" x 7" backlit LCD Display. Light intensity adjusts for environmental conditions.

Display Messages: Auger Revolutions, Production Count, Fill Weight (from scale)

Product Set-Up Memory: Capacity for 25 Presets (100 Presets Optional)

Automatic Calibration: Selectable in units of Grams, KG, OZ, LB, Revolutions.

Feedback & Automatic Density Compensation: Via RS232.

Fine Adjustments: Up and down-arrowed keys permit fine tuned adjustments to operating program during production.

Automatic Recycle Timer: Adjustable up to 99.99 seconds between fills for pacing operator production.

Production Counter: Indicates total packages filled. Resettable.

Self-Diagnostics: Automatic trouble-shooting.

Automatic Coast Compensation: Monitors and adjusts clutch-brake operation.

Auger Jog/Hopper Empty Controls: Convenient for set up and clean up.

ACCESSORIES (Optional)

Automatic Lift: For bottom up filling.

Scales: Digital electronic platform scales for "Fill-by-Weight" operation.

Vibration: Vibrators, joggers—electric, pneumatic or mechanical types—for compacting products into containers as required.

Cut-Off Devices: Valves, Piston Draw-backs, Diaphragm-type, Plug Rods, Knife Blade types as needed for clean product cut-off.

Heated Hoppers: Electric and Water-jacketed complete with thermostatic controls.

Footswitch: For initiating the fill cycle.

Level Controls: Mounted in the hopper to signal infeed and control level of product.

Conveyors: Automatic indexing and adjustable for line speeds: belt, block chain or table-top.

Motor Starters: Magnetic starters, column-mounted, for auger and agitator motors.

SPEED & ACCURACY Fills of ±½ to 1% are maintained on most products. Machine cycling speeds up to 120/Min.

HAZARDOUS AREAS Wash-down, remote control, explosion-proof and special environmental conditions can be met by available designs.

LARGEST SELECTION OF FILLING SYSTEMS

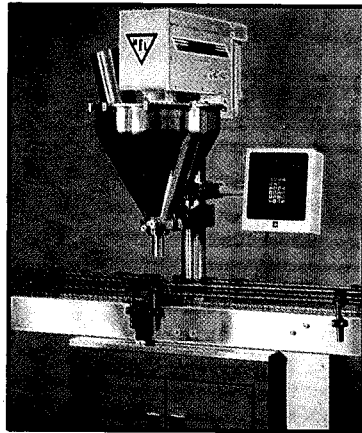


Fig. 11 Single Head Automatic Filling System automatically indexes all rigid containers from 1" to 7" diam. @ 30-120/Min. Fills either from bottom-up or with vibration to settle product.

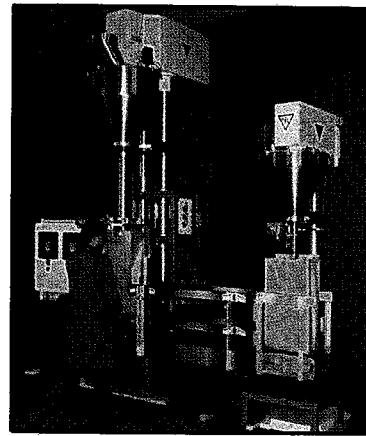


Fig. 12 Fills 50 lb. Bags within 1/2 oz. Up to 600/Hr. Also handles 25 lb. and 100 lb. fills. Open Mouth bags are manually hung, bottom-up filled and jogged during fill. Powered conveyor to top-off station. Dust collector shroud moves with bag lift.

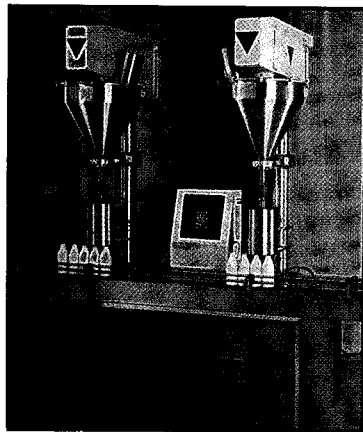


Fig. 13 Dual Head Filling Machine. A versatile producer: fills non free-flowing powders 2 at a time; free-flow powders from 4 at a time as shown, up to 8 at a time; and, adapts easily for filling liquids, creams, etc.

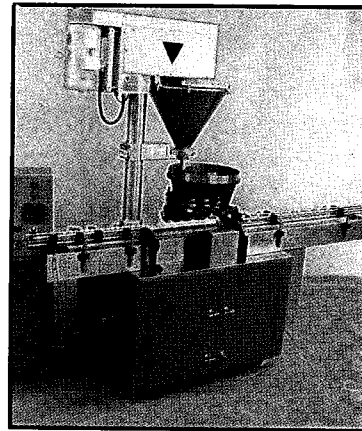


Fig. 14 Rotary Filling Machines may be either indexing type or continuous. Packaging line speeds up to 400 per minute are attainable. Unique vibrating system settles product into container. Accurate. Fast. Clean.

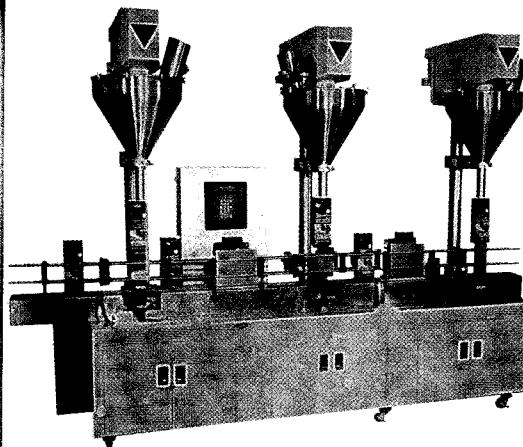


Fig. 15 Automatic Bag Filling System for 3 to 5 lb. flat bottom bags @ 25 to 35/Min. System is designed for use with an automatic bag hanger and is in successful use with non free-flowing bakery pre-mixes.

**Approved Models
Available to Meet
Sanitary Standards**



Dry Milk Products

and



Meat & Poultry

OPERATING PRINCIPLE

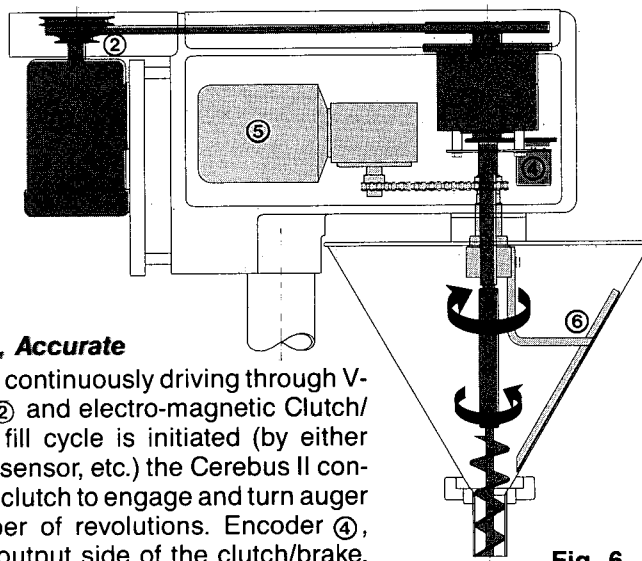


Fig. 6

Simple, Reliable, Accurate

Fill Motor ① runs continuously driving through V-belt and pulleys ② and electro-magnetic Clutch/Brake ③. When fill cycle is initiated (by either footswitch, timer, sensor, etc.) the Cerebus II controller signals the clutch to engage and turn auger for pre-set number of revolutions. Encoder ④, mounted on the output side of the clutch/brake, generates pulses (200 per revolution) which are counted by Cerebus II computer controller. The Cerebus II computes pulse data and signals clutch disengagement and brake operation to stop auger. Enclosed in the filling head is a slow speed agitation motor ⑤. This motor chain-drives agitator blade ⑥ on short sprocket centers for long life. Rotation of the agitator blade is opposite from the direction of the auger rotation. This proven principle reliably assures that products which are normally difficult to handle may be delivered without cavitation in the hopper. Agitation may be "on" continuously; "off"; or, may be run only during the fill cycle as preset on the Cerebus II controller.

Heavy-duty Electro-magnetic Clutch/Brake Automatically Adjusts for Wear

Costly shut-downs and bothersome monitoring for clutch wear are eliminated. The signals from the control system's pre-sets are instantly responsive for engagement and disengagement of the auger drive. Machine cycling speeds up to 120 per minute are attainable.

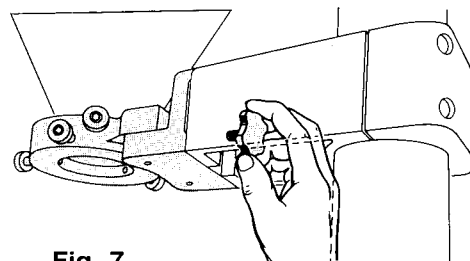


Fig. 7

Fast Clean-up & Changeover Without Tools

Loosen one knob for removal of hopper and support bracket which has dowel locating pins to assure perfect centering. Clean-up between product runs in 10 Minutes; change-over from powders to liquids in 15 Minutes.

Standard Interchangeable Tooling Dispenses All Products

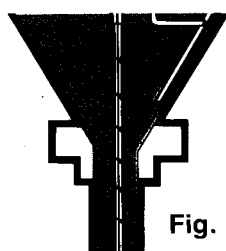


Fig. 8

Powders: Non Free-Flow

Self feeding auger with slow speed agitator for positive dispensing of powdered and high density products. Standard auger sizes: 1/4" to 3 1/4" Diam.

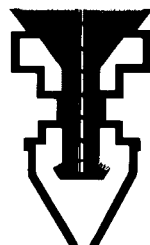


Fig. 9

Powders: Free-Flow

Hopper Assembly for granular materials shows spinner plate and collector funnel arrangement. May have multiple cavity divider heads up to 12 divisions.



Fig. 10

Liquids, Creams, Gels

Progressive cavity pump rotor and stator shown with high speed agitator. May be equipped with pump manifolds for dispensing through two or more nozzles.

Ground Coffee
Ag-Chem Powder
Toner Powder
Milk Powder

Talc
Spices
Caulk
Flour Mix

Silica Gel
Epsom Salt
Drink Mixes
Whole Spices

Bubble Bath
Penicillin
Pool Chemicals
Potato Granules

Lotions
Shampoos
Ointments
Slurries

Sauces
Mascara
Greases
Syrups