



FILLING SYSTEMS, INC.



**HIGH-SPEED
OPEN-MOUTH BAG PACKING SYSTEM
TOPLINE® 2000**

HAVER TOPLINE® 2000

The HAVER TOPLINE® 2000 is a sophisticated machine designed to pack all kinds of free-flowing granulated products into pre-fabricated laminated open-mouth bags made of paper, PE or PP.

Products to be packed are:

- Pet food
- Rice
- Seed
- Salt
- Fertilizer
- Plastic pellets
- And more

High capacity – minimum space:

The TOPLINE® 2000 fits into smallest spaces achieving capacities of 30 bags per minute. For this, 1 filling spout and up to 2 net weighers are needed.

Your benefit:

The reduced footprint allows for less investment cost while keeping high packing rates.

The TOPLINE® 2000 functions:

- Empty bag storage
- Empty bag placing by servo driven bag handling unit
- Product dosing and weighing by HAVER® net weighers
- Bag filling by dust-tight filling spout
- Product compaction during filling process by vibrating unit

During the entire filling cycle the bag is securely handled and controlled. The dust-tight sealing at the spout completes the clean and smooth process.

Your result:

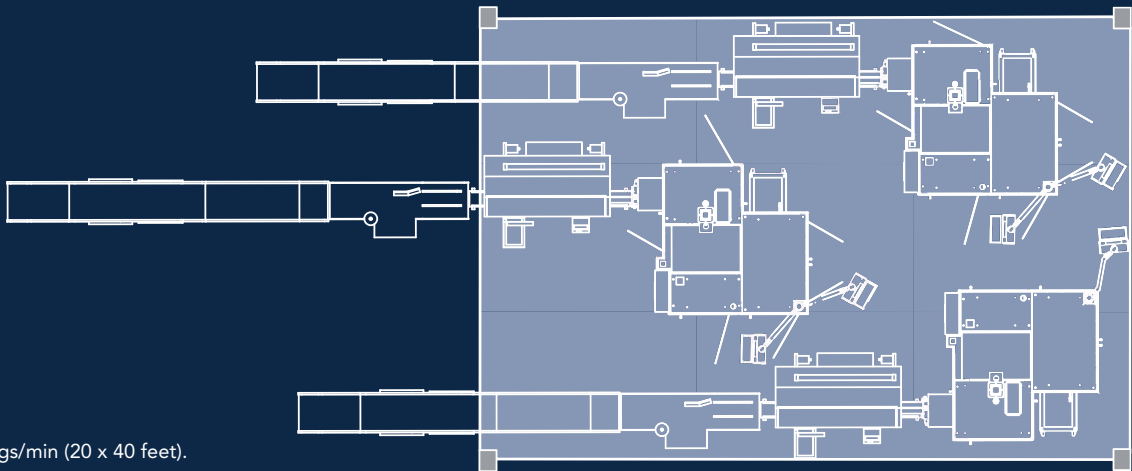
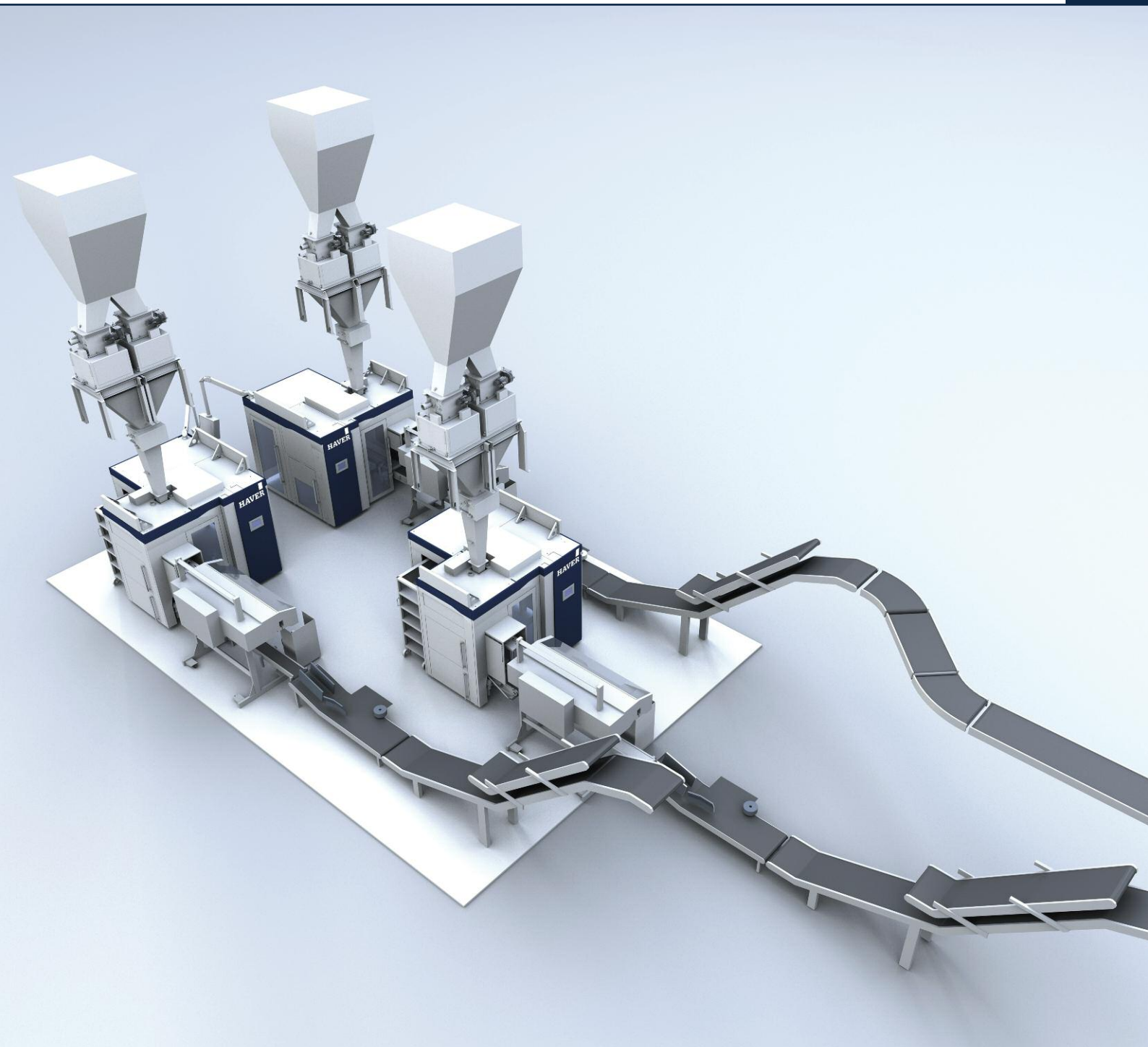
Compact, square-shaped and clean bags, which are easy to palletize, resulting in overall reduced cost in bag handling and bag materials.



TECHNICAL DATA

High-speed open-mouth bag packing system

- Material: All parts coming directly into contact with the product are made of material AISI 316
- Bag design: Pre-fabricated laminated open-mouth bags made of paper, PE or PP
- Bag width: 13 inches – 20 inches (330 mm to 510 mm)
- Bag length: 23 1/2 inches – 39 1/2 inches (600 mm to 1,000 mm)
- Gusset: 1 1/2 inches – 3 1/2 inches (40 mm to 90 mm)



Layout example for 90 bags/min (20 x 40 feet).

SYSTEM COMPONENTS

Empty bag storage – customized to fit your needs

The choice of the right empty bag magazine depends on your project needs:

■ Vertical empty bag magazine

This magazine fits into smallest spaces. Storage: up to 700 bags.

■ Horizontal empty bag magazine

This magazine is suitable for highest storage capacities. Storage is depending on capacity needed and available space.

All the magazines can easily be re-filled in shortest times without interruption of the running bagging process.

Full bag closure – another important feature

With cleanliness and efficiency in mind we offer all of the common closing systems for open-mouth

bags. They can be easily combined with the TOPLINE® 2000:

Your project is decisive – we provide you with your personalized solution:

- Sewing
- Taping
- Hot-melt activating
- Heat sealing

All project solutions assure a secure transport of the filled bags to the externally arranged closing station.

Features matter!

A smooth machine operation is guaranteed by the sophisticated design of our electrical equipment:

- Simple operator log-in via finger print
- Ergonomic operation via 2 operator displays, 1 of them mounted at a telescopic arm for either sitting or standing working position
- Barcode bag type identification with automatic adjustment of the set machine parameters

- E-commerce at machine displays (HMI) possible
- Tele service for fast technical support
- High safety standards thanks to sensor controls and light barriers
- Status indication via LED display
- Packing speed adjustable as needed
- Allen Bradley or Siemens PLC
- Electrical installation at machine – no external cabinets
- Electrical installation UL conform
- Bag printing via laser printer inside the machine
- Easy machine access and easy cleaning
- Energy recovery system using the braking energy

System components



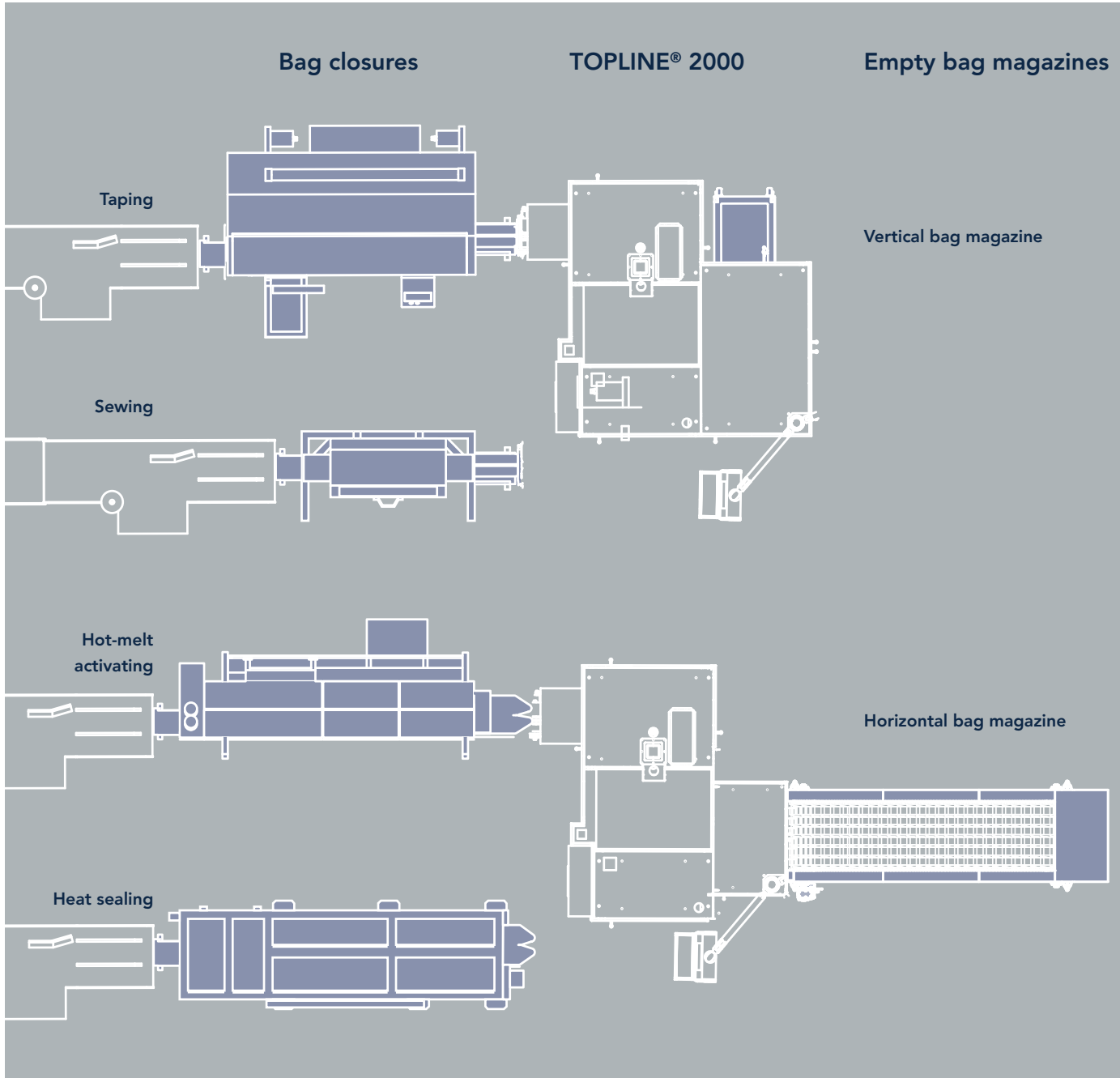
Coding of bag bottom



Operator display with e-commerce



Status indication via LED display



Bag closures



Sewing



Taping



Hot-melt activating



Heat sealing

HAVER ANALYTIC



Using the HAVER BAG DROP TESTER, drop tests on filled bags can be carried out effectively.



The HAVER AIRFLOW TESTER® determines the air-escape capability of valve bags.



A loose material's pourability can be easily determined using the HAVER TRICKLE TESTER.



The HAVER BIG GURLEY® measures the air permeability and assesses bagmaterial.



The HAVER DEAERATION TESTER examines the aeration and de-aeration properties of powder-type materials.

Product analysis + packaging analysis = determining the optimum process technology

We not only produce packing machines, but we also assist our customers in measuring and monitoring the promised levels of quality! For us the term quality also extends to the products for final customers. This is the ultimate target of mutual cooperation: HAVER customers must be assured that their products go to market only with the highest possible quality – year after year and day after day. It has to be documented in writing and be traceable.

Quality control and documentation have gained in importance.

HAVER Analytic is a developer, manufacturer of laboratory equipment and a service provider of equal proportion. Try us out and you'll be convinced. We're at your service worldwide around the clock.

A selection of the wide range of applications:

- Bag manufacturing
- Packaging testing
- Silo technology
- Filling technology
- Transport and logistics
- Production
- Laboratories
- Particle measurement technology

HAYER SERVICES – AFTER-SALES SERVICE

Service Capability

HAYER SERVICES has a world-wide network of service engineers.

Aside from our local service staff, we are able to pull from our HAYER & BOECKER affiliated companies that have over 100 experienced service engineers with expertise in solid and liquid filling technology and speak multiple languages.

Customer Training

We offer in-house training at our facility in Conyers, Georgia and at customer site. Several training levels are available for operating and maintenance staff. Our service engineers receive continuous training on our own equipment, as well as other equipment, so they stay current on all technological advances. As a result, they are able to provide the customer with updates on new applications for their machine.

Maintenance Agreement

Our maintenance agreements are customized to fit our customers' needs. Individual checklists are used for each machine type, which supplies a point by point reference to inspect the machine. The agreements offer special hourly rates and a discount on spare parts.

- For service inquiries:
Phone: +1 770-761-2278
E-mail: service@hayerusa.com

Spare Parts

HAYER SERVICES offers a wide variety of spare parts, from routine wear & tear parts to critical electrical/mechanical parts. A suggested spare parts list is provided to customers with the purchase of a new machine to help minimize potential downtime. We stock the majority of these parts in our warehouse in Conyers, GA. At HAYER SERVICES, we understand your need for timely deliveries of spare parts for your equipment.

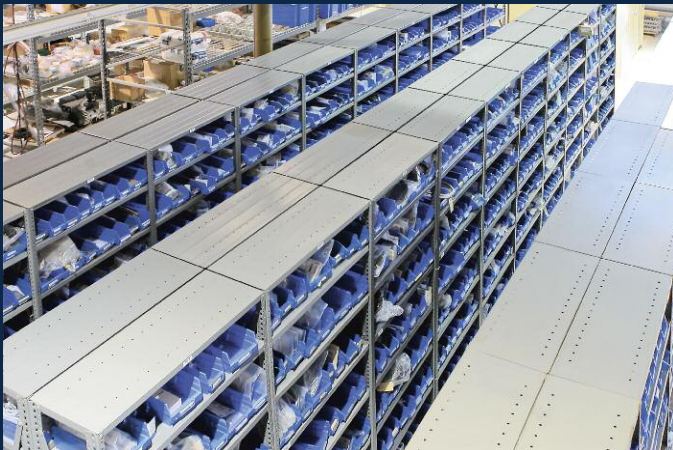
Together with our parent and sister companies worldwide, we are able to provide parts quickly and efficiently anywhere in the world.

- For spare parts inquiries:
North America: +1 770-761-2269
South America: +1 770-761-2281
E-mail: spareparts@hayerusa.com

Retrofits & Upgrades

At HAYER SERVICES, we are expanding our vision of service to our customers by offering retrofits and/or upgrades to existing equipment to achieve our customers' goals of saving capital and increasing productivity. Through superior engineering and research & development programs, we will help improve your performance by retrofitting your existing equipment. We take an underperforming or outdated machine and give it the makeover it needs to perform to 21st century standards.

- For retrofit inquiries:
Phone: +1 770-761-2274
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