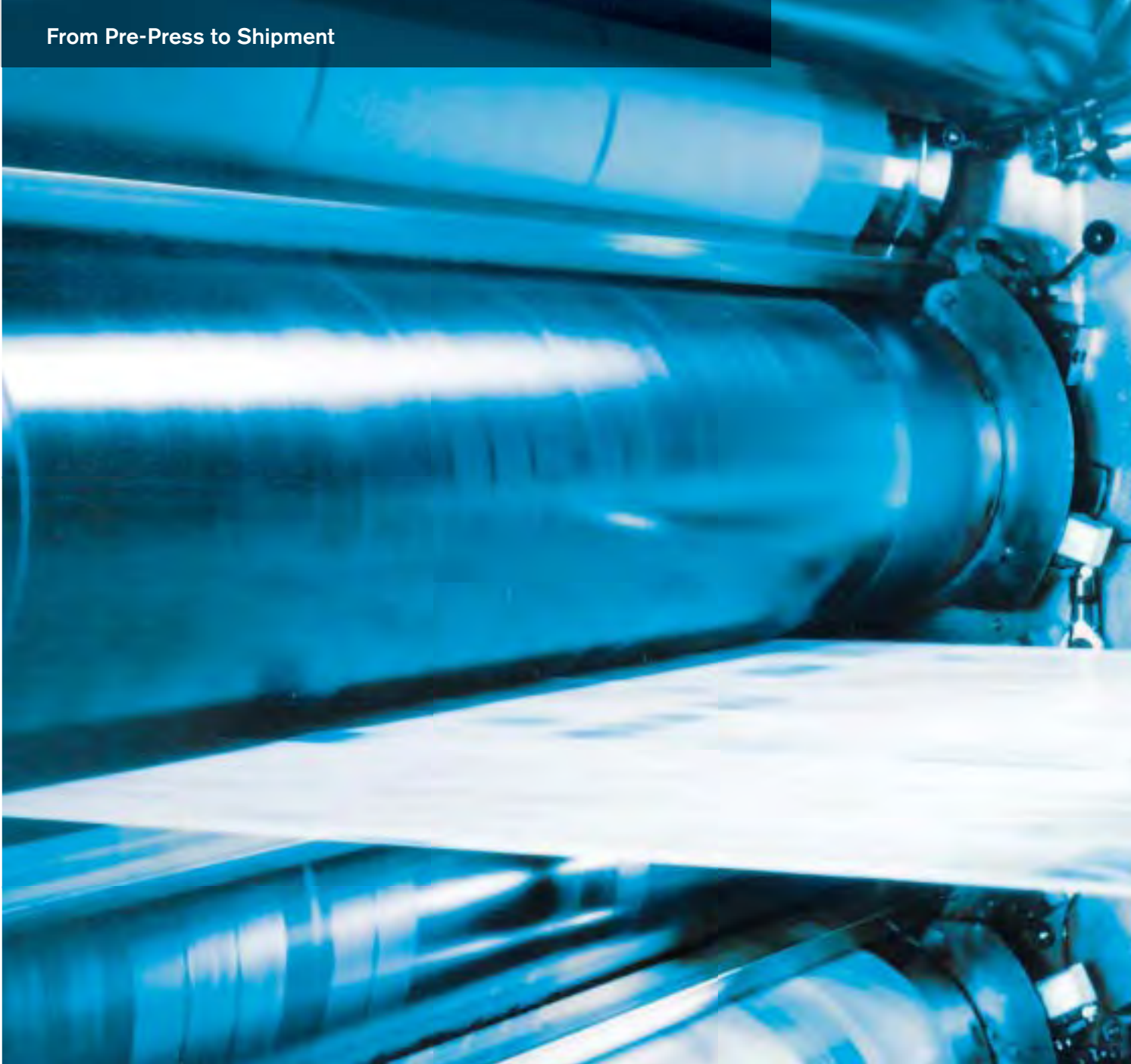


Pneumatic Solutions from Rexroth for Printing and Processing Machines

From Pre-Press to Shipment



Make the best impression. Guaranteed by the precision, efficiency, and reliability of Rexroth Pneumatics



Proof and plate preparation: The technical side of pre-press is nowadays confined to photo-technical proof and plate preparation.

Pre-press



Newspaper rotary offset: High-speed newspaper printing is the classical application for rotary offset systems and demands great reliability from the pneumatic components.

Commercial rotary offset: Printing of top-quality brochures, magazines, and inserts is mostly done on rotary offset machines and requires premium pneumatic components.



Commercial sheetfed offset: Sheetfed offset printing is the most widespread technology used for materials such as brochures, flyers, and commercial items. Optimum for medium to large print runs in the most varied paper qualities and with a high level of automation, thanks to pneumatic systems.



Printing with various printing processes

Rexroth pneumatic components play an important role in all automated printing and paper industry processes. Valves, cylinders, control units, and handling systems ensure reliable process quality.

Gravure printing: Magazines, catalogs, or telephone books—everything requiring large print runs as well as top quality is best realized in gravure printing. Multiple pneumatic applications contribute to high cost effectiveness.



Flexo printing: If special materials are called for—e.g., transparencies, labels, or packaging materials—flexo printing presses will do the job. Rexroth Pneumatics ensures the required precision.



Cutting/pressing/folding: Guiding cutters, adjusting stops, carefully positioning processing tools: all tasks for pneumatic handling technology.



Gathering/folding/binding: Post-press processing of printed items has become more and more automated in recent years. Managing material flow has opened up a wide area of application for pneumatics.



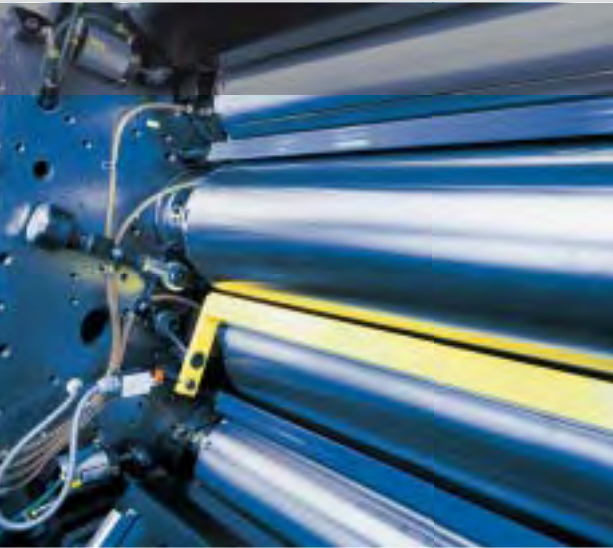
Processing

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Quality off the reel.

Our pneumatic components mean trouble-free, maximum performance

From newspapers to commercial printing: Rotary offset constantly depends on the fastest speed and trouble-free, continuous operation. We assure user-friendly quality in all of our components and systems with our sector know-how and close collaboration with well-known manufacturers.



Cylinder to adjust inking and dampening units.

We make sure everything runs smoothly

Rexroth—in cooperation with leading rotary offset press manufacturers—developed special solutions that set new global standards for rotary offset equipment. The electro-pneumatic pressure regulator for automatic web tensioning is just one example of the outstanding technologies that Rexroth Pneumatics is famous for.

Our components are marked by high speed and extreme accuracy. Whether standard parts or systems configured to your specifications, our components ensure precision for the following tasks:

- Setting the inking rollers
- Setting the dampening rollers
- Setting the impression cylinder to start the printing process
- Controlling web tension
- Aligning web paths
- Handling paper reels

Rotary offset from Rexroth Pneumatics. Because no one should have to wait for their morning paper.



Actuator (cylinder) controlled by the HF03 valve terminal system with a bus connection.



Cylinder valve units for turning the impression cylinders on and off.



Final result: perfection

Rexroth's product spectrum for offset equipment ranges from single valves, diaphragm cylinders and pressure regulator valves developed specially for the printing industry, to complex, modularly built valve terminal systems with integrated pressure regulator and bus connection.



Valve terminal systems

Many machine manufacturers embark on the strategy of being able to adapt a basic machine type to the customer's needs quickly and flexibly. Our modular valve terminal systems HF03 and HF04 also reflect this trend, facilitating swift and flexible conversion and enhanced functions.



CD01 valve terminal systems with integrated pressure regulator
Controlled by bus systems or controlled individually.



Diaphragm cylinder
Features nearly frictionless movement without the stick-slip effect.



E/P pressure regulator, NW5
Even web tension due to optimum control accuracy and speed.

With us, you're safe between the sheets. Rexroth Pneumatics: unsurpassed precision and reliability

Time is money. And standstill is like a step backwards. General truths that easily turn into decisive elements for high-tech processes where efficient operation is vital. Reliable and precise functioning of every detail becomes crucial. And Rexroth Pneumatics makes the right impression.



Systematic process optimization

Split second functions. The shortest reaction times. A precisely defined time frame. Under these conditions, only utmost precision will attain the best results and prevent downtime. Leading printing press manufacturers have relied upon Rexroth's system solutions for decades and continue to build upon our expertise.

- Setting the ink transfer rollers
- Actuating the washing system
- Turning the impression cylinder on and off within a given time frame
- Monitoring the paper feed in order to avoid double sheets
- Adjusting the format in paper delivery



Printing unit

Cylinder valve unit for turning the impression cylinder on and off.



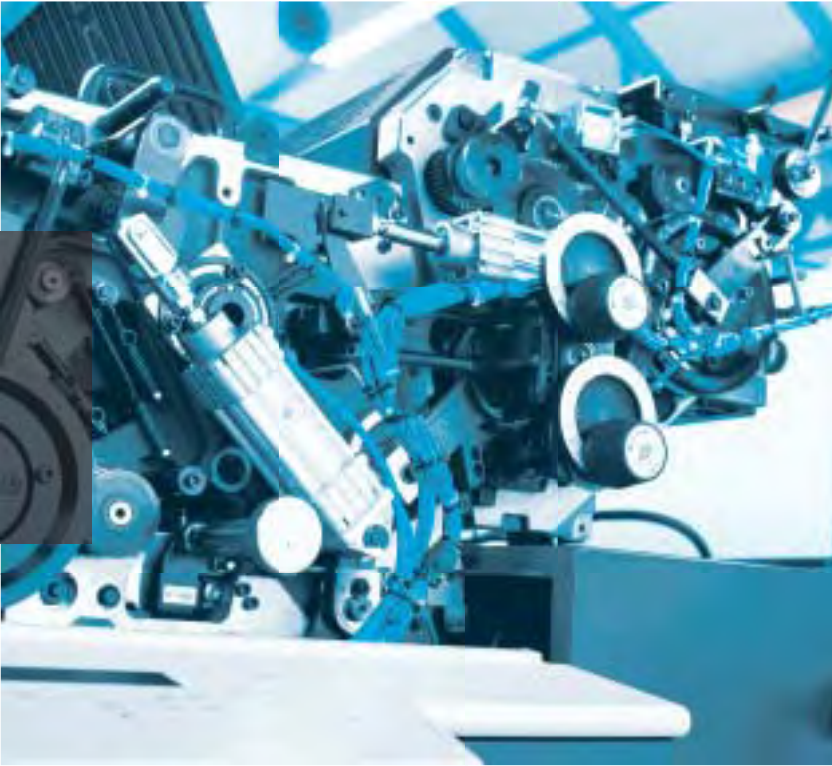
Printing unit

Multi-position cylinder for ink flow control.



Printing unit

Short-stroke cylinder to set the bearer-to-bearer pressure.



Printing plate exchange

During the exchange of printing plates, the two illustrated ISO profile cylinders "unjam" the clamped printing plate.

Modular unit

Up to four positions can be set in the printing unit.

Components optimized for installation

Components must simultaneously fulfill their required functions and fit perfectly into the existing machine environment. Whether cylinders of the most diverse sizes or complex units, Rexroth's pneumatic elements set themselves apart by a compact construction and can be precisely adapted to meet customer specifications.



ISO Mini-cylinder

Corrosion-proof, extremely space-saving, with or without a rotating piston rod for use in printing unit, feeder, and delivery.



Sheet delivery

Cylinder for format adjustment.



Rotary transmission leadthrough

Leading air through rotating machine parts.



Short-stroke cylinder

For use in printing unit; extremely space-saving.

We're not set in our ways. The best pneumatic solutions for gravure and flexo printing



Flexo printing

- Adjusting the chamber doctor blade systems
- Setting the impression cylinders
- Setting the ink rollers

Gravure printing



Cylinder with a holding unit
Based on a tie rod cylinder.

Components for the most diverse functions

Variety and a great deal of flexibility are necessary when equipping the most diverse printing presses and systems. Rexroth's product range covers the entire spectrum: from ISO cylinders for moving, setting and adjusting impression, ink and dampening rollers to special diaphragm cylinders and E/P pressure regulators for exact paper or foil web tension, and finally all-purpose valves and valve terminal systems.

Rexroth tie rod cylinders

One of the highlights in our product line is the patented cylinder controlling the impression cylinder's pressure. Should a tear in the paper arise, the cylinder can immediately reverse the impression cylinder by 10 mm.



Compact cylinder

Tensioning and holding functions.



Air line conditioning

A wide spectrum of maintenance units as well as filters and dryers with fine particle filtration and oil absorption.



Our product range goes even further: Pneumatic components for printing and paper processing

Printed, but not yet finished

A multitude of fully and partially automated processes are applied in further processing and finishing. Rexroth's extensive line of products reflects this variety through its components, handling systems, and system solutions for machine manufacturers.

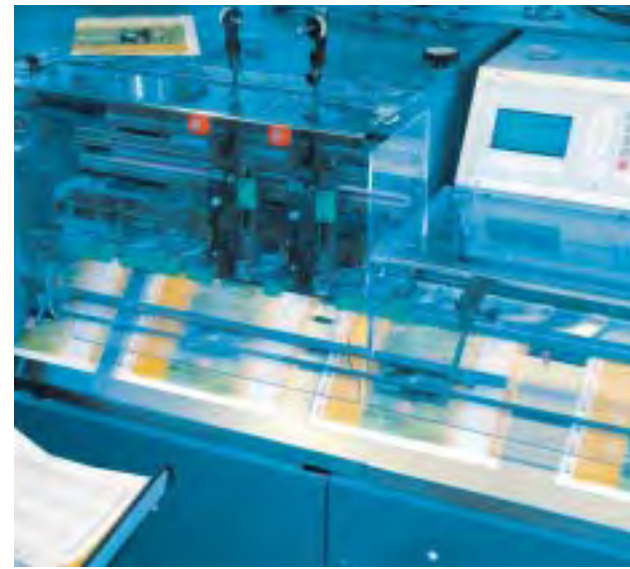
- Moving cutters
- Adjusting stops
- Clamping and tensioning functions
- Vacuum unit-assisted paper transport
- Adjusting rollers and openings
- Sorting functions

Pneumatic cylinders that can maintain speeds of up to 5 m/s are

just as sought-after as mini-cylinders measuring only 2.5 mm in diameter. Whatever the user needs—Rexroth can meet the demand.

Mini-slides, valve systems, and RexMover

The mini-slides are fitted with optimized guiding and cushioning systems and thus provide maximum rigidity for the highest torques and load capacities. The LP04 valve terminal system features a very low height and low weight as well as an integrated bus system. With its many customer benefits, the RexMover is the proven all-purpose shuttle cylinder.



Multi-level ejector

A possible alternative to a vacuum pump thanks to its strong suction capacity.

NCT series

Non-contact lifting and moving of the object.

Vacuum technology for handling operations

Rexroth's entire line of vacuum technology: from compact and in-line ejectors, and vacuum grippers, to multi-level ejectors. One of the highlights is our NCT transport unit for non-contact handling of workpieces.

The whole technological range for complete solutions

Better printing, stamping, folding, cutting, perforating and laminating—it's all possible with Rexroth. For we are the only automation partner to offer electric drive and control systems, pneumatics, linear motion technology, assembly systems and worldwide service all from a single source—all systematic and perfectly matched. Our service and sales organization will assist you both expertly and reliably. The bundling of branch

Rexroth—a solution for everything

Whether rotary offset, sheet offset, flexographic, gravure, oversize ink-jet printing or postprocessing—our extensive modular automation range satisfies all the requirements facing modern technology. Our products range from high-quality mechanical elements through intelligent pneumatic modules to the world's most successful motion control system for the electronic shaft. Our tried and tested high-performance components noticeably improve the process and prevent expensive machine downtimes. Rexroth offers everything to make printing and converting machines fast, reliable and efficient.



expertise, a broad standard range with innovative products and components, and branch-specific solutions—all this provides more economic efficiency. Put your trust in a global player whose products are used by all the well-known printing-press manufacturers. Put your trust in the technological range of a single provider. Put your trust in Rexroth.

Further technologies you benefit from



Controls and drives

Electric drive and control technology from Rexroth synchronizes all machine units in a highly precise manner—whether these are supply reels, printing units, punching units, folders or cross-cutters.



Linear motion and assembly technology

Linear motion technology and assembly systems from Rexroth offer greater accuracy and safety. With our components, precise positioning of the printing rollers is guaranteed. A wide selection of profile systems—e.g. for enclosures and protective elements—rounds off our range.



Service

Our service provides you with support, from project planning to after-sales service. Regardless of whether you need help with commissioning, field service, teleservice or retrofitting—let us impress you with our committed advisory service, branch-specific service packages, fixed contracts and reasonable costs.

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