

HELIOSTAR[®] S – Superior rotogravure print quality in flexible packaging.



HELIOSTAR[”]S – Unmatched efficiency in print quality, output and job change-over times

Packaging printers are facing major challenges in the marketplace. Larger varieties on the store shelves requires an increased demand in print diversification. The shortest set-up time for job change-overs is most important in determining the cost effectiveness of the new gravure press while maintaining the highest print quality. Conserving resources in the handling of substrate, ink and energy continues to be of growing significance.

These challenges offer wide ranging opportunities within the world of printing flexible packaging. Your tool to face these challenges and create new opportunities is the HELIOSTAR[”]S rotogravure printing press.

In the HELIOSTAR[”]S we bundled together all of our know-how and experience in the construction of the most advanced rotogravure printing press for flexible packaging.

Its modern design underlines trendsetting gravure technology.

Technical Specifications	
Print stations	max. 12
Printing width	800 – 1400 mm (31.5" – 55.1")
Print repeat length	450 – 920 mm (17.7" – 36.2")
Output	450/600 m/min. (1500/2000 ft/min.)



HELIOSTAR[®] S with 8 print stations

Machine operation with fully integrated print quality controls.



Machine control centre with PROCONTROL, VISION-ZOOM, VISION-FULL and MACHINE-CAM-MONITORING

The HELIOSTAR™ S is simple, intuitive and easy to operate. The ergonomically designed PROCONTROL operator panel, located at the rewind, is the interface between the operator and the machine. This central position offers the best vantage point for operating the machine, production and process flow.

The new assistant systems from Windmüller and Hölscher are put into action for production control and inspection.

The systems are deeply integrated into the machine. Using this advanced tool the operator receives effective support to detect and avoid printing errors, optimize quality and output as well as increase efficiency.

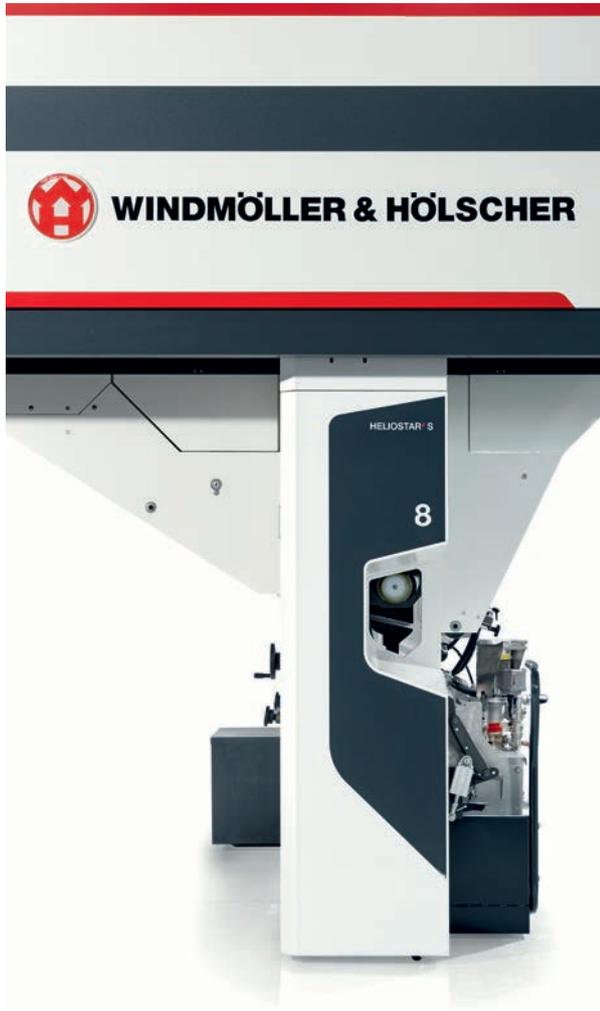
The fully integrated W&H modules VISION-ZOOM with a matrix camera and VISION-FULL for high definition image recognition by line scan cameras are the basis for web monitoring, inspection and defect detection.

These modules operate with the same operator screen layout and technology as the PROCONTROL operator panel. Images on the control panel screens are on a new level of clarity and high resolution not previously experienced. The optimized interface between the modules provides the operator team an invaluable advantage in performing their jobs.

Because of totally integrated automation and the ISP Model, fault messages are not only displayed but are also automatically stored together with all production parameters.

VISION-CHECK can be integrated as highest upgrade. Modules BARCODE-CHECK, DEFECT-CHECK and PDF-CHECK can be added on the fourth monitor enabling bar code testing, 100 % print inspection and comparison of actual print results to pre-set PDF, in order to make adjustments during the printing process.

Additional highlight:
MACHINE-CAM-MONITORING allows for real-time observation of production (i.e. at the printing units or winders).



Superior print quality and performance with sustainable use of inks.

Perfect and consistent print of the highest quality is of crucial importance to your production. During ink transfer the inking roller ensures optimal filling of the print cylinder cells and prevents the ink from drying out in the base of the cells.

The result: Consistent and superior print quality at all printing speeds. You will especially notice the difference when printing with very fine color nuances!

Viscosity and ink temperature control systems maintain ink consistency and print quality throughout the entire print run. Economic ink utilization is a major factor; hence, reduced amount of ink in the ink pans and circulating system are the basis. The ink consumption measuring gauge

delivers definitive values of actual usage and any additional required refills for completing an order – an important tool in preventing accumulation of residual ink.

As alternative addition to electrical pumps, the TURBOCLEAN G ink supply and wash up system can also be integrated supporting fast, effective and energy saving job changes.

EASY-COL color matching technology allows for targeted, fast color adjustments during machine set-up processes. Automatic metering of ink filling and usage levels promptly provide relevant information on ink usage and production costs.

Slide-in cart with driven ink roller device in deck 8

Precise register accuracy for demanding substrates and low contrasting inks and varnishes

The HELIOCONTROL register control offers just the solution. Ease of operation with uniform "Touch and feel" on the PROCONTROL Panel, 2 channel signal processing, shortest signal reaction times, automatic tracking of the signal sensor, as well as modules for the detection of varnish and cold seal.

In order to achieve the highest printing quality, maintaining register accuracy during printing is extremely important. Perfect register accuracy at high speeds, immediate detection of register deviations and quick response to even low contrast inks, varnishes and cold seal applications offer a tremendous benefit. And all of this can be monitored centrally.



HELIOCONTROL multi-channel sensor

The change-over concept: Your advantage is efficiency.

Today an important and decisive part of rotogravure production is the change-over time. The technological advantages of the HELIOSTAR[®] S allows the operator to utilize improved cost effective tools especially with a growing number of short runs.

The HELIOSTAR[®] S is equipped with a slide in cart for ink supply and cylinders. Hollow cylinders are clamped directly by chucks in the press, eliminating the need to prepare them separately beside the machine with shafts.

The slide-in carts are designed in such a way that, depending on the print job, the print cylinder can either be changed with the ink supply or separately.

The cylinders are automatically connected to the individual drives. EASY-SYNC allows for easy and quick pre-register setting. While the job change over of the slide-in carts and inking system takes place, the impression roller sleeves and doctor blades can quickly be changed without any tools.



Changing of print cylinders together with the ink supply.

Drying, concentration, energy: Effective, safe, economical.

High printing speeds along with large ink applications require effective drying performance. Most important factors are the drying air velocity and the air temperature. The HELIOSTAR[✓] S utilizes precision designed components which achieve the highest efficiency and minimize energy consumption.

All blowers are controlled by frequency convertors for the most energy efficient production.

The drying units are dimensioned according the requirements of printing and any special applications. Either single, dual or triple dryers are available.

Energy can be provided using any primary heating medium available, such as thermal oil, hot water, steam or even electricity. The operator control panels displays continuous measurement of the energy used.

The exhaust air is concentrated for downstream disposal and solvent level can be continually monitored or controlled.



Powerful drying, precision manufactured nozzles, maintenance friendly access

Precise web guide to minimize waste on critical substrates.

At the HELIOSTAR[™] S great care was taken on compactness, waste reduction and ergonomic design.

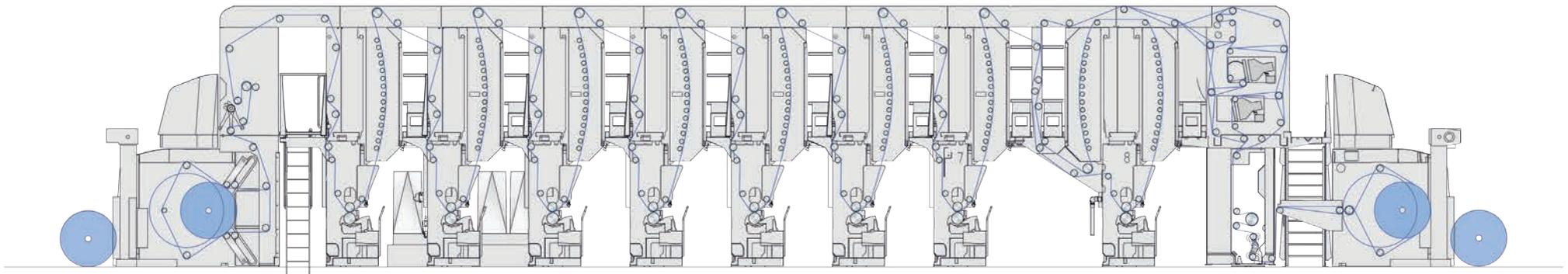
The web paths were consequently minimized and machine accessibility respectively optimized. One can readily see how printing specialists in the field influenced the development of this machine.

The basis of the unrestricted function of above noted features is the high-precision machine layout and its minimized friction of the guide rollers. This allows running the press with lowest web tensions.

Additional options, for example for printing on PE-film or aluminum foil, round up the HELIOSTAR[™] S range of application.

For back side printing, or coating applications stationary or even movable web turning stations are available. Depending on the selected print monitoring and inspection system the web path is designed for easiest operation and best accessibility.

Either shafted and shaftless winders with a maximum winding diameter of 800 – 1300 mm (31.5" – 51.2") are available.



Web run on an 8-color HELIOSTAR[®] S with double drying on the last printing deck.

Extrusion, printing, converting. All of the highest quality.

Our comprehensive service organization provides reliable support for your HELIOSTAR™ S round the clock. This includes expert advice on process application and technology and we offer full operator training facilities and 24 hour, 365 day support by our in-house information and diagnostic center, and a 24-hour hotline for fast and efficient emergency spare parts service.

Windmüller & Hölscher specializes in the development of innovative engineering concepts for the manufacture and printing of flexible packaging, using paper,

plastic film, and laminates. Our customer services range from the sale of individual machines to the engineering and delivery of complete turn-key factories.

Backed by our subsidiaries and agencies on all continents, Windmüller & Hölscher holds the leading position in the international marketplace and will continue to set standards world-wide with new and innovative technologies.

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