

rotec® SLEEVES & ADAPTERS FOR FLEXOGRAPHIC PRINTING

XSYS manufactures rotec® sleeves and adapters customized 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 customized 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 utilize 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® High Performance Sleeve - with its next generation materials and construction to provide lighter weight for easier handling, as well as bounce reduction to achieve faster press speeds.



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 glassfiber compound to ensure long-lasting and consistent mounting characteristics
- Tight tolerances with high precision grinding (TIR ≤ 0.001") and length ±2 mm (+2 mm / -0 mm for automatic registration systems)

Wall thickness

rotec® Blue Light Sleeve	0.080" - 4.000"	2 mm - 100 mm		Ω
rotec® High Performance Sleeve	0.472" - 4.000"	12 mm - 100 mm		\bigcirc
rotec® Premium Sleeve	0.472" - 4.000"	12mm-100 mm	(\bigcirc
rotec® Premium Lightweight Sleeve	1.000" - 4.000"	25.4mm-100mm		\bigcirc
rotec® TSX Sleeve	0.032" - 0.080"	0.8 mm - 2 mm		
rotec® Compressible Sleeve	0.114" - 4.000"	4 mm - 100 mm		Ω
rotec® High Speed Sleeve	0.114" - 4.000"	4 mm - 100 mm		Ω
rotec® Offset Sleeve	0.570" - 4.200"	14.5mm-107mm	(7)	
rotec® Base Sleeve	0.035" - 0.080"	0.9 mm - 2 mm		Ω



developed for these products using advanced materials and state-of-the

-art sleeve construction to make mounting easier for the press operator



COMPRESSIBLE

LIGHTWEIGHT

These products are an advantage for the press operator by being easier

to handle. This comes from reduced

weight and easier mounting properties

These products have a compressible outer surface for optimized printabilty.



HIGH SPEED

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

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



Latest polyurethane technology with superior dimensional stability

- Weight optimized with up to 25% reduced weight
- Newly developed easy-mount technology
- Specialized sleeve construction for bounce reduction and >35% faster press speeds
- Constant outer diameter (TIR < 0.001") at fluctuating temperatures or humidity











rotec®







Superior dimensional stability

- Constant outer diameter (TIR < 0.001") at fluctuating temperatures or humidity
- Perfect for high printing speeds and HD graphics
- Long-lasting with dependable register accuracy





Easier handling with superior dimensional stability

- Up to 50% weight reduction
- Constant outer diameter (TIR < 0.001") at fluctuating temperatures or humidity
- New lightweight polyurethane intermediate layer
- End plate sleeve edge sealing for long lasting protection









rotec®



Efficient and cost effective thin sleeve

- Hard surface and superior solvent and ink resistance
- · Low cost, quick availability
- Perfect for job storage





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®

High Speed Sleeve

Extremely durable

- Especially designed surface to attain high speed print results
- Higher print speeds achieved with bounce dampening characteristics
- Continuous printing for full tone and larger elements







Durable, solid construction

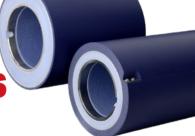
- Offset plate and blanket sleeve set specifically designed for web offset presses
- Allows extremely quick format changes for all repeat sizes
- Lasting dimensional stability, even at high temperatures and torque forces
- Perfect resistance to UV inks, solvents, and humidity











rotec®

Base Sleeve

Extremely durable

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







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



rotec®







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 glassfiber compound to ensure long-lasting and consistent mounting characteristics
- Tight tolerances with high precision grinding (TIR ≤ 0.001") and length ±2 mm
- Specialty sizes for wall thickness and length options available upon request

Wall thickness

rotec® Bridge Adapter	0.189" - 0.394"	5 mm - 10 mm		Ω
rotec® Unifit Adapter	0.394" - 3.394"	10 mm - 86 mm	(7)	Ω
rotec® Airo Adapter	0.626" - 4.000"	16 mm - 100 mm	(\bigcirc
rotec® Atlas Adapter	0.626" - 4.000"	16 mm - 100 mm	(7)	<u>Ω</u>
rotec® ULW Adapter	1.180" - 4.000"	30 mm - 100 mm		\bigcirc
rotec® H/C Adapter	0.210" - 4.000"	5 mm - 100 mm	(<u></u> Ω



These products provide superior dimensional stability because the construction includes an additional glassfiber 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 optimized printabilty.



CONDUCTIVE OPTION

Available with rotec° Ω 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



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 customized air transfer system
- · Application in press or plate-mounting equipment









Lightweight Polyurethane Adapter



rotec®Atlas Adapter

High modulus carbon fiber adapter for maximum printing performance

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



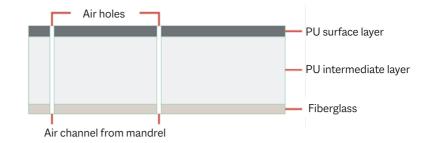






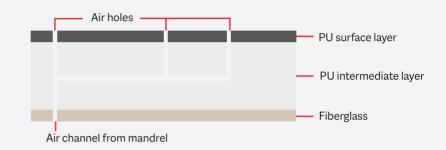
Bridge

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



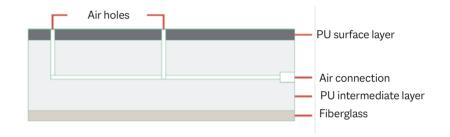
Unifit

Customized air transfer system for most types of air cylinders. In the Eco version, the standard air holes are replaced by a multi-air hole design 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 design 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



UPGRADE YOUR OWNrotec® SLEEVE OR ADAPTER

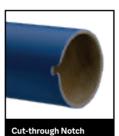
Let's upgrade you!

Need something more than the standard rotec® products?

XSYS has several high-quality upgrade options to customize 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

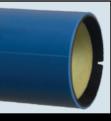
- Notches ensure safe and accurate positioning of the rotec® sleeves or adapters on the air cylinder
- Notch type options: composite, cut-through
- Standard and interlock notch types available in standard and specialty dimensions



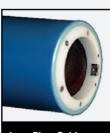




Inner Ring - Stainless Steel



Inner Ring - PUR



Inner Ring - Delrin



Pull Ring

- Rings ensure safe and accurate positioning of the rotec® sleeves and adapters and provide extra protection of the base sleeve
- Inner ring material options: stainless steel, PUR-polyurethane,
- Outer ring with or without end stop
- Pull ring used with heavy sleeves (i.e. offset) and automatic mounting robots

Labeling

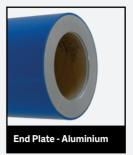
• Laser engraving or production order label included on all rotec® bases with key sleeve specifications





End Plates & End Stop

- 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



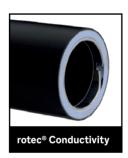






rotec[®] Ω Conductivity

- 10-year warranty for conductivity
- Complete conductivity of the inner construction through to the surface makes rotec $^{\circ}$ Ω 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 System





Registration & Mounting Tools

- Registration tools aid in faster mounting and print job set-up for increased press productivity
- Scribe lines, register pins, registration systems with GPS / RFID
- Retractable pin reduces wear for sleeve and pin protection. Pin retracts upon contact with the sleeve, until it locks into place

PRODUCINA 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



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