

möllers

Quality and Performance
Bagging • Palletizing • Unitizing
Complete Systems From One Source



For nearly 50 years, in thousands of installations around the world, Möllers has set the standards for bag and unit load material handling systems. Möllers systems are known for their rugged durability and trouble-free operation, in the most demanding applications.

Our equipment's performance is the result of a history of engineering excellence and our dedication to the highest quality standards in manufacturing and customer satisfaction. From the first drawing, through installation and start-up, every process and procedure in our facility is designed to ensure the highest quality standards.

Our quality standards are evidenced by:

- The latest CAD technology.
- CNC controlled machining equipment to ensure accurate tolerances.
- Certified AWS welders, to provide consistent, high quality welds.
- Touch-screen systems interface for ease of operation, simplified training and optimum flexibility.
- Assembling and testing each system before it leaves our facility to ensure quality and simplify installation in your plant.
- A rapid response service team and complete parts inventory to minimize downtime.



We design each system using the latest in CAD technology.

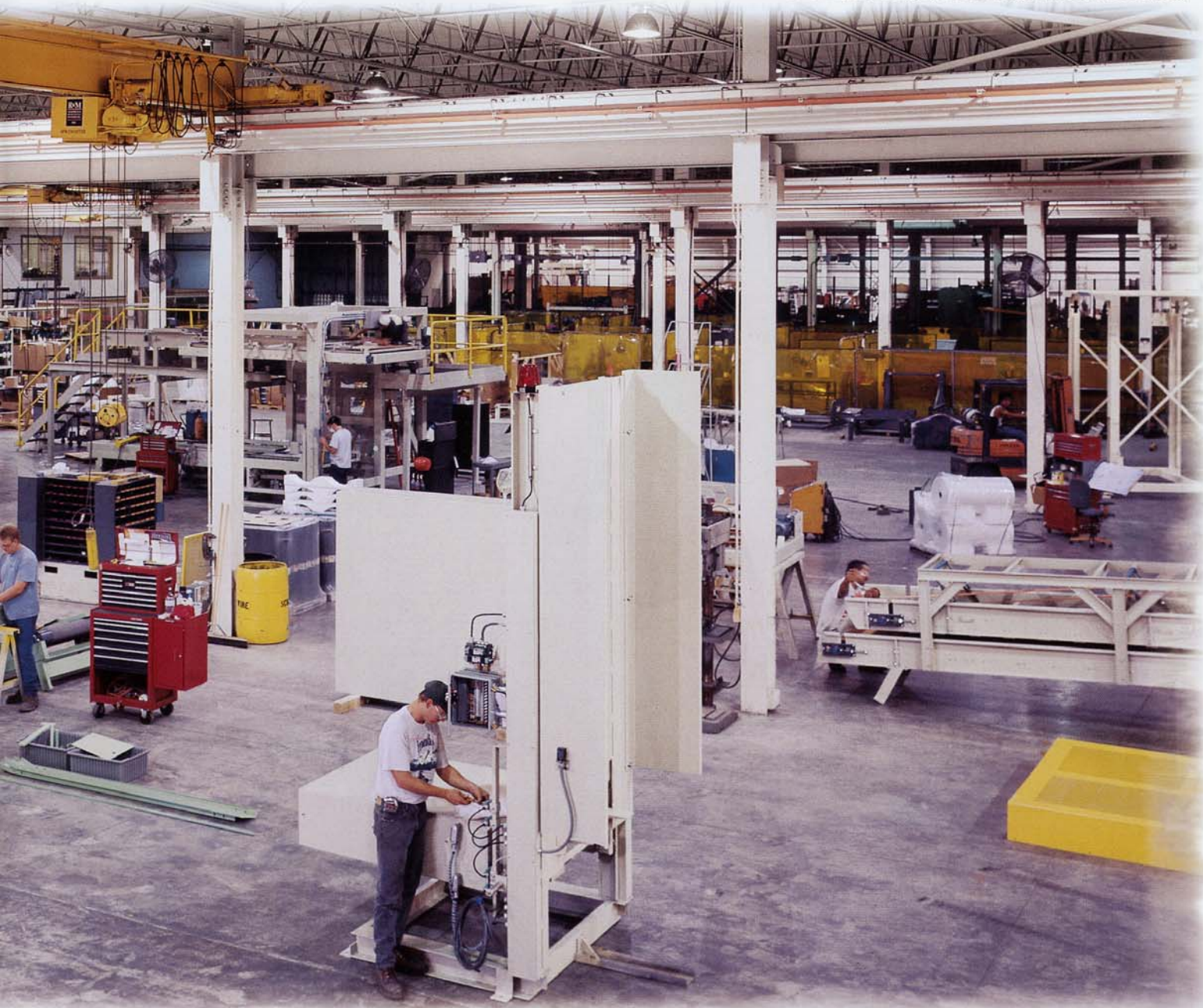


CNC controlled machining equipment ensures complete precision.



AWS certified welders produce consistently high quality welds.

In our more than 100,000 square foot facility, centrally located in Grand Rapids, Michigan, Möllers designs and builds each system.



Touch-screen interfaces simplify operation while optimizing flexibility.



To ensure quality, we assemble and test each system before it leaves our facility.



Our rapid response service team keeps potential downtime to a minimum.

Impeller Packing Systems

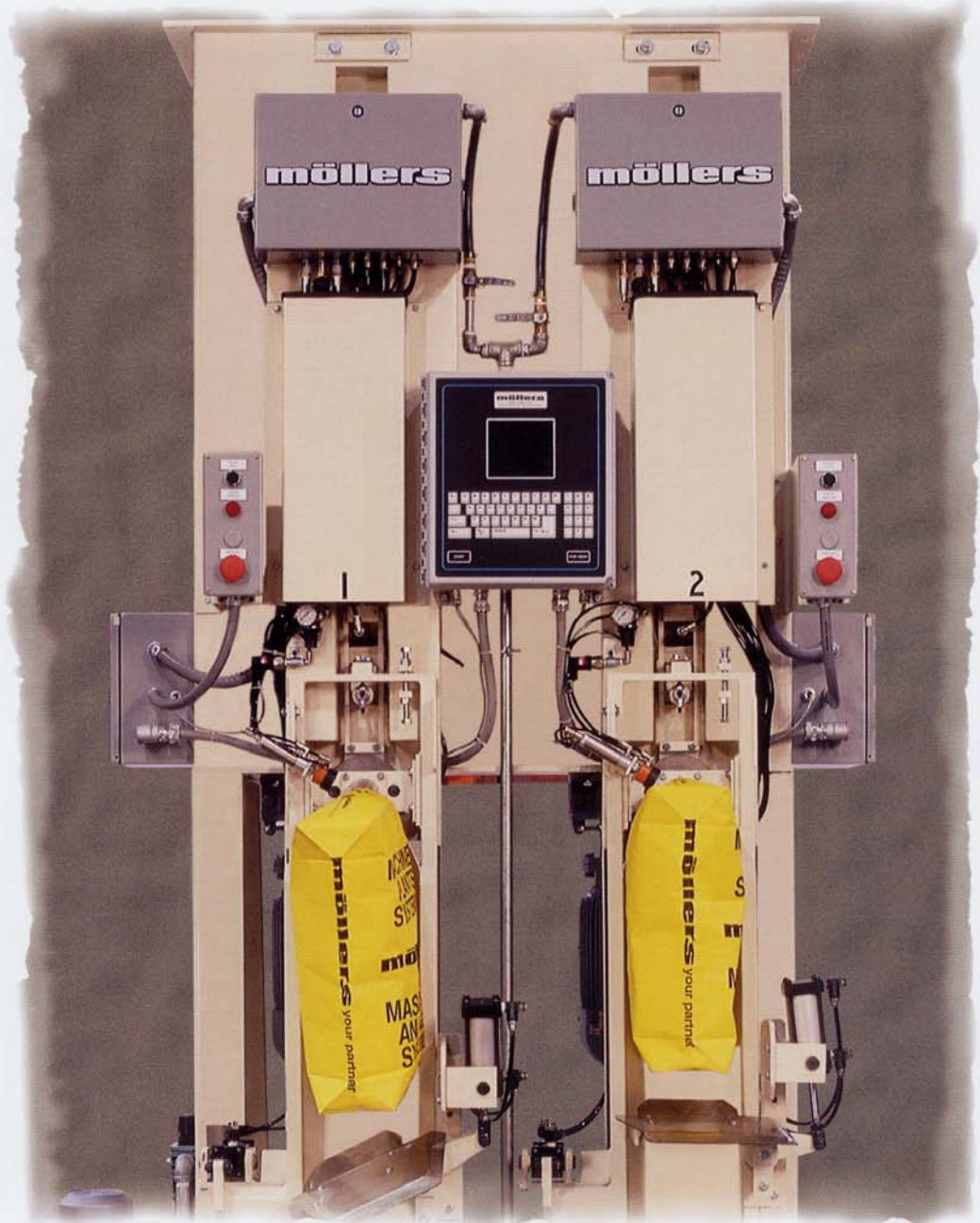
Impeller packers are ideally suited for powdered products of all kinds, including talc, cement, gypsum, lime, sand and other products. A horizontally mounted, motor-driven rotary impeller fills the bags. Packing, weighing and bag discharge functions are fully automatic.

Each system comes with an electronic weighing system, a separate controls box, and a display screen with key pad to change bag size, weights or other bagging parameters. Packers are designed to be fed by an automatic bag placer and can be configured as single units or set-up four in-line.

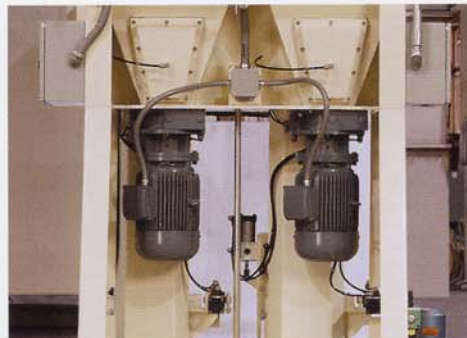
Throughput is 3 to 5 bags per minute, per spout, depending on product handled and bag size.

Features of Möllers impeller packers include:

- Suitable for most powdered products
- Handles either paper or plastic valve bags
- Completely automatic operation
- Integral electronic weighing system
- Designed to work with an automatic bag placer
- Separate control box



Nozzle with bag detection device.

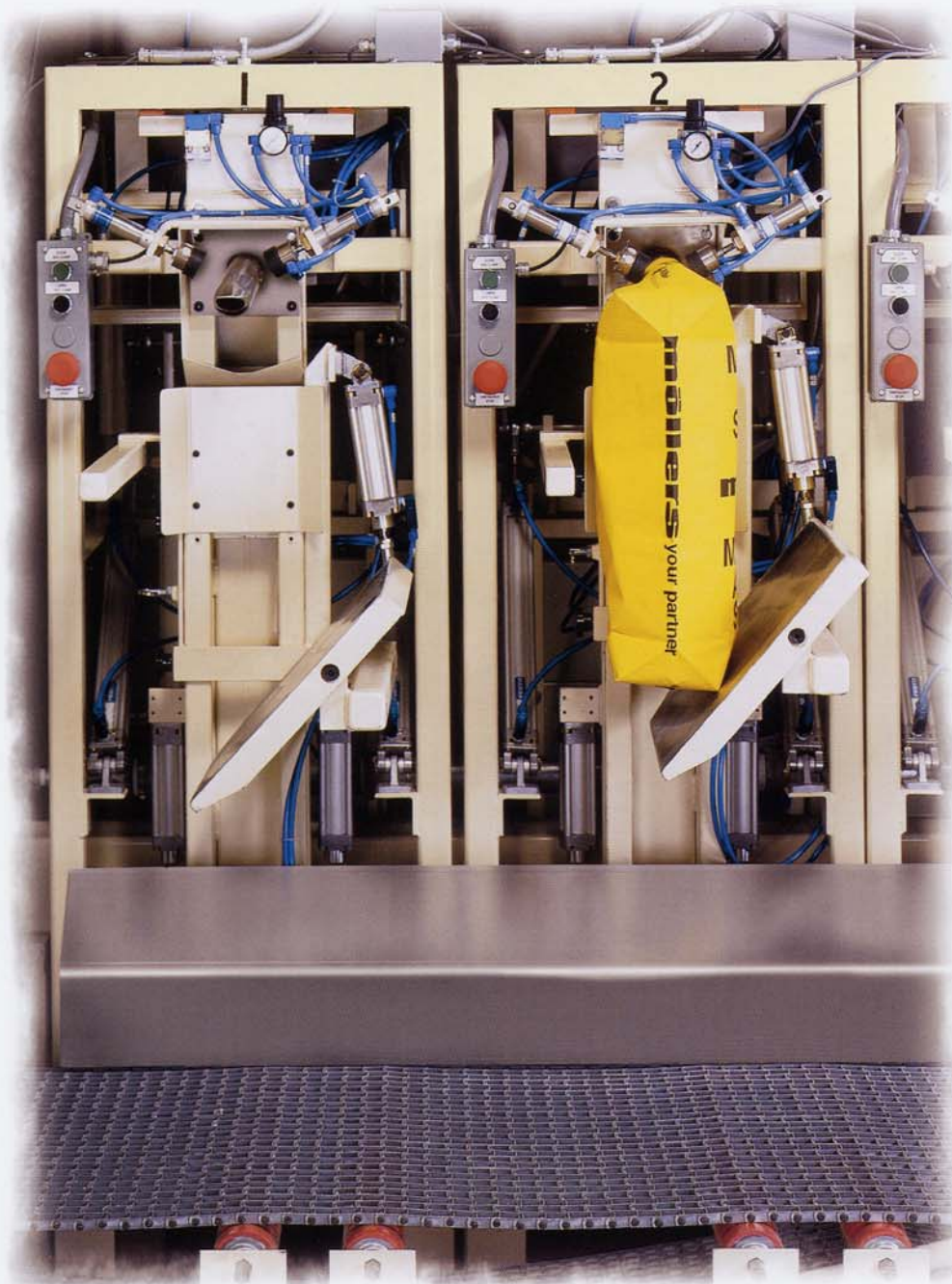


Product is packed into bags by horizontally-mounted, motor-driven impellers.



Packers can be quickly reprogrammed to handle multiple bag sizes and varying weights.

Pneumatic Packing Systems



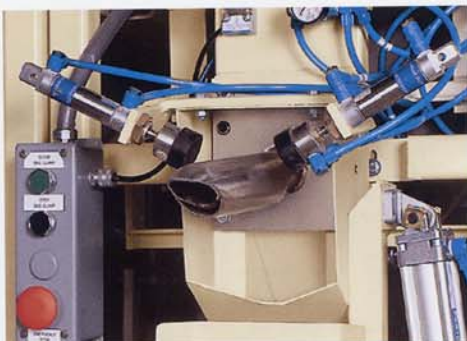
Pneumatic packers can handle granular, as well as powdered products, including chemicals, building materials and food products. Products handled can be as fine as powdered milk and pigments, to as coarse as grain and animal feed.

The product being bagged is fluidized at the chamber base and blown into the empty bag. Packing, weighing and bag discharge functions are fully automatic.

Throughput volume is high, with rates of 4 to 8 bags per minute, per spout, depending on product handled and bag size. Packers come complete with an electronic weighing system that can be adjusted to coarse- and fine-flow settings, to improve accuracy and reduce filling time.

Features of Mollers pneumatic packers include:

- Suitable for both powdered and granular products
- Handles either paper or plastic valve bags
- Completely automatic operation
- Integral electronic weighing system
- Designed to work with an automatic bag placer
- Separate control box



Bags are automatically placed over the nozzle for filling.



Four in-line packers are controlled from a central station.



Stainless steel hopper has quick disconnect fittings and drop-down bottom for easy cleaning.

Valve Bag Placer

Mollers' pneumatic valve bag placer completely automates the bag filling process, when used in combination with packers equipped with automatic bag clamps and discharge devices.

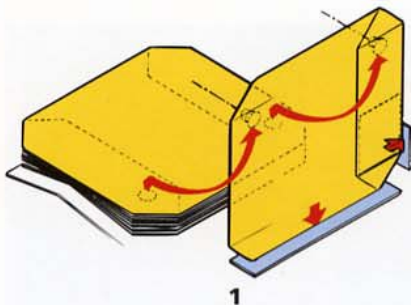
Bag placing systems come with an empty bag magazine, bag feeder with placing arm and separate controls with cabinet. For design flexibility, placer can be positioned to the left- or right-hand side of the packer(s). Each placer can service up to four in-line packers.

Features of the Mollers valve bag placer include:

- Handles either paper or plastic valve bags
- Completely automatic operation
- Compact size (6'-0.5" x 3'-7.5")
- Handles a variety of bag sizes
- Throughput of up to 1,000 bags per hour
- Feeds up to four packers

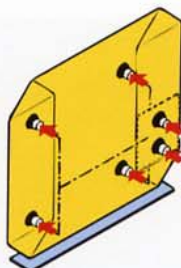


Conveyorized bag feeder provides a steady supply of bags to the packer.



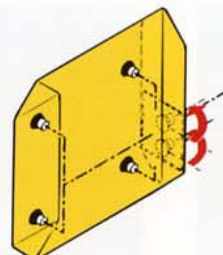
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1. Suction cups pick up a single bag from the empty bag magazine.



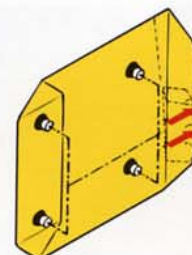
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2. Suction cups mounted on the transfer arm grip the bag and transfer it to the spout location.



3

3. During transfer, suction cups open the valve and ready it for mounting on the spout.



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4. When the transfer arm reaches the spout, the arm swings down 90° to place the empty bag on the spout.



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5. The bag is placed on the spout.



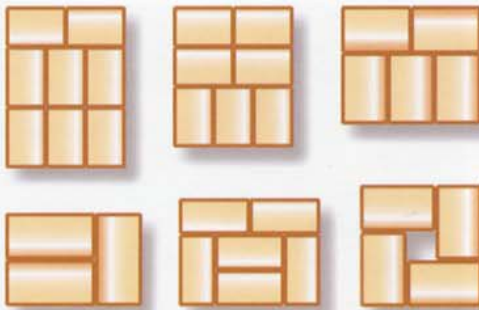
The space-saving PFS Floor-Level Modular Palletizing System provides the advantages of automatic palletizing to businesses with lower throughput requirements. And like its counterpart, the PLS system, it can accommodate any stacking pattern that you may require.

Each PFS palletizer is composed of independent modules, enabling it to be configured to fit virtually any space requirements. Because of its modular design, the PFS also enables you to easily add auxiliary devices.

Features of the PFS Floor-Level Modular Palletizing System include:

- Low infeed height for easy monitoring.
- Standard empty pallet magazine (20 empty pallets) and loading conveyor.
- Pre-engineered bag turning devices, roller or belt tables, and loading stations that can be added to suit your application.

A complete array of palletizing accessories
Palletizing often involves preparatory procedures, and in other cases, you may want to accomplish complementary functions. Möllers palletizing systems are supplied with all the accessory equipment you may need to accomplish your packing goals. Our systems can be supplied with accessories such as metal detectors, check weighers, bag flatteners, glue systems, slip sheet dispensers, bag marking systems, and a variety of other equipment.



Each of our palletizing systems can be programmed to stack pallets in a variety of patterns.



The PFS palletizer's modular design allows bag in-feed and pallet out-feed conveyors to be configured to fit any flow requirement.

PLS High-Speed, Split-Plate Palletizing Systems

PLS palletizers are modular in design, so that they can be configured to meet the operational needs of your facility. Units can be engineered with a selection of bag positioning devices and pusher arms, to meet throughput requirements of 1,500 to 3,000 bags per hour.

PLS systems can handle any pallet size and any stacking pattern; that's why you find them in a wide variety of industries, handle everything from building materials and pet food, to plastic pellets and ice cubes.

Features of the PLS Split-Plate Palletizing System include:

- An independent layer compressing plate flattens the surface of each layer, providing maximum load stability.
- A split sliding plate minimizes friction on each layer.
- Standard empty pallet magazine (20 empty pallets) and loading conveyor.
- A full pallet pick-up station simplifies pick-up of completed loads.
- Pallet elevator with counterweight.
- A number of additional options are available, such as glue systems, slip sheet dispensers, air tables, check weighers, metal detectors, bag marking systems, reject stations, and empty pallet storage zones for 60 pallets or more.



Automatic reject station kicks out under and overweight bags.



Bag flattener elevator flattens and elevates bags in reduced floor space.



Bag equalizer flattens air-tight, sealed bags.



The standard empty pallet magazine holds 20 empty pallets.



Slip, intermediate and top sheet dispensers are available.



Layer squaring system and independent layer compressing plate square and flatten each tier.



Pop-up turning device handles up to 25 bags per minute.



Overhead flap turning device handles up to 30 bags per minute.



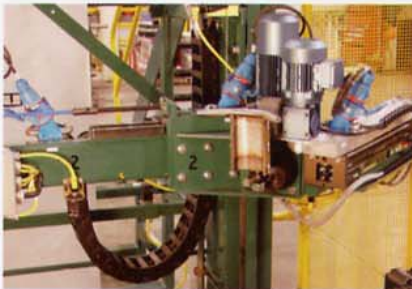
Bag turning post handles up to 50 bags per minute.

Protecting palletized loads using stretch film is a reliable, cost-effective alternative to shrinkwrapping. The one-piece hood is stretched over the pallet load to tightly secure it, without heat. As a result, you save the cost of energy and reduce the environmental impact.

Stretch-hooding is preferable to shrinkwrapping if you want to avoid the application of heat near your product, or if the pallet load will encounter lower stresses during transport. The stretch hood forms a smooth-surfaced envelope which is dependably watertight, and can also act as a surface for your advertising message.

Features of the HSA Stretch Hooder include:

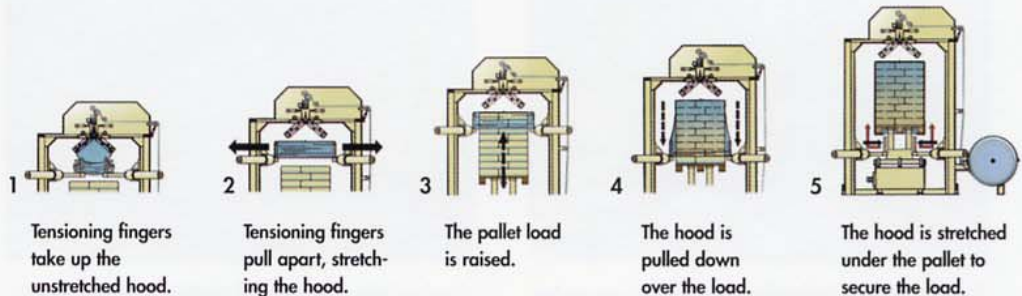
- Hoods are made from a supply reel of gusseted tubular film, measured, heat-sealed and cut to the proper length.
- An optional height scanning device selects the required film length, to allow handling of mixed load heights automatically.
- A capacity of up to 100 pallet loads per hour can be achieved.



Adjustable stretch arms can handle different pallet sizes.



The hood is stretched over the load and secured to the pallet.



*U.S. and other patents



Shrinkwrapping has proven to be a highly effective and adaptable method of protecting and securing a wide variety of unit loads during shipping. Depending on your working environment, Möllers shrinkwrapping systems are available with either electric or gas heated shrink frames. Electric shrink frames are ideal where gas shouldn't be used for safety reasons.

Features of Möllers shrinkwrapping systems include:

- Hoods are made from a supply reel of gusseted tubular film; hood length is adjustable to suit the load height, reducing material waste.
- Patented non-contact system for film guidance prevents displacement of light packages or damage to the film and corners of the load.
- Under-pallet shrink reinforces the bond between the load and the pallet, increasing stability.
- System can handle 60–80 loads per hour.
- Shrink film can be changed in less than five minutes.

Securing pallets for transport

Palletized goods are subjected to extreme forces during shipping and need to be protected against collapse, distortion, interlocking with adjacent loads, theft, and even the elements. The use of shrink or stretch film is an ecologically and economically sound method of protecting pallet loads. Möllers wrapping systems ensure minimum use of packing materials, while providing exceptional protection.



Shrink or stretch film can secure almost any product, including rolled roofing...



product in boxes...



product in bags...



and product in pails.

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All from One Source

Designing, developing, manufacturing and installing complete systems

Based on our extensive experience in engineering and our efficient manufacturing facilities in Grand Rapids, Michigan, we are able to offer a comprehensive line of bagging, conveying, palletizing, stretch-wrapping and shrinkwrapping systems.

