HALGILA

PACKAGING SOLUTIONS

Octopus ()

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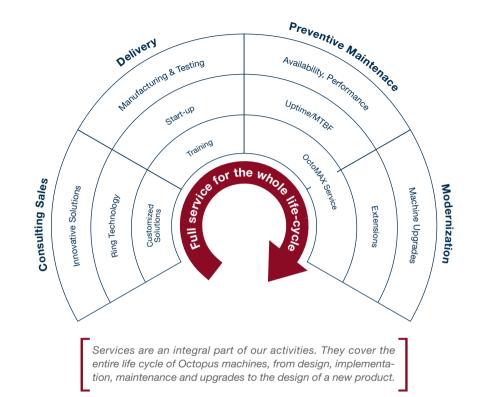
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Haloila – Full Service for the Whole Life-cycle

Haloila is the leading manufacturer of automatic pallet load wrapping machines. In three decades we have delivered thousands of fully automatic Octopus machines all around the world.

We are committed to understanding the need of our customers providing leading wrapping technology as well as innovative solutions for machines modernization and maintenance. Our knowledge extend also to material technology of stretch film, manufactured by our sister companies Muller LCS and Mima Films.

By innovations and focused development of each individual segment, cooperation to combine the knowledge, we are positioned to provide latest pallet wrapping technology to our customers.



Signode Industrial Group

With more than 100 years of experience Signode Industrial Group is a leading manufacturer of industrial packaging products. Company has 88 manufacturing facilities across 6 continents.

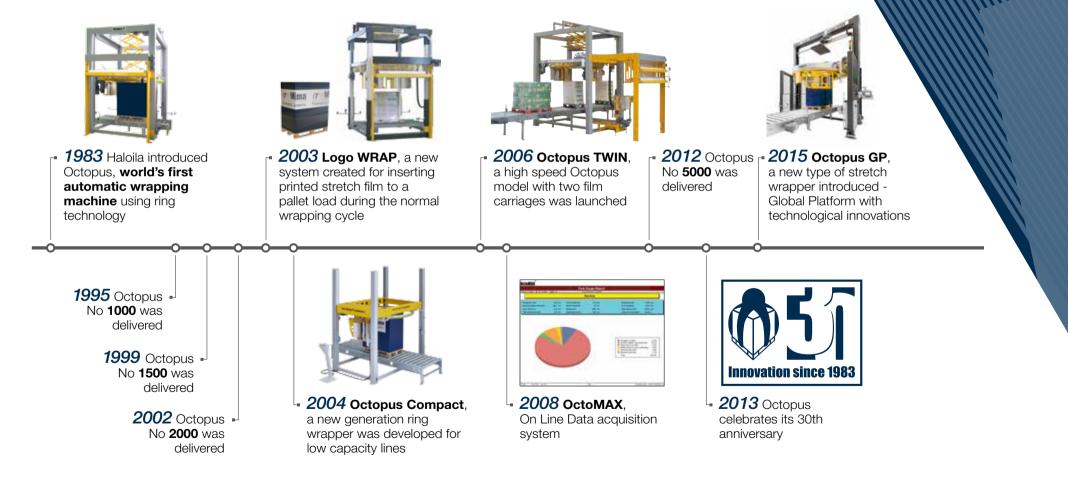
With nearly 7,000 employees working in facilities throughout the US, Europe and Asia, we maintain

leading positions in our businesses through our global scale, broad product portfolio and long-standing global customer relationships.

Signode Industrial Group is a pioneer in the industrial packaging sector with a long history of customer-focused innovations in materials, processes and automation technology that have revolutionized the sector.

Our products are sold around the world in developed and emerging markets under well-known and trusted brand names, including: Acme Packaging, Angleboard, Burseryds Bruk, Caretex, Dacro, Down River, Fleetwood, GaleWrap, H.Bohl, Josef Kihlberg, Kiwiplan, Lachenmeier, Lock N' Pop, Loveshaw, Mezger Heftsysteme, Mima Films, Mima Packaging Systems, MIP, Muller, Multi-Wall, Orgapack, Shippers Products, Signode, Silawrap and Strapex.

30 Years of Innovation



Octopus (j)

Octopus ring technology Packaging Solutions for Many Branches of Industry



Dairy products wrapped by Octopus.

The Octopus ring technology is the result of innovative research and development. It combines our long experience, the result of delivering thousands of Octopus machines, with an understanding of the varied needs of customers. The Octopus ring technology is suitable for all pallet-loadable products in many branches of industry.

Wrapping machines using the Octopus technology are reliable and flexible: features can be tailored according to the specific requirements of the customer and the industry. Pallet loads wrapped by an Octopus machine meet transportation requirements. Depending on the model, the packaging capacity is up to 200 pallet loads per hour.

Octopus is

- More productivity
- Reduced packaging and transport costs
- Standardized logistic system







Food, dairy and beverage industry

- Packaging capacity up to 200 pallets per hour
- Product specified settings for different type of primary packages
- Film roping and pallet lift for heavier primary packages like drinks
- Automatic corner post applicator for light primary packages
- No chains: Octopus is clean and hygienic
- Solutions also for cold packaging areas
- Air Flow solution for dairy industry to prevent condensation and to reduce needed time for cooling



Construction industry

- Packaging solutions for e.g. light concrete blocks, bricks, insulation material, paints, bagged products
- No Touch No Tail film seaming for uneven product pallets like bagged products
- Water proof wrapping result by integrated top film dispenser
- Logo Wrap: pallets wrapped with printed company logos
- Robust structure for demanding production environment
- Solutions for packaging in cold, outside temperatures
- Real cost cut compared to hood technology
- Tail Tucker unique solution for brick & pavement industry



Paper industry

- Packaging solutions for e.g. tissue paper, cardboard and copy paper
- One machine to meet the requirement of different product pallet dimensions and irregular shape
- Unique film lay on force control to protect light primary packages, still having excellent transport stability

Methods to wrap pallet loads

Product pallets can be wrapped by using following methods: manually by hand, by using semi-automatic machine or automatic wrapping machine.

Automatic wrapping is carried out mainly by using following technologies:

- Turn table -technology: Pallet load is rotated on turning conveyor, load itself partly pulls the film from reel.
- Rotary arm -technology: Wrapping film is rotated around the pallet load by arm, starting always from bottom and ending to bottom.
- Ring technology: Technology developed by Haloila, where product pallet stays stationary and film is rotated by using wrapping ring.

In addition exist hood technology, which however has high unit cost per pallet load, and has limited features to adjust transport package.

Benefits of Octopus Ring Technology

High packaging quality and capacity

In Octopus ring technology product pallet is stationary and primary packages are not moving during the wrapping cycle. This improves packaging quality. It's easily possible to wrap heavy product pallets, like drinks, steel coils, bagged concrete etc. It is also possible to wrap very unstable and light products and pallets with uneven and irregular dimensions.

Stationary product pallet and ring technology makes possible to reach high capacity with lowest overall costs. Octopus can reach high capacity, over 200 pallets per hour.

Multiple wrapping methods.

Octopus ring technology enables number of different wrapping methods by the same machine. Wrapping cycle can start and stop from any height: single wrapping from bottom to top, band wrapping to specified height, or double wrapping.

Automatic film seaming and cutting unit

Automatic film seaming and cutting unit ensures durable film seaming without tails. Wrapped pallets are automatically warehouse proof and there are no load stability issues.



OctoFACE Detailed lay on force setting for each wrapping program.

Cost-effective film pre-stretch

Octobus

Octopus ()

Octopus includes controlled film pre-stretch which ensure consistency of film consumption and packaging quality.

Unique film lay on force control

Octopus' unique, variable, and programmable remote tension control system allows ultimate flexibility in how loads are wrapped and eliminates problems associated with "constant" tension systems.

Extensions and upgrades

There is number of standard optional modules for Octopus machines for product specified solutions and for different industrial segments.

Why Stretch Wrapping?

Stretch wrapping is a modern and reliable packaging method suitable for many branches of industry. Stretch wrapping, in addition to benefiting the end user, can bring many advantages in production, logistics and warehousing:



- Less waste. Wrapping protects products against damage, moisture and dust during warehousing and transportation. Unauthorized persons cannot tamper with the products without leaving visible evidence. Successful transportation improves the image of the product supplier.
- 2 A cost-effective method of packaging. Stretch wrapping enables a cost-effective use of material for primary product and delivery packages.
- **Faster production and shorter delivery times.** Automatic wrapping of transportation packages reduces throughput time and improves package quality.
- Uniform quality of wrapped pallet loads. Wrapped pallet loads enable efficient logistics and warehousing. Pallets can be loaded and unloaded quickly and easily. Even taller pallet loads are easily manageable.
- **Reduced labour costs.** An automated packaging line significantly reduces the packaging labour costs.

Wrapping Solutions



Octopus Compact



Octopus B-range



Octopus S-range



Octopus T-range/T200



Octopus GP

Optional Equipment for Octopus Machines Integrated Top Sheet Device

Ensure high quality water/dust proof wrapping result.

Logo Wrap

New system for inserting printed stretch film to a pallet load during the normal wrapping cycle.

Automatic Reel Change System

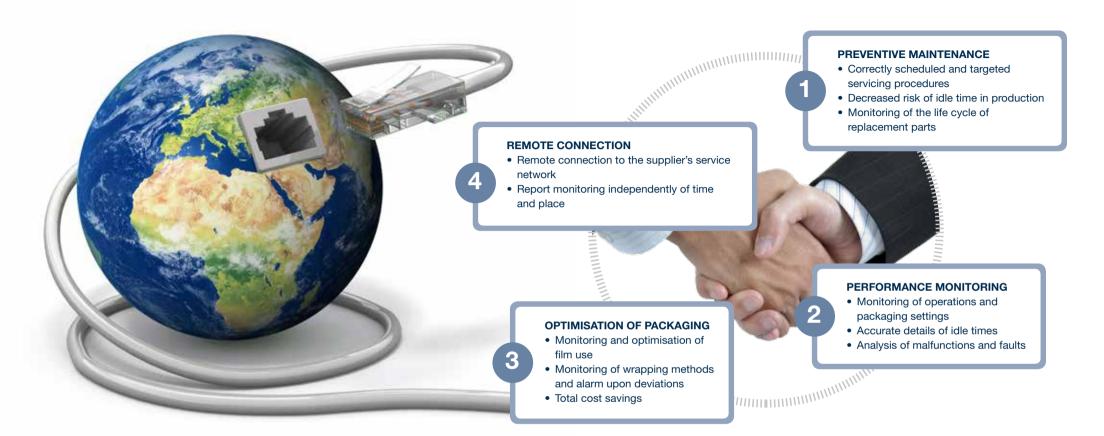
Reel Change System consists of a number of cassettes with stretch film reel, a manipulator and a magazine for storing the cassettes. When the system senses lack of wrapping film it automatically changes the film cassette and the wrapping continues without manual intervention. In ONE SHIFT CONCEPT number of spare film reels is specified based on need for 8 hours.

OctoROPE and pallet lifter

The Octopus roping system is ideal solution for tissue products, soft drinks, empty PET bottles, inboard loads etc. Roping device lifts lower edge of film about 80 mm while Octopus is wrapping the bottom layers.

Corner Post Device

Fully automatic four corner protection for variable load dimensions.



OctoMAXTM

USABILITY, RELIABILITY, COST-EFFICIENCY through the OctoMAX service concept.

OctoMAX is an automated real-time monitoring service for Octopus wrapping machines, which improves the usability, reliability and cost efficiency. The service includes preventive maintenance that covers the entire life cycle of the wrapping system, utilizing information that has been acquired about the machine and film application. OctoMAX enables customers to maximize the benefit profit from their investments in production lines. OctoMAX continuously monitors the operation of Octopus and provides the user with important information regarding production and machine parameters, as well as idle times and their duration. Through reporting, it is possible to develop regulating measures to improve and maintain production and cost efficiency.

Worldwide Sales and Service Network



Haloila offers service worldwide

Your complete wrapping solution does not end with equipment delivery. Our goal is to work as a co-operative partner with our customers throught the life-cycle of the equipment.

The principal task of Haloila's service organization, and that of our authorized dealers, is to provide quick and flexible maintenance service and technical support.

We draw up customer-specific preventive maintenance programs and upgrade the delivered machines according to customer needs.



PREVENTIVE MAINTENANCE SPARE PARTS UPGRADES TECHNICAL SUPPORT TRAINING & CONSULTACY OctoMAX™

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