NEWSPAPER PACKAGING SYSTEMS
INTEGRATED, HIGH-PERFORMANCE SOLUTIONS

GOSS INTERNATIONAL
Magnapak and more

The Magnapak packaging system

Expandable to 80 hoppers, the shaftless Magnapak® system provides the right mix of speed, product quality and versatility to manage any production contingency; from large Sunday packages with many inserts, to high-volume daily papers with fewer inserts.

Magnapak systems run at up to 30,000 copies per hour, and shaftless, multi-motor technology simplifies makeready, reduces maintenance and provides the flexibility to facilitate truly automatic zone changes without impacting speed or productivity.

Modularity also allows newspapers to customize their Magnapak configuration according to today’s production requirements and then adjust it to meet tomorrow’s - without purchasing a new machine. Systems are expandable up to 80 hoppers in two or four hopper sections and can accommodate multiple deliveries.

The open-in-the-middle circulinear design of the Magnapak system combines performance advantages of a straight-line inserter with the flexibility and package integrity of a circular model.
This configuration allows placement around support columns, and the gripper deliveries exit and return through the center of the machine. Wide curves allow smooth production flow, and the pockets are always upright, allowing efficient recycle repair to ensure that packages are complete. Operators find it easier to set up and operate the system due to scaled, on-the-fly adjustment capabilities and intelligent system controls.

Innovative pockets

An innovative design makes the pockets and carriers on the Magnapak systems efficient, effective and easy to use. With a trap door release, they can effectively handle inserted or collated packages.

Lap and/or vacuum opening devices are integrated into the pockets, and a “clip to carrier” design attaches each pocket to an individual carrier. The pockets can be easily removed from the system or reinstalled in seconds with a simple tool, minimizing down time for repairs.

Servo-driven motor drive units feature a simple timing belt drive transmission to the carriers – cutting maintenance and repair requirements. Multiple drive units are utilized according to machine size.

Magnapak features

- 30,000 per hour cycle speed
- Automated zone changes
- Multiple deliveries
- Shaftless, multi-motor drive technology
- Versatile, high-performance hoppers
- Modular, circulinear design
- On-the-fly adjustments
- Quarter fold and Berliner format capabilities
- Integrated Omnicon™ control system
- Reduced and simplified maintenance

Magnapak pockets can be removed or reinstalled in seconds, reducing downtime for maintenance significantly.
clear advantages

The independent, servo-driven Magnapak® NP30™ hoppers can be taken in and out of production for different zones while the system is running at full production speeds. No gears, clutches, or shafts are required.

The NP30 differential gripper drums improve hopper performance with lower torque, low inertia, reduced set-up and minimal maintenance. These innovative gripper drums slow the motion of the gripper seats while gripping the paper, reducing divots and misses. Fully automatic set-up calipers monitor the thickness of the product to detect misses and multiples and report accurate statistics on hopper performance.

Set up is simple with the NP30 hoppers, as all adjustments are scaled and calibrated for predictability. Most changes can be made on-the-fly, and control screens at each hopper assist with the push-button adjustment of hopper-to-pocket timing as well as hopper and drive status. A sliding interlocked guard provides full access to the hoppers. Additional features include vibration isolation from the main frame, eccentric motion sucker bars, electronic vacuum control and extending, removable feeding trays. The hoppers can also be easily removed for off-line maintenance.

NP30 hopper features
- Servo drives
- Differential gripper drum
- Scaled set-up adjustments
- On-the-fly adjustments
- Improved efficiency and accuracy
- Exact number multiple detection
- Minimal maintenance
The versatile, reliable Goss® NP642™ straight-line inserter automates the delivery of up to 41 inserts into a single newspaper jacket while providing single-copy control throughout the production run. This is also a high-capacity system capable of processing 25,000 papers per hour in single-delivery mode and 50,000 papers per hour in dual-delivery mode. The NP642 systems can be configured with as few as six hopper stations or as many as 42, and the design is modular to allow for expansion as operational needs change.

Ergonomically designed with 48 inches of space between hoppers for unobstructed feeding, the NP642 model also features a low, convenient feed height that does not require pits or platforms. An Automatic Repair System detects misfed or incomplete packages and recycles them, eliminating costly and time consuming off-line repair. The integrated Omnicon™ control system simplifies operation of the NP642 system, improves accountability and allows precise microzoning.

NP642 features

- 25,000 per hour cycle speed
- Single or dual delivery
- Simplified mechanical drive system
- Modular design – 6 to 42 hoppers
- Integrated Omnicon control system
This advanced gripper delivery system accepts inserted or collated products from the inserter pocket and delivers them to any designated release point, including stackers, diverts, reject or check copy stations, or single-copy plastic wrappers. The system can accommodate in excess of 800 broadsheet pages, operate at up to 30,000 copies per hour and provide selective single-copy control for efficient and accurate transitions.

A low-maintenance gripper track and composite chain utilizes sealed bearings that never need lubrication. The heavy duty grippers are center mounted to reduce stress at attachment points for longevity and unsurpassed performance, and a single-bolt attachment allows quick replacement.

**Gripper delivery features**

- Up to 30,000 copies per hour
- Single-copy control
- Fold edge leading
- Up to 800 broadsheet (2-inch thick) products
- Independent gripper drive
- Customized configurations
- Selective release capacity
- Integrated control
on-line efficiency

A SIMPLE RELIABLE DESIGN DELIVERS JACkETS AUTOMATICALLY.

On-line transfer system

The Goss On-line Transfer System automates jacket or insert hopper loading, interfacing with a gripper or belt conveyor to deliver products directly from the press or storage system to the inserter hoppers. The system directs, aligns and guides the product stream for easy, simplified switching and transfer. It also allows the gripper conveyor to batch or split release products for maximum system flexibility.

After a jacket or insert is laid on the On-line Transfer System’s vacuum release conveyor it is transported through a heavy duty, double point squeeze roller that conditions the product and sharpens the fold to reduce faults. A vibrating side belt stream aligner then straightens and centers the product stream for positive tracking and infeed control before feeding product to the hoppers. For on-line systems using a lapped stream belt conveyor, the stream passes through a gap maker to ensure proper feeding of the hoppers. Product can be fed in batches to the inserter’s hopper, and the system automatically bypasses to the next hopper in line or diverts to an overflow station if one hopper is unable to accept the product. The infeed swings up for manual hopper loading.

Direct pocket transfer system

The Goss Direct Pocket Transfer System in cooperation with Ferag systems takes newspapers from press delivery or storage directly to the inserter pocket. Utilizing a unique single-copy press gripper, it bypasses on-line or hopper interfaces and enables single-copy control all the way to the pocket.

The system excels at handling large page counts, especially tabloids, and simplifies the delivery of product from storage or buffer systems to the inserter. Positive gripper control of the papers results in faster net speeds as well as reduced waste, and automatic operation can significantly reduce labor.

Compatibility with the Goss Automatic Repair System assures product integrity, with the ability to inhibit product from feeding to a pocket that contains a repair copy.
press conveyors and hopper loaders

THE PERFECT COMBINATION OF PRODUCTIVITY, ACCOUNTABILITY AND RELIABILITY.

The NP200 press gripper

With an ability to transport up to 85,000 newspapers per hour with single-copy control, the NP200 provides unsurpassed productivity, flexibility and product accountability.

This system is also designed for high reliability and low maintenance. The NP200™ grippers feature a latch-closed and trip-open design and are made of high-strength, glass-reinforced nylon. They are also center mounted to reduce stress at the attachment points and increase durability. The steel alloy track has hardened curves, the closed track and chain design reduces maintenance, and sealed bearings never require lubrication.

A standard, programmable console puts complete control of the NP200 at the operator’s fingertips. Data can be entered during setup or changed on-the-fly through an easy-to-use touch screen, and all production data is collected and stored.
**Goss Beltveyor**

The Goss® Beltveyor Lapped Stream Conveyor is a flexible and cost-effective system for transporting broadsheet or tabloid newspapers. This system can convey either press or inserted product streams to downstream processing equipment. Automatic belt tensioning eliminates the need to adjust the Beltveyor between runs of different product sizes, and variable speed drives accommodate press speed variations. A heavy-duty design ensures low maintenance and a long operating life.

**GS500 stacker**

The GS500 is an easy-to-use, high-performance stacker. Its fast makeready features provide quick turnaround and high productivity, while low-maintenance requirements ensure continued use and profitability. A heavy-duty turntable features a three-pusher design for maximum reliability and durability, while ribs and rollers reduce friction between the bundle and table for a smooth, efficient eject cycle.

The GS500 stitcher efficiently accepts broadsheet or tabloid format newspapers from belt or gripper conveyors. It accurately counts and neatly stacks bundles in desired heights.

An easy-to-use touch screen control manages makeready and changeovers with simple selection of stack parameters and quick on-the-fly adjustments. Previous setups can be recalled with the touch of a button. Infeed speed, conveyor following ratio and eject speed can be adjusted from the control screen as well. Step-by-step diagnostic procedures and troubleshooting guides are at the operator’s fingertips. The GS500 also incorporates integrated light curtains to stop the bucket rotation if the beam is broken.

**The GS500 features**

- Stack broadsheet or tabloid formats at press speed
- Dual staging sections for stack quality and control
- Wide range of page counts and bundle heights
- Integrated turntable light curtain
- Movable bucket walls to accommodate various product sizes

**Hopper loader features**

- Low ergonomic loading height
- Gradual low angle incline section
- Smooth radius transfer to infeed
- Integral nose side pile jogger
- Simple height/width adjustments

**Goss hopper loaders**

Goss hopper loaders increase productivity, reduce labor costs and prevent interruptions by automating the process of feeding jackets or inserts. They also offer important ergonomic, portability and ease-of configuration features. Hopper loaders can significantly reduce hopper manning requirements while keeping the hopper pile at a constant height to increase hopper efficiency.
The Goss® Eclipse® Bottomwrapper quickly and efficiently applies protective kraft paper to the bottom or to three sides (optional). It handles a wide variety of bundle shapes and sizes and is designed for close-coupled stacker operation or down-stream placement in tie lines. The unit is equipped with a proprietary paper feed system. High bundle throughput helps reduce bottlenecks at the delivery end of the packaging center.

Designed for years of trouble-free use, the Eclipse Bottomwrapper is rugged and reliable. Safe operation is ensured with automatic low-speed paper loading and interlocks throughout the machine.

The Eclipse features optional ink jet capabilities to print preprogrammed messages either on the top side of a 3/4 wrapped bundle or on the bottom of an underwrapped bundle. This increased level of automation makes it easier to zone and microzone bundles and can reduce labor requirements in the packaging process.
Eclipse Bottomwrapper options:

- 3/4 wrap for three-sided bundle protection
- Side walls for stack support, with bottomwrapper located between close-coupled stackers and tying machine
- Driven infeed and outfeed belt extensions to permit easy integration with longer machines
- Inkjet addressing

Mattop conveyor

The Mattop conveyor is well-known for providing trouble-free service in bundle conveying applications. The key to its superior performance is its conveying material, which is made from a special high-impact, low-friction plastic. This surface permits deflection anywhere along the conveying area. Its elements mesh tightly without holes or slots to prevent scraps of newsprint from slipping through. Various surfaces are available to accommodate such material handling challenges as inclines, fast deliveries, and heavy loads.

Rollerslat conveyor

The Rollerslat conveyor is a trouble-free system that transports tied or untied stacks of printed products without distortion or damage to the bottom product and allows for bundle accumulation.

Constructed for durability and longevity, the conveyor is designed with heavy gauge steel and welded construction. The surface consists of rollers that are freely rotated around their shafts by opposing dual chains, providing zero pressure accumulation.
The Goss® Omnicon™ based master control system is designed to simplify the monitoring and management of the entire packaging system. This advanced control system utilizes a modular design with an open architecture, and it can be seamlessly integrated with the Goss Omnizone® supervisory control system or other third party systems. The design complements advanced carrier route zoning and selective inserting capabilities by putting control of the inserter, gripper deliveries and release stations at the operator’s finger tips.

**Omnicon features at a glance**

- Windows® based control
- Integrated gripper delivery control
- Flat screen user interface
- Integrates with Goss Omnizone or third-party supervisory control systems
- Integrates with Goss DSC system

The master control system features an easy to navigate graphical user interface.
**Omnizone**

Goss Omnizone supervisory controls are an integral part of the larger suite of newspaper packaging hardware and software solutions. This allows the application to quickly and efficiently present data to insert packaging equipment, monitor that equipment, and interact closely with it.

Omnizone utilizes standard PC technology, as well as other standard platforms for the creation of a robust software application. Microsoft’s SQL Server technology is used as a database storage system. The industry standard reporting package ‘Crystal Reports’ is fully integrated into the application as well, providing flexible viewing and printing of reports. Because Omnizone is based on an open architecture, clients who have experience with Crystal Reports can develop their own reports, extracting just the data they want.

The Omnizone system is comprised of four main software modules:

**Advertising Assistant**

**Planning Assistant**

**Production Assistant**

**Warehouse Assistant**

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<th>REDUCES LABOR</th>
<th>REDUCES PRODUCTION TIMES</th>
<th>REDUCES TIME REQUIRED FOR PLANNING</th>
<th>REDUCES ERRORS AND SETUP TIME</th>
<th>IMPROVES PRODUCTION; LATE INSERTS ARE IDENTIFIED BEFORE PRODUCTION BEGINS</th>
<th>OPTIMIZES LABOR</th>
<th>INCREASES EFFICIENCY</th>
<th>ELIMINATES DOUBLE-DATA ENTRY</th>
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customized solutions

MODULAR OPEN SYSTEMS ARE THE FUTURE OF MODERN PACKAGING AND DISTRIBUTION CENTERS.

Production routines are growing more complex and demanding. No two jobs are alike anymore. Customers are demanding better quality and more value. These are the reasons Goss International is committed to a modular solutions concept: from individual products to complex workflows.

The goal is to deliver solutions tailored to each publisher’s unique challenges and markets. Goss International will design and integrate systems utilizing Goss® components as well as the best third party components, such as roll storage, to deliver the optimum system for specific needs. Solutions are the concept, and customer focus is the guiding principle.
In-depth process knowledge and expansive R&D efforts continue to deliver differentiating breakthroughs like Magnapak, gapless Sunday™ press, Autoplate™, Flexible Printing System™, Automatic Transfer™, DigiRail™ and Ecocool® technologies as well as advanced workflow and finishing systems.

Lifetime Support

The Goss Lifetime Support™ program extends this level of innovation and execution throughout the life of every Goss system. Fast access and specialized experience define comprehensive parts, service, training, audit and rebuild capabilities. The direct link between development of new technology and ongoing support of existing products also drives a steady stream of valuable, market-driven enhancements.

Goss International Advantages

- Innovative technology
- Collaborative project management
- Expansive product options
- Integrated press, finishing and auxiliary systems
- World-class manufacturing
- Lifetime Support services
- Global resources and perspective
- Expertise and experience

GOSS INTERNATIONAL DELIVERS UNIQUE OPPORTUNITIES FOR PRINTERS AND PUBLISHERS TO ADVANCE THE PRINT MEDIUM TO NEW LEVELS OF IMPACT AND VALUE.

Worldwide development and support resources are anchored by world-class manufacturing sites throughout the United States, Europe and Asia, enabling Goss® web offset press and print finishing systems to set the standards for innovation, productivity and value.

Goss International’s industry leadership position is built on intensive collaboration with customers and a proven ability to innovate and execute, making web offset a more effective way to communicate.