

AMS

FILLING SYSTEMS, INC.



SOLUTIONS
FOR THE
PACKAGING
WORLD.

PERFORMANCE ENGINEEREDTM auger filling systems

FILLING EVERY EXPECTATION

THROUGH DECADES OF GROWTH, AMS FILLING SYSTEMS HAS EARNED A REPUTATION FOR GOING ABOVE AND BEYOND IN CREATING CUSTOM FILLING TECHNOLOGIES AND IN FULFILLING EVERY CUSTOMER EXPECTATION FOR ACCURACY, RELIABILITY, SERVICE, AND SUPPORT.

Expanded capabilities

As one of the industry's leading packaging equipment manufacturers, AMS is committed to outstanding products, service, and support. This philosophy has resulted in tremendous growth and a continued expansion of our capabilities. In 2000, AMS expanded again, moving into a substantially larger facility. Our increased manufacturing, testing, and inventory capabilities now allow us to respond faster than ever to requests for machines and components.

Trained technical experts

When you work with us, your needs will always be met by a technically trained AMS representative who knows your machine and your application. Our sales and service staff have broad expertise with filling systems and in-depth knowledge of our machines — right down to the nuts and bolts. In fact, to assure our customers of the highest quality technical service, every member of our sales and service staff receives rigorous in-house training in machine design, engineering, construction, and operation.

The industry's best service and support

AMS Filling Systems offers a service commitment that is unmatched in the industry: We will respond within one hour to any call that comes to us by phone, fax, internet, or mail. Additionally, our sales representatives oversee customer orders from the original request

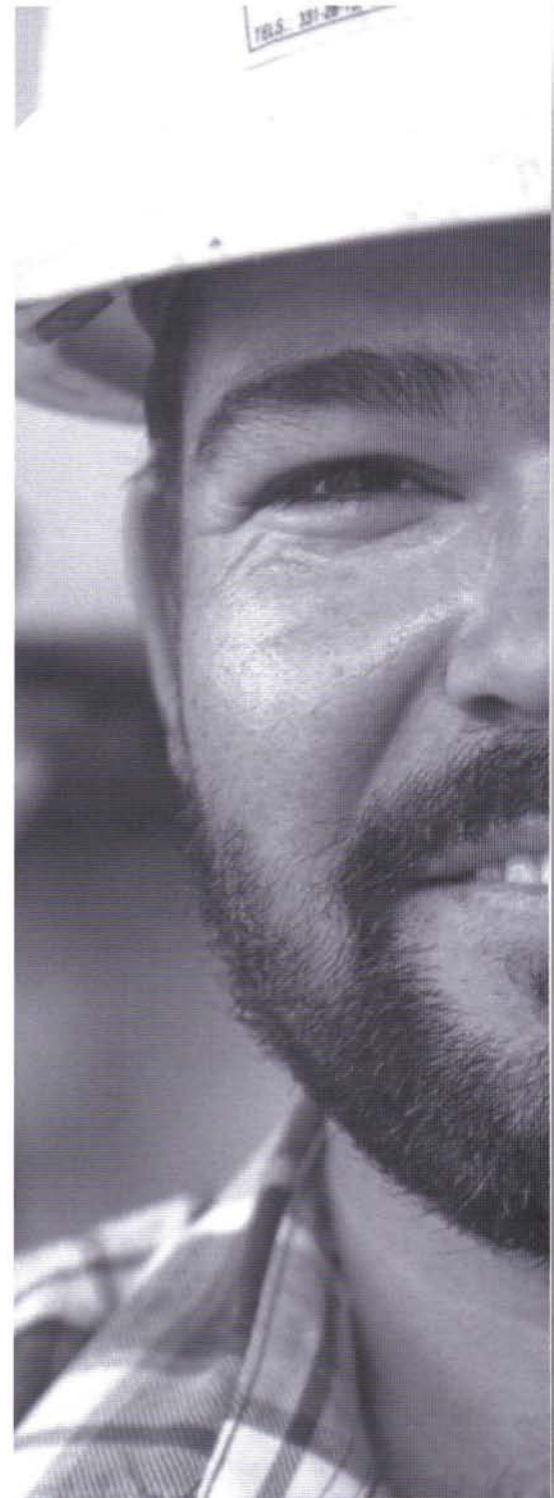
through engineering, manufacturing, testing, and delivery. This hands-on approach assures customers that their requirements always receive priority treatment. We maintain an extensive database of customers, machines, and applications, so we can zero in on your application, your machine, and your needs quickly and accurately.

Advanced manufacturing technology

AMS fillers are built with the most dependable, heavy-duty, and commercially available components available. By combining CNC manufacturing technology with a commitment to quality and craftsmanship, we create machines with outstanding accuracy and reliability. And, we have the expertise to skillfully design and assemble technically advanced custom machinery.

In-house programming

Unlike many manufacturers, AMS creates all control packages in-house, including the PLC ladder logic and interface design. By doing so, we are able to control costs and assure that each customer receives a control package matched to precise application requirements. Through the use of non-proprietary Allen Bradley components, customers are assured of the highest level of reliability as well as access to reasonably priced alternate component sources.



THE FOUNDATION

AMS FILLING SYSTEMS HAS EARNED ITS OUTSTANDING REPUTATION BY MANUFACTURING A FULL LINE OF QUALITY ENGINEERED AND RUGGEDLY BUILT AUGER FILLING SYSTEMS.

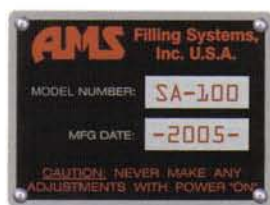
AMS Filling Systems has earned its outstanding reputation by manufacturing a full line of quality engineered and ruggedly built auger filling systems. The fillers are available as either volumetric or gravimetric systems.

Both start as single head semi-automatics and progress to multiple head automatics. Our diversity covers a wide range of filling applications from small companies just starting to automate — on up to large production facilities running at hundreds of containers per minute. Customers come to

AMS looking for the support that they can not find elsewhere. Having found continued quality support, our customers come back to AMS as their needs change and businesses grow.

With a quick tooling change, each model can dispense products ranging from powders, granulars, and flakes to liquids, gels, and pastes. AMS is known and respected in many industries, including: FOOD, PHARMACEUTICAL, CHEMICAL & COSMETICS.

The USDA approved A-100 filling head is an integral part of most AMS filling systems. Every model is available with such options as all stainless steel construction and NEMA 4X rated electronics, making them ideal for corrosive environments and washdown applications. By steering away from proprietary parts, AMS gives its customers the highest level of reliability as well as alternate sources for replacement parts at a reasonable cost.



SA-100 Servo Filler

The SA-100 Servo Drive Auger Filler Head utilizes a true closed loop servo control system. The servo motor is mounted above the auger shaft as a direct drive system. It is ideally suited for the pharmaceutical industry's clean room environments. The servo motor is designed to run at much higher cycle rates. This makes the SA-100 filling head perfect for applications that require both a high cycle rate and high accuracy.



SA-100

A-100 Series Semi-Automatic Fillers

The standard A-100 is foot switch operated and is ideally suited to fill foods, chemicals, pharmaceuticals, and cosmetics. Standard features like high performance PLC controls, stainless steel product contact parts, and quick-and-easy clean up make the A-100 a powerful addition to any packaging facility.

Options include: All stainless steel filling heads; control boxes and floor bases; NEMA 4 washdown electronics; two levels of PLC control upgrades; portable mounting frames with column jacks for head height adjustment; bottom-up fill lifts; hopper level controls; vibrators to assist product settling in the container; automatic conveyors; and sensors for fill-on-the-fly.

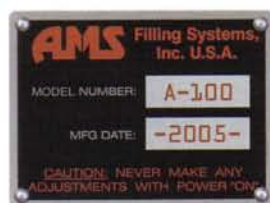
The Commissary Filler is a special version of the A-100 filler. This system accurately dispenses ham, chicken, and tuna salads along with cheese sauce, pizza sauce, burrito filling, and other food components with similar consistency. The system is equipped with a stainless steel dispensing head and portable frame. The variable speed drive allows the commissary operator to adjust the speed of the food line to suit their specific needs. It reduces labor costs, eliminates food give-away, and provides immense savings compared to manual food lines.

It can also be integrated into existing conveyor lines for automatic dispensing and wrapping operations.



A-100 COMMISSARY

OEM APPLICATIONS



A-100 Base Model

The A-100 is the foundation of AMS's product line. This semi-automatic volumetric auger filler offers incredible versatility in an economical machine. Its rugged build runs efficiently and eliminates costly downtime. The A-100 can fill free flowing and non-free flowing dry products as well as liquids, regardless of viscosity. Whether yours is a 100 mg pharmaceutical fill application or a 50 lb. bulk product fill, the A-100 is up to the task. With accuracies that average $\pm 1\%$ or better, the A-100 can meet most filling application requirements.



A-100



A-100
OEM



A-300-8
OEM



A-200
OEM

A-100 Single Filler

The A-100 is the industry standard auger filler for single station vertical and horizontal form/fill/seal equipment. The A-100's all electric heavy duty drive is built tough to deliver extended service in demanding vertical machine applications with long tooling. This USDA approved filler is also available with all stainless steel construction, and washdown rated electronics.

Standard interchangeable tooling allows filling of a wide variety of products including: institutional size ground and whole bean coffee, bakery premixes, spice blends, sauces, freezer gels, cleaning compounds, pharmaceutical preparations, and agro chemicals.

A-200 Twin Filler

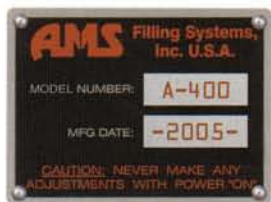
The A-200 twin auger provides higher filling rates for any line requiring two-up capabilities. The spindles can be either side by side or front to back. Each spindle is individually controlled for maximum flexibility and accuracy. Even two different products can be filled simultaneously. Add an electronic scale and the A-200 becomes a compact and economical bulk and dribble filler. It can turn an A-400 into an A-420 or an A-500 into an A-520 for increased production using less of your premium floor space.

A-300 Multiple Filler

The A-300 series of multiple spindle fillers can dispense products from 3 to 12 fills per cycle on centers as close as 1.5". Each spindle is driven independently for maximum flexibility and accuracy with single or multiple products.

The Polyfill brings the advantages of an auger filler to difficult non-free flowing food and pharmaceutical products on multiple lane, high speed, mechanized packaging. Adaptable to virtually any style automatic package making or handling machine, including horizontal thermo-formers, cup or tray equipment and vertical strip packagers.

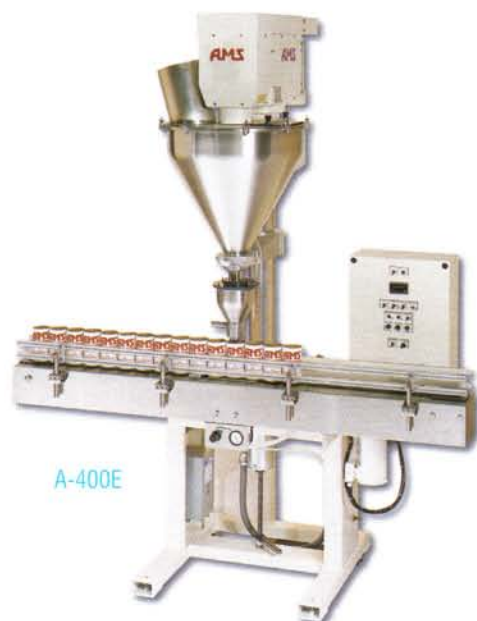
AUTOMATIC FILLERS



A-400 Series Single Head Automatic Fillers

The AMS A-400 series can fill virtually any rigid container at rates up to 120 cpm. This line offers a highly reliable, accurate and efficient way to automate rigid container packaging lines.

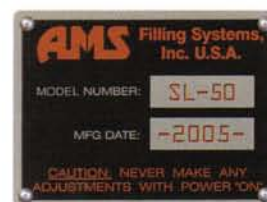
The economy model A-400E features the proven A-100 filling head, an open base frame with a mechanical jack, versatile pneumatic indexing, and a 6' stainless steel conveyor.



A-400E



A-400



SL-50 Series Single Head Semi-Automatic Fillers

The SL-50 can function as a standard revolutions based volumetric filling system or can be upgraded to operate using the intergration of a highly accurate scale eliminating any concern of bulky density variations or high fill accuracy requirements on small fills.

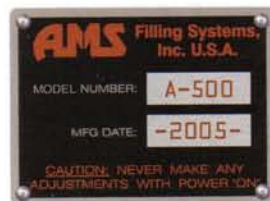


A-500



A-500E

FILL BY WEIGHT SYSTEMS



A-500 Series Dual Head Automatic Fillers

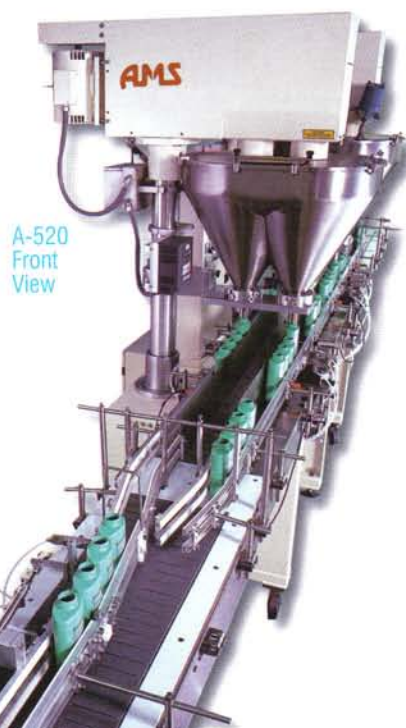
The AMS A-500 series can fulfill a variety of unique filling applications at high end in-line speeds. Utilizing its two station design, the A-500 fillers can increase production rates, perform bulk and dribble fills or put two products into the same container. These models are a powerful addition to any automatic rigid container packaging line.

The economy model A-500E features two of the proven A-100 filling heads: an open base frame with mechanical jacks, versatile pneumatic indexing, and a 9' stainless steel conveyor.

The A-500 features an enclosed base cabinet with hinged access doors, a stainless steel top, Platinum 3000 controls, built-in transformer, an 8" stroke container lift for bottom-up fills, vibration to aid product settling, and a dust trough at each filling station on its 11' conveyor.

The model A-520 is a two lane, dual twin head, in-line automatic auger filler. This unique design provides much higher line speeds than traditional in-line automatics.

The two lane design requires much less space than a single lane filler with the same number of stations. The A-520 is ideal for today's high efficiency packaging lines, where square footage is at an all time premium.



A-520
Front
View

MAINTENANCE
VALVE STOPPER

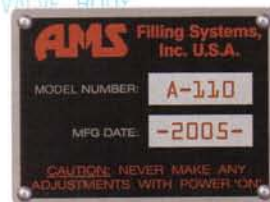
PLUG

A-110 Series Semi-Automatic Net Weight Fillers

The model A-110 series delivers extremely high levels of accuracy and comes in several configurations for filling small containers, bags, boxes and drums.

A modern digital electronic scale and controls produce net weight accuracies of $\pm 0.1\%$ to 0.25% on fills from less than a gram to 500 kg. This makes it perfect for packaging high cost ingredients and products with density variations where product give-away can impact profits.

The optional variable speed auger drive delivers optimum production rates and filling accuracies by utilizing a bulk and dribble fill. The A-110 can be equipped with a bottom-up fill container lift and dust collection shroud. The net weighers can be automated with several types of conveyor systems.



A-110



A-110
Box & Drum



A-110 Bag

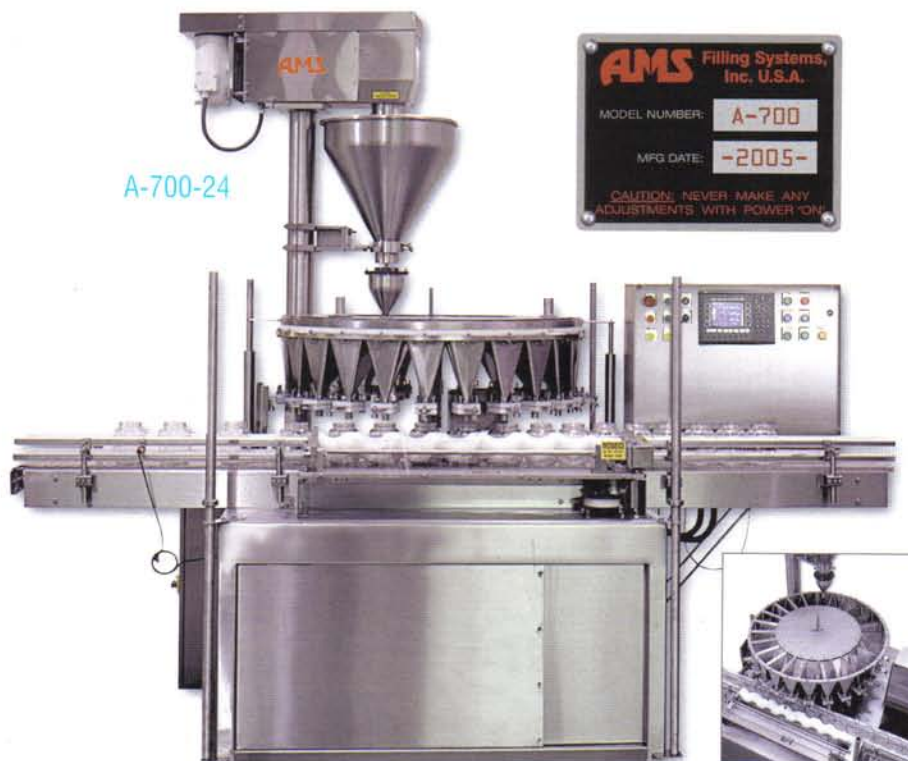
HIGH SPEED FILLING LINES

AMS ROTARY FILLERS PROVIDE HIGH SPEED FILLING SOLUTIONS FOR THE MOST CHALLENGING PACKAGING APPLICATIONS.

A-700 Series Rotary Fillers

AMS indexing and continuous motion rotary fillers solve difficult container handling and product settling problems at high line speeds. By combining AMS single or multiple head auger fillers with up to 36 station turrets, packagers will have smooth production at speeds up to 400 CPM.

The A-700 continuous motion rotary filler offers higher operating speeds and enhanced filling over traditional in-line auger fillers while providing a level of filling accuracy comparable to more accurate but slower operating fill-by-weight methods. By design, continuous motion rotary fillers produce less wear on their parts than traditional in-line fillers.



Overhead Bulk Bins

AMS offers a variety of stainless steel overhead bulk bins for flood feeding free flowing products into the fill hopper. They come in a variety of capacities, include covers and have optional vibration to aid in product flow. Cutoff devices are available at the discharge opening.

A-610 Multi-Head Filler

The AMS Multi-Head Filler Model A-610 features three or more filling heads designed to provide your company with high production rates while maintaining unsurpassed accuracy. The A-610 will fill virtually any dry or liquid product and includes all the features of the A-100, so packagers can be assured of flexibility and rugged dependability. The A-610 can be configured with a variety of control packages offering

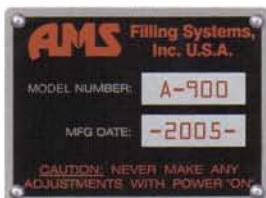
features such as: bulk and dribble operations, checkweigher feedback, and product memory storage. Productivity options include lift and vibration capabilities, a complete stainless steel filling package, and servo driven units. This automatic multi-head filler is a powerful addition to any rigid container filling line.



CONTAINER HANDLING

SEVERAL CONTAINER HANDLING ACCESSORIES ARE AVAILABLE. THE FOLLOWING IS A PARTIAL LIST:

container lifts, container vibrators, container clamps, neck clamps, diving nozzles, container tappers, collector funnel tappers, vacuum filling heads, and dust collection shrouds. AMS will always be happy to design unique container handling features to meet the needs of our customers.



A-900 Series Rotary Tables

Both unscrambler and accumulator versions are available in order to fully automate a rigid container filling line. The A-900U unscrambler table orients and feeds glass, plastic, and metal containers into an automated packaging line at speeds up to 120 cpm. The unscrambler version comes with custom outriggers to orient and stabilize difficult containers. The A-900A accumulator version is ideally suited to accumulate filled containers prior to case packing.

Both versions feature state-of-the-art Teflon Impregnated Aluminum table tops and variable speed drive controls for versatile line integration. Stainless steel tops and base cabinets are available.



A-900U

Stand Alone Conveyors

Free standing and roll-up conveyors are available for use throughout your production facility. They can automate almost any semi-automatic machine. They are available in a range of lengths and chain types. Options include: indexing, vibration, and container lifts.



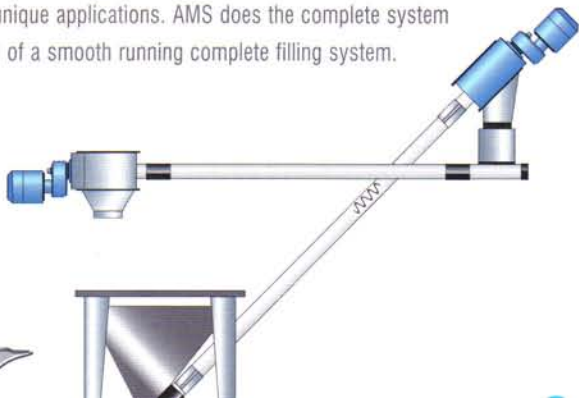
A-900C

INFEEED SYSTEMS

EVERY PACKAGING LINE NEEDS A MEANS OF LOADING THE FILLER'S HOPPER IN ORDER TO COMPLETE THE INSTALLATION.

Flexible Screw Feeders

AMS offers flexible screw feeders for floor-level-to-fill hopper feeding of free flowing and non-free flowing dry products. These systems are versatile and can be adapted to unique applications. AMS does the complete system integration assuring you of a smooth running complete filling system.



A-800 Horizontal Auger Feeder

The A-800 provides consistent infeed flow control of most dry products. When combined with our level control, head pressure is evenly maintained, delivering the maximum accuracy from a volumetric filler. Delivered as a system, customers are assured of an integrated filler/feeder operation.



A-800

CONTROLS

AMS OFFERS SEVERAL SERIES OF CONTROL PACKAGES, WHICH ARE AVAILABLE ON ANY MODEL OF OUR FILLERS.



Platinum 2000 Controls

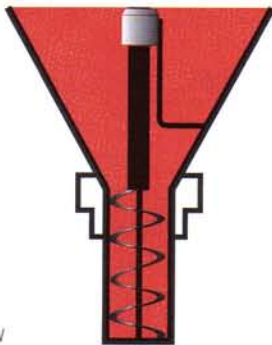
Platinum 2000 Controls use selector switches and an AB tactile keypad to interface with an Allen Bradley PLC. This series offers auger jam protection, 30 programmable product memory presets, auger coast compensation, and optional checkweigher feedback. The Platinum 2000 is a great mid-range package.



Platinum 3000 Controls

Platinum 3000 Controls gives you added features at a very economical price. Features included in this package are 100 product memory storage for production runs with several different products, auger coast compensation, programmed and actual count/revolution display, test fill setup, and checkweigher feed back options. This package will also offer precise timing control features including index timers, pre and post-fill delays, lifting operations, and recycle. Other key functions control by the Platinum 3000 interface include: agitation mode, vibration mode, cutoff and lift mode, and two stage fill control for bulk and dribble operations. The 3000 provides you with the perfect high-end control package at an economical price.

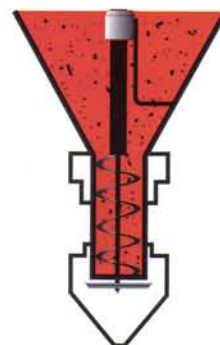
TOOLING



POWDERS: Non Free-Flow

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

Ground Coffee, Ag-Chem Powder, Toner Powder, Milk Powder, Talc, Spices, Caulk, Flour Mix



POWDERS: Free-Flow

Hopper Assembly for granular materials shows spinner plate and collector funnel arrangement. May have multiple cavity divider heads up to 4 divisions.

Silica, Epsom Salt, Drink Mixes, Whole Spices, Bubble Bath, Penicillin, Pool Chemicals, Potato Granules



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.

Lotions, Shampoos, Ointments, Slurries, Sauces, Mascara, Greases, Syrups