

rotec® SLEEVES & ADAPTERS FOR FLEXOGRAPHIC PRINTING

XSYS manufactures rotec® sleeves and adapters customised for all flexo printing presses, as well as several specialty applications.



rotec® sleeves and adapters have been in use around the world since 1990, with state-of-the-art, quality production facilities in Germany and the United States. Through innovations and a continuous improvement process of sleeve and adapter technology, cost efficiency, service and ecological responsibility, rotec® sleeves and adapters became the number one in terms of effectiveness, reliability and convenience in daily practice.



Standing behind our quality products is also a strong team listening to our customers in order to provide innovative solutions and reliable service. Our commitment towards our customers to continuously improve our products and services drives our objective of making our products and services better, faster and easier to use.



Every single printing sleeve and adapter is tailor-made according to your needs. You can choose between various rotec® sleeves, depending on your application needs. In addition, you can build your own customised rotec® adapter from the choice of base materials, air distribution systems, and air source, specific to your individual press operation.

And, with a selection of quality upgrade options, you can further design the optimal sleeve or adapter for your individual requirements.



TECHNICAL SOLUTION PROVIDER

At XSYS, we utilise our vast global market intelligence combined with technical expertise to provide market-oriented and innovative solutions. Whether customer service, sales, or production, empowered people are our greatest asset. This enables our customers to better position themselves to address present and future emerging market realities.

The rotec® product line is ever expanding in an effort to provide customers with the solutions they need. With new product developments, customers can significantly improve print performance, press productivity, as well as operator health and safety.

A perfect example is the innovative rotec® Eco Technology - the patented air distribution option for adapters. A significantly more efficient multi-air hole design at the at the operator side to allow easier and faster mounting of sleeves.



DEDICATED PRODUCT DEVELOPMENT

With diverse backgrounds in physics and mechanical engineering, the rotec® sleeves and adapters product development team has a fresh perspective on the construction of sleeves and adapters. Based out of the Technology Center in Ahaus, Germany, their energy and enthusiasm for out-of-the-box thinking has contributed to the thriving stream of new products now available to the market.





rotec® Sleeves

rotec® sleeves are high-quality sleeves to be used for conventional flexo plate-mounting, as well as other speciality applications. They allow plate-mounting outside the press and can be combined with various adapters.

- Easy and reliable handling with all plate types
- High durability and stability
- Specialty sizes for wall thickness and length options available upon request
- Proven rotec[®] interior design of synthetic resin and glassfibre compound to ensure long-lasting and consistent mounting characteristics
- Tight tolerances with high-precision grinding (TIR ≤ 0.02 mm, measured on carrier cylinder at TIR ≤ 0.005 mm) and length according to DIN ISO 2768 1c

Wall thickness

rotec® Blue Light Sleeve	0.9 mm - 125 mm		Ω
rotec® Smart Premium Sleeve	7.5 mm - 125 mm		\bigcirc
rotec® Lightweight Premium	30 mm - 125 mm		\bigcirc
rotec® Compressible Sleeve	2.9 mm - 125 mm	(Ω
rotec® Offset Sleeve	14.5 mm - 125 mm	(7)	
rotec® Base Sleeve	0.8 mm - 2.2 mm		\bigcirc
rotec® Cover Sleeve	0.8 mm		



SUPERIOR DIMENSIONAL STABILITY

These products provide superior dimensional stability because the construction includes an additional glassfibre barrier layer to prevent any growth.



LIGHTWEIGHT

These products are an advantage for the press operator by being easier to handle. This comes from reduced weight and easier mounting properties.



HIGH SPEED

These products are ideal for highspeed press applications because the construction and material provide bounce reduction properties.



EASY-MOUNT TECHNOLOGY

New easy-mount technology was developed for these products using advanced materials and state-of-the -art sleeve construction to make mounting easier for the press operator.



COMPRESSIBLE

These products have a compressible outer surface for optimised printabilty.



CONDUCTIVE OPTION

Available with rotec $^{\circ}\Omega$ Technology that provides complete conductivity from the base sleeve through to the surface. See upgrade section for more information.

CHOOSE YOUR OWN rotec® SLEEVE

Every sleeve is tailor-made according to your needs. Nearly all lengths and diameters are available. In addition, you can choose several upgrade options.

rotec[®]

Blue Light Sleeve

The benchmark in plate mounting

- Superior service life and outstanding durability
- Consistent and long-lasting mounting and clamping characteristics
- Easy and reliable handling



New polyurethane technology with superior dimensional stability

- Weight optimized with up to 25% reduced weight
- Newly developed easy-mount technology
- Specialised sleeve construction for bounce reduction and >35% faster press speeds
- Constant outer diameter (TIR ≤ 0.02 mm) at fluctuating temperatures or humidity











rotec®

Smart Premium Sleeve

rotec®

Lightweight Premium Sleeve

Easier handling with superior dimensional stability

- Up to 50% weight reduction
- Constant outer diameter (TIR ≤ 0.02 mm) at fluctuating temperatures or humidity
- New lightweight polyurethane intermediate layer
- End plate sleeve edge sealing for long lasting protection







Unique compressibility

- Long-lasting compressibility, excellent bounce-back properties
- Plate and tape savings, print consistency with long print runs
- Low dot gain, best solid ink density on irregular substrates





rotec®



rotec®



Durable, solid construction

- Offset plate and blanket sleeve set specifically designed for web offset presses
- Allows extremely quick format changes for all repeat sizes
- · Lasting dimensional stability, even at high temperatures and torque forces
- Perfect resistance to UV inks, solvents, and humidity





Extremely durable

- Optimal stability with low weight for bonding with coating materials
- Robust and durable over long time period
- Fibreglass for perfect bonding characteristics with different coating materials







rotec®

eeve



rotec®

Cover Sleeve



Sleeve to protect products with high-end surfaces

- Protection of anilox and other valuable products during storage, transport and mounting
- Rubber ring on the end to hold the cover sleeve in place
- Extra long life due to excellent durability



In-the-round ready-to-image photopolymer sleeves available as nyloflex® ITR Thin or nyloflex® ITR Classic

- Combines advantages of XSYS's dedicated photopolymer plate technology with vast experience in production of sleeves
- · Perfect for endless designs and seamless printing
- Several available wall thicknesses to match required job specifications





nyloflex®





rotec® Adapters

rotec® adapters are high performing products to reduce the wall thickness in order to improve weight and handling of plate mounting sleeves. They are tailor-made according to the customer specifications. Choose a rotec® adapter for bridging diameter differences between air cylinder and sleeve.

- Quick set-up times, easy handling and cost savings
- Innovative air conduction system for easy mounting of sleeves
- Suitable for quick change cantilevered machines and conventional cylinder presses
- Proven rotec[®] interior design of synthetic resin and glassfibre compound to ensure long-lasting and consistent mounting characteristics
- Tight tolerances with high-percision grinding (TIR ≤ 0.02 mm, measured on carrier cylinder at TIR ≤ 0.005 mm) and length according to DIN ISO 2768 1c
- Specialty sizes for wall thickness and length options available upon request

Wall thickness

rotec® Bridge Adapter	4.7 mm - 11 mm		Ω
rotec® Unifit Adapter	7.9 mm - 80 mm	(Ω
rotec® Airo Adapter	16 mm - 125 mm	(Ω
rotec® Atlas Adapter	16 mm - 125 mm		Ω
rotec® CFX Adapter	16 mm - 125 mm	→ ✓	Ω
rotec® ULW Adapter	30 mm - 125 mm		Ω
rotec® H/C Adapter	4.7 mm - 125 mm	(7)	Ω



SUPERIOR DIMENSIONAL STABILITY

These products provide superior dimensional stability because the construction includes an additional glassfibre barrier layer to prevent any growth.



LIGHTWEIGHT

These products are an advantage for the press operator by being easier to handle. This comes from reduced weight and easier mounting properties.



HIGH SPEED

These products are ideal for highspeed press applications because the construction and materials provide bounce reduction properties.



ECO TECHNOLOGY

Available as Eco version, which uses patented air distribution system for significantly easier sleeve mounting. See adapter section for more information.



COMPRESSIBLE

These products have a compressible outer surface for optimised printabilty.



CONDUCTIVE OPTION

Available with $\mathsf{rotec}^{\circ}\,\Omega$ Technology that provides complete conductivity from the base sleeve through to the surface. See upgrade section for more information.

BUILD YOUR OWN rotec® ADAPTER

Choose from the different base materials, then add your desired air distribution and air source. Nearly all lengths and diameters are available. In addition, you can choose several upgrade options.

Base Material

Functional base material used in the construction of the adapter to achieve the required characteristics needed for specific press applications

Polyurethane Adapter

rotec® Adapter

The perfect fit for every cylinder configuration

- Standard adapter for the flexographic industry
- High durability and stability
- Several air supply alternatives available to meet press-specific requirements







rotec® ULW Adapter

The ultra-lightweight option for adapters

- Up to 65% weight reduction compared to similar adapters
- Available as Unifit or Airo versions for customised air transfer system
- Application in press or plate-mounting equipment









Lightweight Polyurethane Adapter



rotec®Atlas Adapter / rotec®CFX Adapter

High modulus carbon fibre adapter for maximum printing performance

- For high printing press speeds and outstanding printing results
- Vibration dampening characteristics due to high-modulus carbon fibre structure
- Significantly lighter than conventionally manufactured products -especially with larger wall thicknesses
- Available as Unifit or Airo versions for customised air transfer system











rotec® H/C Adapter

Compressible adapter to mount In-The-Round sleeves

- Exclusive compressible anti-slip surface
- Consistent and long term printing performances especially for long print runs due to bounce-back properties of the compressible surface
- Available with customised air conduction system



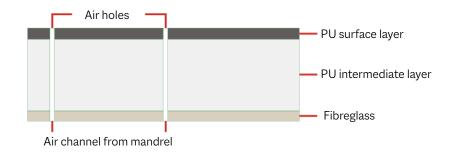






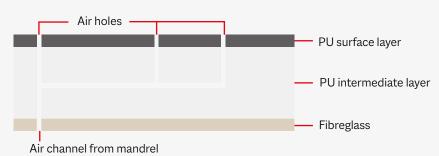
Bridge

For wall thicknesses below 10 mm. Conducts air from the air cylinder to the surface via air holes.



Unifit

Customised air transfer system for most types of air cylinders. In the Eco version, the standard air holes are replaced by a multi-air hole ring on the operator side.



Airo

Dedicated external air connection system. In the Eco version, the standard air holes are replaced by a multi-air hole ring on the operator side.



Air Distribution

How the air flows into the adapter

Standard Air Holes

4-8 air holes on operator side, additional holes along the length of the adapter



Eco Technology

Patented multi-hole design along the entire circumference of the adapter's operator side. Typically, no additional air holes are needed along the length of the adapter.

- Up to 90% less compressed air needed for easy sleeve mounting
- Increased efficiency for cost savings and improved productivity
- Eco Xtra Ring also provides protection against edge wear to extend product lifetime



UPGRADE YOUR OWN rotec® SLEEVE OR ADAPTER

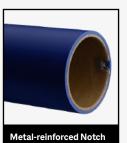
Need something more than the standard rotec® products?

Let's upgrade you!

XSYS has several high-quality upgrade options to customise your sleeves and adapters for your individual press and job specifications. If you can imagine it, we will do everything we can to make it happen. With years of experience, we are able to provide flexible solutions for most all needs and requirements. Each sleeve and adapter is configured new for each order, just for you!

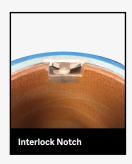
Notch Options

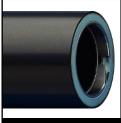
- Notches ensure safe and accurate positioning of the rotec[®] sleeves or adapters on the air cylinder
- Notch material options: metal-reinforced, composite, grinded
- Standard and interlock notch types available in standard and specialty dimensions





















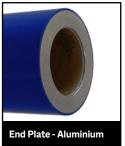
Ring Options

- Rings ensure safe and accurate positioning of the rotec® sleeves and adapters and provide extra protection of the base sleeve edge
- Inner ring material options: stainless steel and PVC
- Outer ring with or without end stop
- Eco Xtra Ring: with mounting efficiency benefits as well as reduced edge wear for extended lifetime
- Pull ring used with heavy sleeves (i.e. offset) and automatic mounting robots



End Plates & End Sto

- End plates (aluminium or compressible) available to protect the edge of the sleeve
- End plate with End stop
- Soft stop used to mount ITR sleeves













rotec® **Ω** Conductivity

- 10-year warranty for conductivity
- Complete conductivity of the inner construction through to the surface makes rotec $^{\tiny{\text{\tiny{0}}}}\,\Omega$ technology the safest product on the market
- Complies with the regulations of ATEX EU Directive No. 2014/34/EU (formerly ATEX 95) for electrostatic derivation ability
- Conductivity is needed to ground all parts of the press, including sleeves & adapters, which prevents fires & explosions while using solvent-based ink (with flash point below 55°C)

Registration & Mounting

- Registration tools aid in faster mounting and print job set-up for increased press productivity
- Scribe lines, register pins, registration systems with GPS / RFID



















Labeling

- Laser engraving included on all rotec[®] bases with key sleeve specifications
- Label strips can be used with water-based ink applications to help quickly identify required sleeves
- Painted edges for easy sleeve identification available in red, green, and blue (solvent resistant, suitable for use with all ink types)

PRODUCTION SOLUTIONS

The quality & robust construction of rotec® sleeves and adapters, available accessories, and re-working options significantly extend the product lifetime. This leads to cost efficiency and helps to reduce waste. The rotec® sleeve production process is continuously being optimized for higher energy efficiency as well as lower emissions and follows a rigorous Quality Management System to drive continuous improvement. The production sites are proud to be ISO-certified for quality (ISO 9001), energy (ISO 50001) and environmental (ISO 14001) management. By choosing XSYS, you invest in innovative solutions that support both business success and environmental responsibility.

Global production of rotec® sleeves and adapters make the variety and possibilities for our customers virtually endless.

PLEASE CONTACT US FOR ADDITIONAL IN ECONOMICS IN ECONOMIC



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Print solid. Stay flexible.