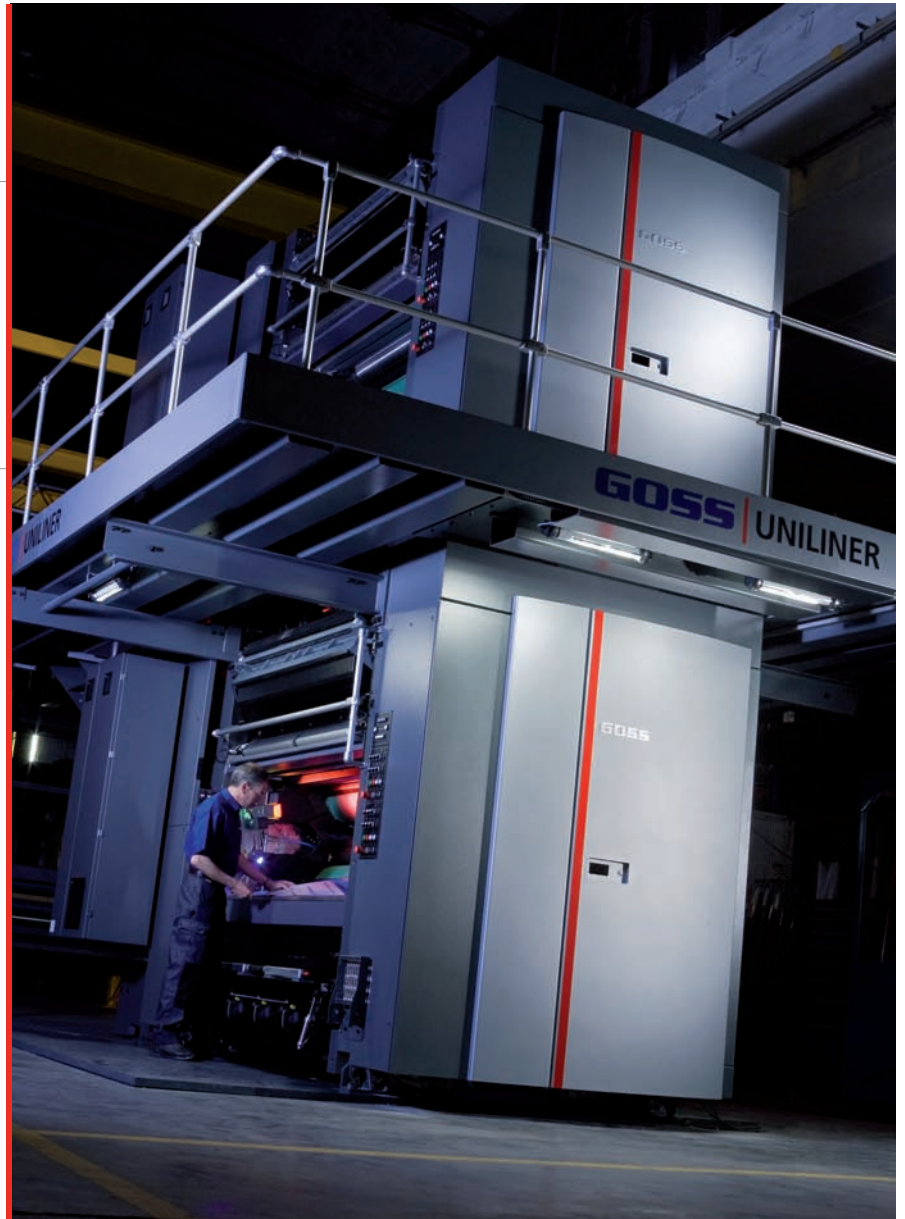


GOSS UNILINER

8 - T O 24 - P A G E P R E S S S E R I E S



GOSS | INTERNATIONAL

Goss innovation

2

INTRODUCING A UNIQUE PRESS SYSTEM FROM GOSS INTERNATIONAL – A SINGLE CONCEPT THAT COVERS NEWSPAPER AND SEMI-COMMERCIAL PRODUCTION REQUIREMENTS, WITH FORMATS FROM 4X1 (8-PAGE) TO 6X2 (24-PAGE).



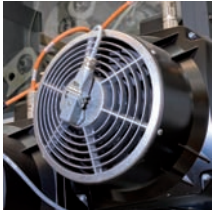
The Uniliner® press series is modular and flexible, giving it the ability to cover the widest range of production requirements. It is a true printing innovation, combining proven Goss® design and technology into a highly flexible one-around and two-around press system for both coldset and heatset production.

The modular design allows for 4x1, 4x2, 5x2 or 6x2 configurations, using a common base that shares major press elements and systems. Also, the Uniliner press series allows the unique choice of non-collect or straight/collect running for highly efficient production. For added flexibility, different cylinder formats can be combined into a single press line, where independent but flexible production is planned from two folders.

This Uniliner press series provides a host of options that can be installed at the time of purchase or retrofitted as production needs change.

Uniliner 4x1 press system

Dedicated to straight production, utilizing a one-around plate cylinder plus a two-around blanket cylinder, this press offers cost savings in use of plates and makeready times. It also offers significant flexibility in pagination,



section count and color for printers not running collect products.

Uniliner 4x1 benefits:

- Newspaper, semi-commercial and heatset capabilities
- Dedicated 'Straight' production giving totally flexible section numbers and section pagination
- Reduced plate cost and number
- DigiRail™ digital inking option with RIP pre-setting
- Semi-automatic plate change option
- Automated web-width change option
- Flexible configurations, including "T-90"
- Up to 80,000 copies per hour

Uniliner 4x2 press system

Covering all straight and collect production needs and utilizing two-around plate and blanket cylinders, this press offers highly effective production of short to medium run work. The Uniliner 4x2 is a highly flexible and cost effective investment, ideally suited to daily production at up to 192 pages collect, with 2:5:5 folder. 5x2 and 6x2 alternatives are also available as well as heatset configurations.

Uniliner 4x2 benefits:

- Newspaper, semi-commercial and heatset capabilities
- Collect mode maximizes color content and paging
- Maximum flexibility of 'Straight' and 'Collect' production
- 4-page section steps when running collect
- DigiRail digital inking option with RIP pre-setting
- Semi-automatic plate change option

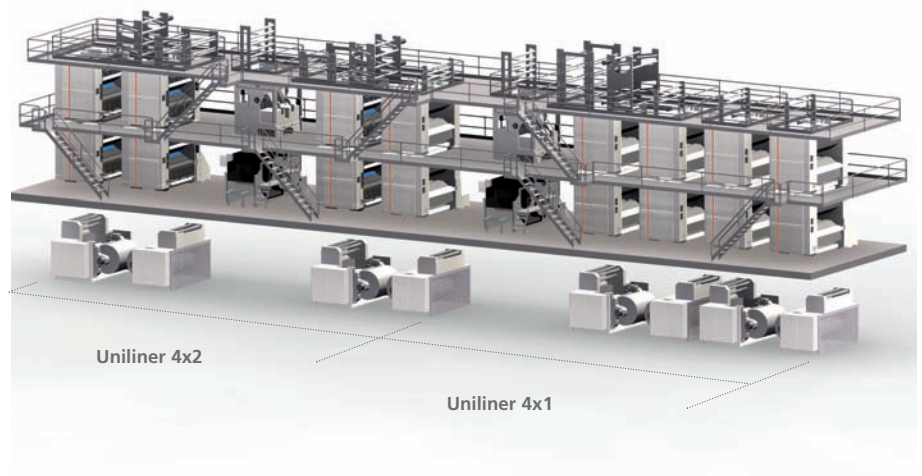
- Automated web-width change option
- Flexible configurations, including "T-90"
- Fewer replates on long runs
- Up to 80,000 copies per hour

Both Goss Uniliner presses have been designed as modular presses to allow current, as well as future, printing requirements to be accommodated. Tower and folder additions, enhancements and upgrades are available. Both presses are equally capable of producing coldset newspaper and heatset products.

With feedback from customers around the globe operating more than 600 press units, the Goss Uniliner press series is continually evolving to match the increasing rigors of



24-hour newspaper and commercial printing production. This evolution combines proven, and regularly enhanced, Goss technologies into a highly flexible one-around and two-around press system, with 4x1, 4x2, 5x2 or 6x2 alternatives.



4x1 flexibility

4

THE UNILINER 4X1 IS A HIGHLY FLEXIBLE 8-PAGE PRESS THAT OPENS NEW PERSPECTIVES FOR HIGHER OUTPUT 'STRAIGHT' PRODUCTION NEEDS.



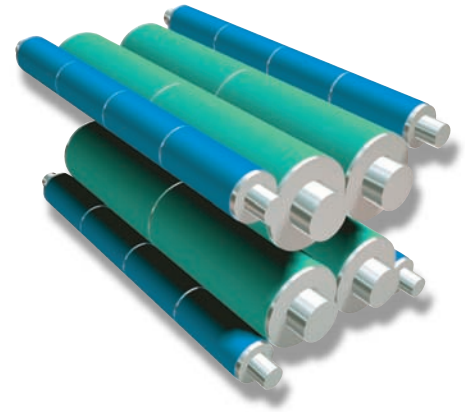
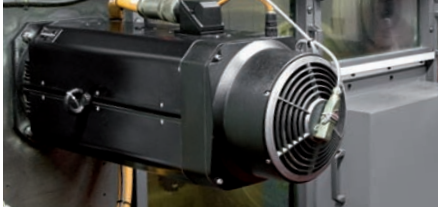
Utilizing a four-plates-across and one-plate-around plate cylinder with a two-around blanket format, this press system combines all printing unit, folder, reelstand and sophisticated control system features into one integrated press system.

Modern publishing has new challenges in terms of color quality, section numbers and size, mix of production run lengths and total efficiency. In particular, many regional newspaper printers now want higher and more flexible section capability, high productivity in tight time windows and maximum efficiency when investing in CTP and press systems.



The ability to produce varying sections and the flexibility to size these sections in two-page steps is also a key issue. Flexible advertising placement and demographic tuning of the sections is an increasingly important area of publishing to generate more revenue and defend circulations. This is equally important for 'own newspaper' and third party 'contract print' situations, where quite different needs may be required from a single press investment.

The flexible 4x1, 8-page press is ideal for these production scenarios, being not only attractive in its own right but a potentially more attractive solution over larger, multiple footprint single-width presses. When paginations get above 48 pages broadsheet, the 4x1 press investment gets more attractive as it uses fewer reelstands and has lower manning requirements.

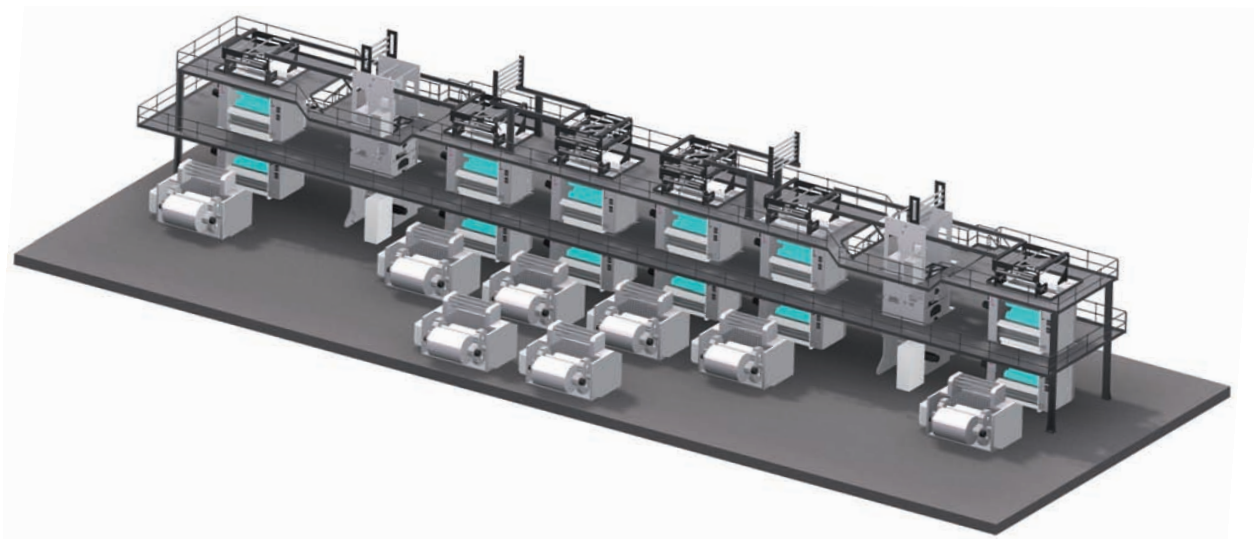


Uniliner 4x1

To optimize manning and space requirements, the Uniliner 4x1 has configuration alternatives including split-level and "T90"". The latter has the reelstands on the same level as the printing units, with both at 90 degrees to their normal orientation. This not only optimizes manpower, but also provides a very compact press with the added advantage of easier web-width changes.

Uniliner 4x1 features

- Up to 80,000 copies per hour
- Dedicated 'Straight' production
- Metal backed blankets
- Reduced plate count, cost and time, ideal for CTP, plus decreased makeready time
- Semi-automatic plate change option
- Shaftless drive technology across entire press
- Digital or open fountain inking choice
- Quick release form rollers
- Even or odd section capability
- Same or different page counts within sections
- Two-page steps for all production
- High accuracy jaw folder up to 96 pages
- Core drive reelstands
- Coldset or heatset
- OPCS total press control system with remote diagnostics standard
- Imposition driven
- RIP pre-setting, management information system
- Linkable to plateroom and reelroom automation



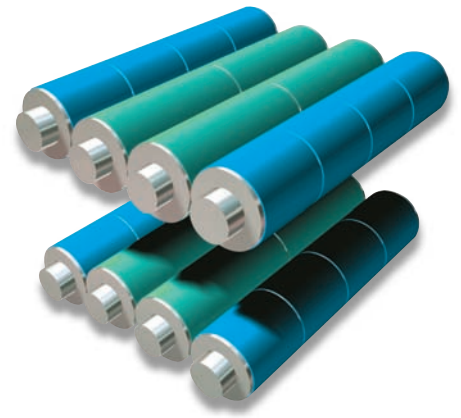
A Uniliner 4x1 press line in "T90".



two-around productivity

6





Uniliner 4x2

THE UNILINER 4X2 PRESS, WITH ITS 5X2 AND 6X2 ALTERNATIVES, IS A HIGHLY FLEXIBLE 16-24 PAGE PRESS THAT OPENS NEW PERSPECTIVES FOR 'STRAIGHT' AND 'COLLECT' PRODUCTION.



7

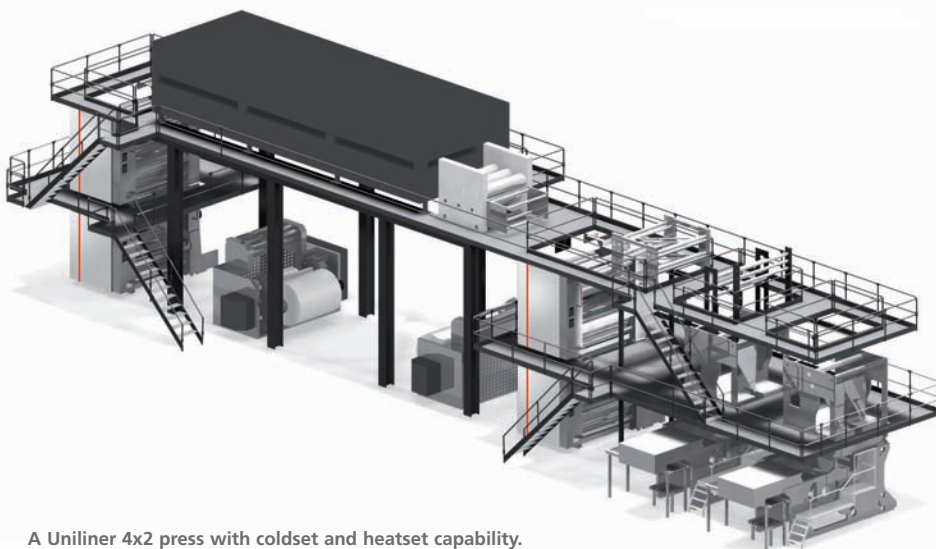
Utilizing a two-around plate cylinder with a two-around blanket format, the Uniliner® 4x2 press system provides an integrated flexible printing solution, fully featured from reelstand to folder.

While many newspapers require very high output in very short time windows, others require a highly flexible double-width press that delivers high quality but at a more modest investment cost and target life cycle.

The pressures to operate a newspaper press in a more 'commercial' environment are also placing new demands on the printer. Longer running hours, more product variety in products, reduced times for maintenance, mixed coldset and heatset production are all possible needs of today's printer. The Uniliner 4x2 is designed to cover exactly these needs.

Uniliner 4x2 benefits

- Up to 80,000 copies per hour
- 'Straight' and 'Collect' production
- High production flexibility
- Shaftless drive technology across entire press
- Digital or open fountain inking choice
- Quick release form rollers
- Four-page steps for all production when running collect
- High accuracy jaw folder up to 96 pages
- Core or belt drive reelstands
- Coldset or heatset
- OPCS total press control system with remote diagnostics standard
- Imposition driven
- RIP pre-setting, management information system
- Linkable to plateroom and reelroom automation



A Uniliner 4x2 press with coldset and heatset capability.

Uniliner color quality

8



THE GOSS UNILINER PRESS SERIES IS A TRUE PRINTING EVOLUTION WHICH COMBINES PROVEN GOSS TECHNOLOGY AND DESIGN ELEMENTS DEVELOPED FOR THE SUCCESSFUL UNIVERSAL, NEWSLINER AND COLORLINER PRESSES.

The Goss® Uniliner® press series is specifically designed for 24-hour newspaper and commercial printing operations, with product cut-off requirements from 400mm to 630mm (15.75" to 24.8"). Web-widths range from 1100mm to 1900mm (43.3" to 74.8"), depending on cut-off and Uniliner model. The press units offer a range of quality and flexibility features including:

- **Unique 4x1 or 4x2 format choice**
- **Four-high or five-high towers**
- **Short web leads**
- **Narrow plate and blanket lock-ups**
- **Semi-automatic plate change option**
- **Commercial-style fan out compensation**
- **Shaftless drives throughout**
- **Digital or open fountain inking**
- **Spray bar dampening system**
- **Automatic blanket wash option**





Tower flexibility

Uniliner press units can be arranged in printing towers to produce 1/1 to 4/4 color, with an optional fifth level. The tower arrangement allows maximum flexibility for multiple webs. For example, three webs running in a four-high tower can produce 32 pages in mono plus 16 in two colors. The tower arrangement also ensures that the Uniliner press is simple to operate, with two level operation and easy access resulting in rapid plating and makeready. The short web leads from reelstand to folder, and within a printing tower, ensure consistent high print quality.

A Uniliner press can have as many towers as needed to customize output to specific print capacity, pagination and color content requirements.

Chosen to maximize press flexibility, shaftless drives make complex press configurations easier to accommodate and have major advantages when frequent job changes are required.

Semi Automatic Plate Change option

The SAPC option optimizes press utilization on short runs. Plates are manually placed on the cylinder leading edges and the system takes over to automatically plate each cylinder and then remove all or selected plates at the end of the run according to the imposition plan.

Robust investment

Goss utilizes state-of-the-art design and manufacturing techniques throughout its entire product portfolio. The modular printing units of the Goss Uniliner series feature high quality castings and forgings, stainless steel cylinders and high grade material solutions for optimum print quality and press life.

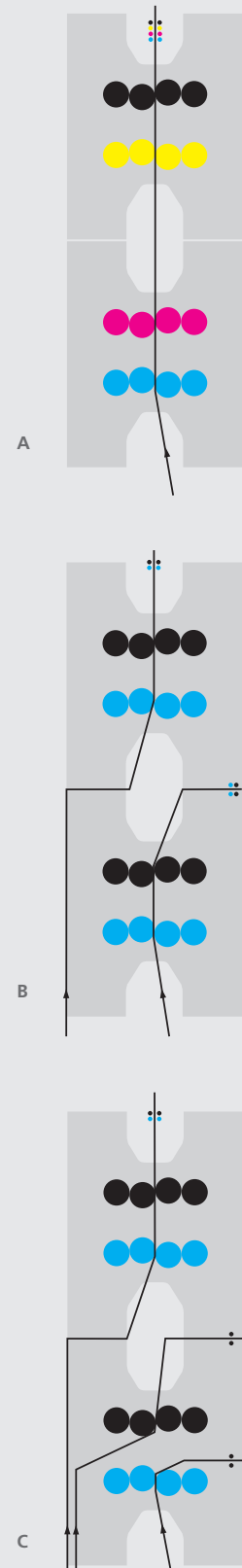
'H' frame unit construction, shaftless drives with four motors per tower and two-form inking combine to give a very attractive investment package for regional newspaper printers around the world.

Unique 4x1 unit design

A unique and patented printing cylinder mounting design on the Uniliner 4x1 press allows high print quality for all web-widths up to 1680mm (66"). Additional features driving high print quality are the metal backed blankets with a very narrow gap (1mm), effectively eliminating blanket-gap bounce and ensuring optimum blanket life and reduced noise.

Uniliner 4x2

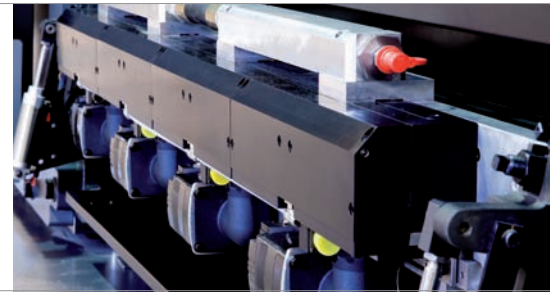
- A) 16 pages 4/4
- B) 32 pages 2/2
- C) 16 pages 2/2
32 pages 1/1



key technologies

10

THE GOSS UNILINER PRESS SERIES HAS A WIDE RANGE OF ADVANCED FEATURES AND OPTIONS TO ADDRESS THE DIVERSE DEMANDS OF TODAY'S SOPHISTICATED PRINTING MARKET AND TO ACCOMMODATE REGIONAL PREFERENCES.



Digital Inking

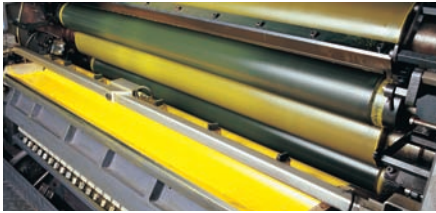
Goss® Digital Inking benefits include extremely precise ink metering with the ability to achieve high and consistent ink densities at low waste figures. Specific benefits are:

- High quality, consistent color
- Excellent ink control technology to match with RIP pre-setting
- Optimum ink density control
- Press speed synchronized
- Minimized start-up waste – cold or hot
- Repeatability/low maintenance
- Consistent density of very small images
- Minimum ink contamination by total enclosure

Goss DigiRail™ is a very reliable, highly accurate, inking system that is compatible with today's RIP presetting and digital workflow production trends. Digital Inking gives very fine control to ink density – as low as 0.1 percent in highlight areas or equal to one in 1,000 increments – and provides consistent color quality in all conditions, from low to high density.

In addition to providing exceptional performance, the Goss DigiRail enables fast switching between coldset and heatset inks. The manifold containing the ink has a very small capacity and can therefore be purged quickly. This allows the alternative ink to be simply switched into the flow. This is a superior solution to the compromise inks often employed in hybrid coldset/heatset printing.





Open fountain inking

Goss Open Fountain Inking benefits include simplicity of operation, accurate ink metering and ease of access for cleaning and maintenance. The ability to set color by up to 32 separate printing zones results in a simple and robust system, which is easy to use and very reliable. An optional page-wide ink shutdown facility and page-wide removable pan dramatically reduce ink changeover times. Full remote control and pre-setting features are available.

As with the majority of adjustments on the Uniliner series, the inkers are remote controlled from the press desk and also offer optional RIP pre-setting capability.

Spray bar dampening system

The Goss spray bar dampening system ensures consistent, contamination-free and even water laydown throughout the speed range of the press. Fully enclosed, it features a three-roller delivery system with two nozzles per page and manual shutters for

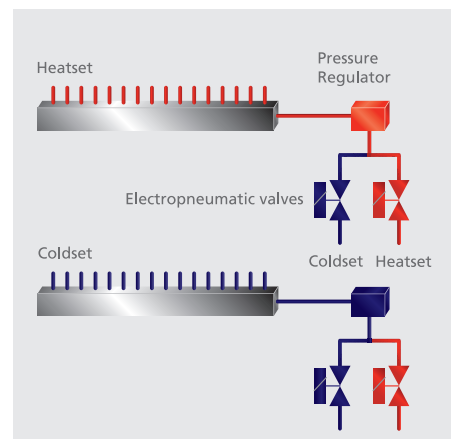
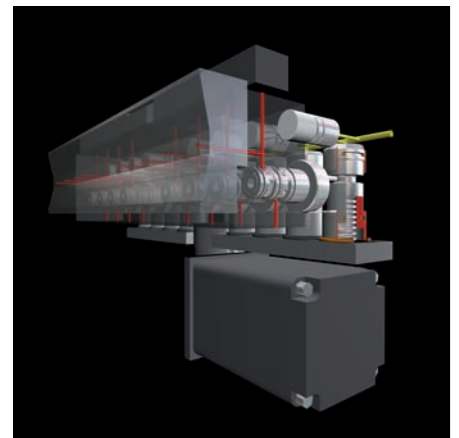
fast web-width adjustment. A new electronic dampening module improves pulse frequency and gives greater control.

Shaftless drives

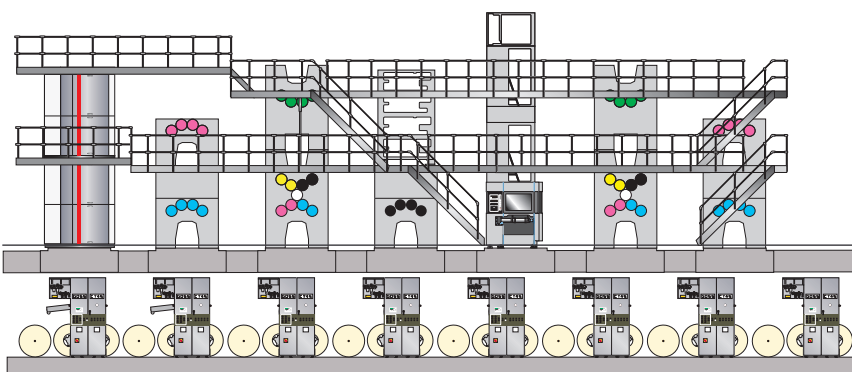
Shaftless drives assist the modular concept of the Uniliner press series allowing current, as well as future, printing requirements to be accommodated. Highly accurate AC servo drives are used to give optimum print quality and consistency. One drive motor is used per unit level to give a balance between investment cost and flexibility. One shaftless drive motor per couple drive is available as a customer option.

Straightforward tower additions

Uniliner towers can be added to existing Goss or non-Goss presses to add color or pagination in a very cost-effective way. Aided by the simplicity of shaftless drives, tower addition projects can replace existing mono footprints or be added in available space at the ends of a press line or within the press line itself with minimum disturbance.



Typical Goss Uniliner tower addition -
Either as a 4x2 or 4x1 tower





total press system

12

THE UNILINER PRESS DESIGN PROVIDES OPTIMIZED WEB CONTROL FROM REELSTAND TO FOLDER. THIS IS ACHIEVED IN THREE MAIN ZONES: REELSTAND TO FIRST PRINTING COUPLE; FIRST PRINTING COUPLE TO THE LAST AND WITHIN THE FOLDER.



Accurate control over web tension is the key to the combination of quality and speed provided by the Uniliner® press. By carefully managing the tension gain from the reelstands, through all the printing couples to the turner bars and then into the folder, optimum print quality is maintained at all press speeds.

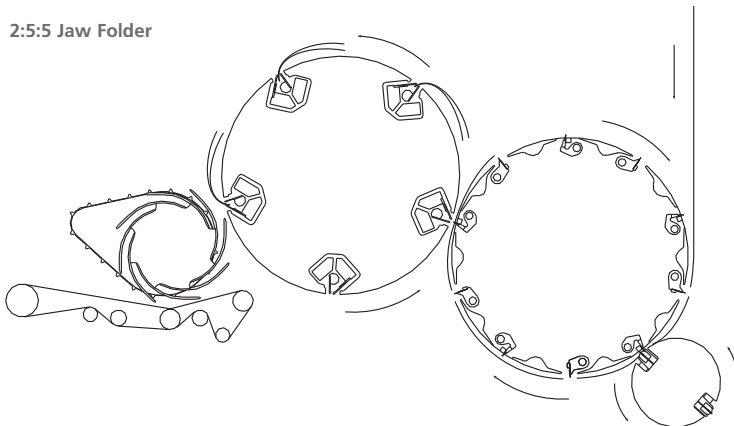
Reelstands

The Uniliner press series is offered with a choice of two-arm reelstands. Automation features include chucking, centering and unloading of the cores. An automatic reel-loading system can be supplied with the option of a station for unpacking and splice preparation as well as turntables for rotating reels.

Web feed system

Web feed systems dramatically reduce webbing-up time, especially for job changes. A webbing-up system with tapes is supplied as standard. There is also an option with a chain 'snake' which provides webbing-up speeds of up to 40 meters (130 ft) per minute.

2:5:5 Jaw Folder



13

Angle bar system

The flexible turner bar package of the Uniliner press contributes to the overall flexibility of the press, providing turning and slitting under heavy-duty operation. The turner bars also provide essential draw for the web using motorized rollers and register for multiple webs using sophisticated sidelay controls.

Modular folder system

The Uniliner press is offered with a range of fast and reliable Goss® folders, to ensure efficient delivery of quality products.

The proven and user friendly Goss 2:5:5 and 2:3:3 jaw folder range provides high accuracy and flexible folding to match pagination requirements up to 96 pages broadsheet.

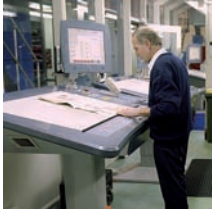
An impressive list of standard and optional features completes Goss folder packages, making them among the most versatile available.

Jaw 2:3:3 folder – Ideal for medium pagination newspapers, the advanced shaftless drive 2:3:3 jaw folder offers consistently high accuracy of folding and delivery up to 80 pages broadsheet, straight and collect. Major features include on-the-run lap fold, push button mode change and pin release adjustment. There is a full range of options to provide motorized adjustments controlled by imposition data, including remote controlled nip setting. Additionally, a collect stitcher and quarter folder are among other options available.

Jaw 2:5:5 folder — Similar to the 2:3:3 folder but with an expanded capacity of 96 broadsheet pages, this folder with a 2:5:5 cylinder ratio offers a top of the range production alternative for high pagination work.

Upper folder options include up to three levels of former boards for high section counts and three across formers, where height restrictions require a different approach.

Goss folders are an integral part of the total press system and are engineered to provide high quality output at all speeds for the Uniliner press series. A quarter folder option is also available which can be provided at the time of purchase or retrofitted.



controls and options

14

THE HEART OF THE UNILINER PRESS SYSTEM IS THE ELECTRONIC PRESS CONTROL SYSTEM.

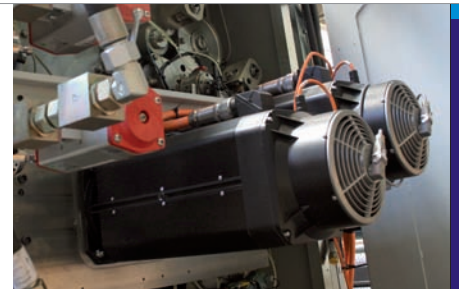
Designed and manufactured by Goss International, the latest generation Goss® OPCS press control system is used by the Uniliner® press series as well as by the Universal® press.

OPCS stands for 'Open Press Control System', which reflects that it has an open architecture

that can link to both Goss and vendor control desks. It can also integrate a wide range of third party register, ink supply and management information systems into one coherent system.

The OPCS press control center is the focal point for all the work the press crew does,





from utilizing data from the digital workflow and CTP area to controlling the press for fast makeready and low waste start-ups. Remote diagnostic capability is standard.

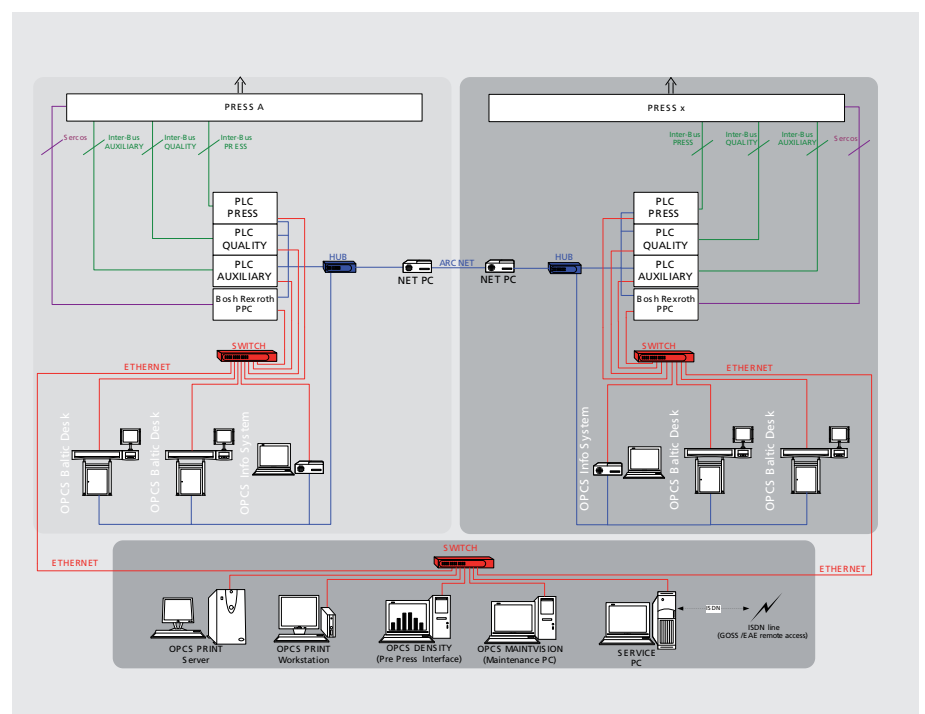
It is also the location for altering the basic setting of the press, from adjusting the "S" curves governing ink and water balance to preparing the press for production.

Press control specifications can accommodate different levels of remote control to suit production requirements. These can be upgraded if production requirements change.

In addition to these key features the control system has an optional state-of-the-art press simulator which can be used for training and evaluating new printers.

Key features include:

- Goss expertise in control system design, operation and lifetime service
- Use of industry standard hardware, software and communications networks
- Intelligent modules for specific printing functions such as inking, dampening etc.
- 20" TFT flat screen monitor, pushbutton keyboard and trackball operation
- Integrated PC with easy access for maintenance
- Standard remote diagnostics capability for worldwide coverage and support
- Choice of Goss control desk/console or interface with control stations from other suppliers





cost-effective options

16

A PRINTING PRESS SYSTEM THAT CAN OFFER A WIDE VARIETY OF FEATURE CHOICES IS MOST LIKELY TO SATISFY EVERY PRODUCTION NEED.



The Goss® Uniliner® series offers a wide variety of choices, including installation options, additional equipment and heatset packages for commercial print production.

Heatset option

As the Uniliner press is based on knowledge gained from selling the Universal® press family in over 45 countries worldwide, it harnesses a wealth of experience in heatset and mixed heatset/coldset press systems.

Heatset press packages are normally specified with cooled ink drums, chill roller assembly and full heatset dryer assemblies engineered for mixed or dedicated production.

Concrete table or reelstand substructure mounted presses

Reelstands for the Uniliner press family can be at floor level, mounted below a concrete table, or be load bearing, supporting the printing units, to suit individual customer requirements.

For single floor operation, Goss "T90" configurations create a more compact press configuration and, with the use of "Uniflex" bars at the top of each tower, provide a

simpler solution to web-width changes and ribbon positioning.

Where Uniliner tower additions are being considered for existing Goss or non-Goss presses, Uniliner equipment can be adapted to suit the existing press mounting situation.

Fan out compensation

Fan out compensation, via bustle wheels, is standard on all Uniliner printing towers. An air-operated option is available which has remote control and presetting from the press desk.

Register systems

Goss offers a choice of automatic register control systems from leading vendors. These systems include four-color and cut-to-length

register, which can be fully integrated within the Goss control system. A closed-loop density control option is also available.

Wash-up systems

With increasing press running hours, the use of automated wash-up systems is a very positive efficiency improvement. A choice of blanket wash systems is available, together with an automatic ink train system which cleans the rollers with solvent and collects excess ink and dirt with a scraper blade to a programmable sequence.

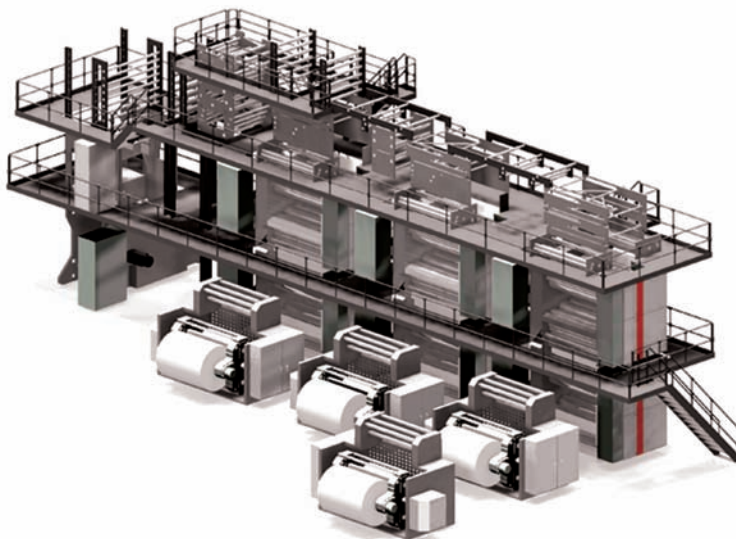
Reelroom and Mailroom Automation Systems

From assisted reel loading to full AGV systems and sophisticated newspaper packaging solutions, Goss can offer a wide range of reelroom and mailroom automation to suit every production situation.



Further commercial options

These include quarter fold capability, stitchers, perforators and gluers.



innovation and execution

18

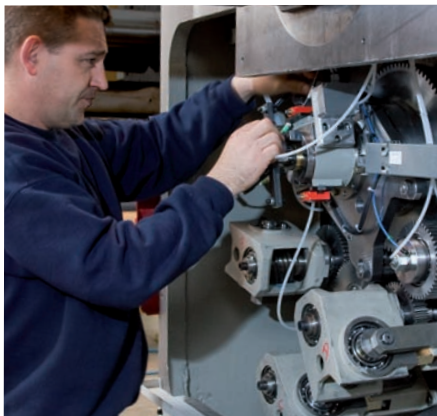


Goss commitment

To ensure optimum performance from every Uniliner® installation, Goss International works as a global team to ensure that your business objectives are met. Key areas of our capability that will benefit you include:

Project management

With ever-increasing complexity of press system projects, Goss International has been the leader in professional project management skills and working practices. Liaising with the customer's own project team, Goss coordinates all project actions from initial order placement to 'press in production'.



Project execution

Working with architects, consultants, building contractors, services providers and other equipment suppliers, Goss focuses on achieving 'on time', 'on target' projects, to ensure minimum installation times for an earlier payback.

Lifetime Customer Service

Goss International focuses on excellence in the support of its customers through parts, service and breakdown advice.

- Full global 24/7 parts and service support
- Press audits to establish service needs
- Annual service plans and lifetime parts



Training

In addition to comprehensive training programmes, which cover the entire spectrum of printers' needs from color theory to pressmanship, Goss has an exclusive partnership with Sinapse. The Sinapse system uses interactive real-time simulation of printed jobs, projected onto and controlled by the actual press desk of a Uniliner installation. Using this unique solution, press crews can quickly ascertain the impact of making adjustments to the press without wasting paper. This process dramatically accelerates the training of personnel to full press-crew competence.

Enhancement programs

An increasing range of enhancement programs is available under the Goss ENHANCE™ brand. As technology develops, we bring new features and capabilities to your printing press system, to keep it state-of-the-art.

Your own printing needs may change after several years, so the ability to add a heatset dryer package, alter your folder capability or even upgrade controls or inking systems may be important opportunities.

specifications

The Goss Uniliner press series

PRESS TYPE	UNILINER 4x1		UNILINER 4x2	
Maximum output (cph)	75,000 / 80,000		75,000 / 80,000	
Cut Off Size Range	400- 630mm	15.75 – 24.8"	400- 630mm	15.75 – 24.8"
Web Width Range	1100-1680mm	43.3 – 66"	1100-*1900mm	43.3 – 74.8"

* 1900mm web width available on 6x2 models

Key feature availability

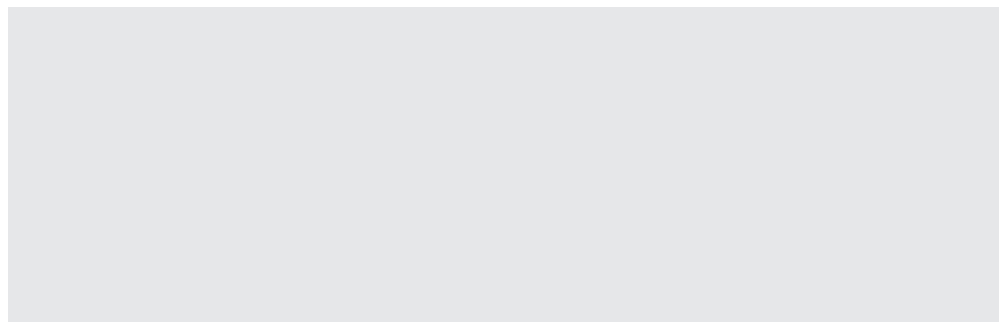
Printing unit modules	H-STYLE	H-STYLE
Shaftless drives	•	•
Digital inker	option	option
Open fountain inker	•	•
Metal backed blankets	•	option
Jaw folder	•	•
Reelstand – 2 arm	•	•
Heatset dryer option	•	•
Commercial features	•	•
Control System	Goss OPCS	Goss OPCS

Goss jaw folders

2:5:5 Maximum Pages Straight	96	96
2:5:5 Maximum Pages Collect	-	96
2:3:3 Maximum Pages Straight	80	80
2:3:3 Maximum Pages Collect	-	80

*Broadsheet Pages
Tabloid is higher*

*Broadsheet Pages
Tabloid is higher*



www.gossinternational.com

Copyright Goss International Corporation 2008. All rights reserved.
All trademarks identified are trademarks of Goss International Corporation.
Published by Goss International Corporation.

Operating speeds for optimum production will vary with paper quality, size of product, number of webs and pressmanship.
To display product features, some safety devices may be omitted or shown out of position in photographs or illustrations.
Specifications and dimensions are subject to change without prior notice.