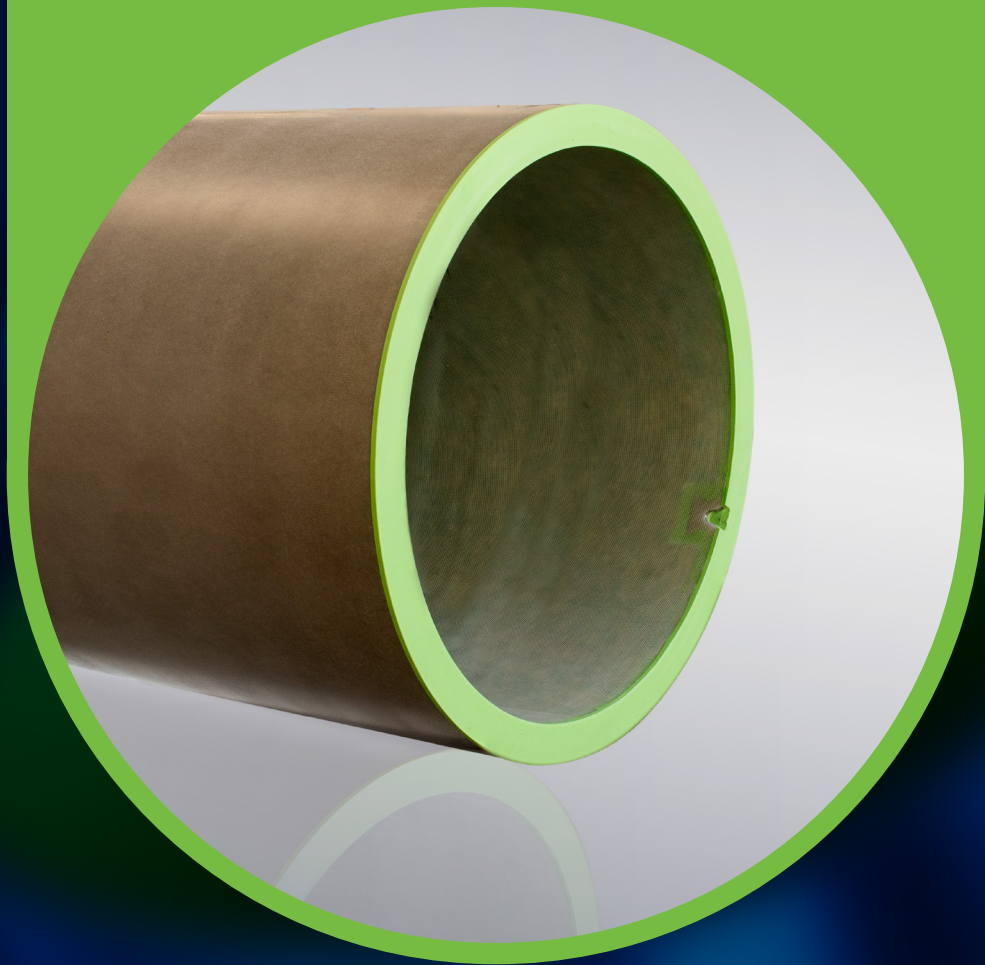




TECH SLEEVES

THE FUTURE IS NOW

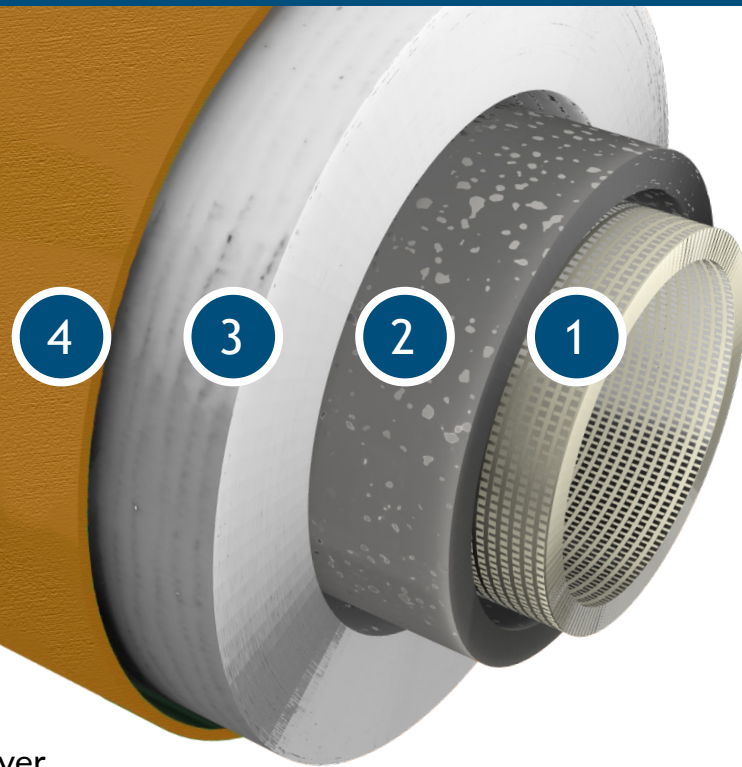


PRODUCT PORTFOLIO

Quality, Innovation & Reliable Services

www.tech-sleeves.com

TECH LIGHT VERSION



1

Base Layer

- Expandable and extremely durable base layer (1mm).
- Contains Dyneema that offers maximum strength with minimum weight.
- Dyneema has a good abrasion resistance and is 40% stronger than aramid fibers.
- Resistant to moisture, UV lights and chemicals.

2

Compressible Layer

- High rebound resilience and 50% compressible without bulging.
- Enable the sleeve to expand and have a perfect fit.
- Resistant to permanent deformation, good abrasion resistance from aging and weathering.
- Resistance to cleaning solvents.

3

Tech Core Light Layer

- Contains lightweight PU core material infused with Vinyl-Ester resin for excellent form stability
- High pressure resistance
- Enables sleeve build-ups to all wall thickness requests.
- Water resistance.

4

Outer hardened UV-cured layer

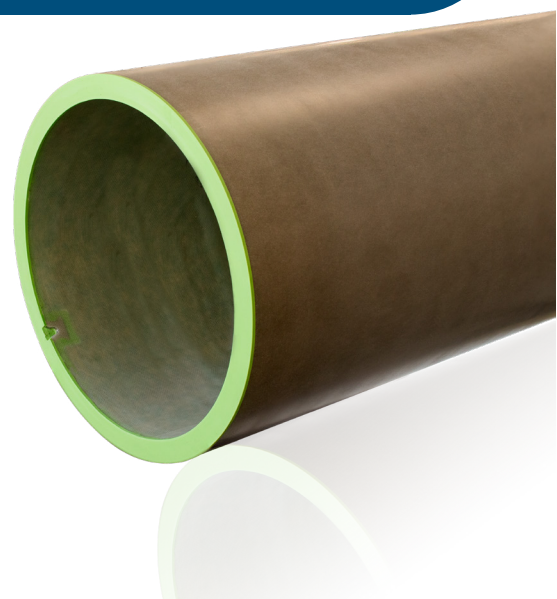
- The UV-cured layer has 80-85 Shore A hardness, which is significantly higher than the market standard.
- Due to no need of pigment, sleeves are now clear
- Very stiff and firm sleeve
- Excellent tape adhesive properties allowing good mounting and demounting of tapes.
- The UV cured Derakane Vinyl Ester Resin has excellent chemical and corrosion resistance



NEW LIGHTWEIGHT TECHNOLOGY

The **Tech Light** range of sleeves and bridges uses our ground-breaking lightweight technology which was co-developed with our sister company, AV Flexologic. Our in-house developed machinery in combination with the TIR Sleeve Measurement System, **automate** the build-up process and provide measuring accuracy of **1 micron**.

Our latest innovation with the hardened UV cured Vinyl Ester Resin outer layer is ready to revolutionize the flexographic industry creating one of the **lightest, stiffest and stable** sleeve on the market with **weight savings of over 40%**.



ADVANTAGES OF OUR NEW FORMULA



40% LIGHTER SLEEVE

Advanced lightweight technology that reduces the weight of the sleeve, while its performance remains exceptional



IMPROVED DURABILITY

Our new build-up formula contains PU infused with Vinyl Ester resin, which offers dimensional form stability and durability.



STIFFER AND STRONGER

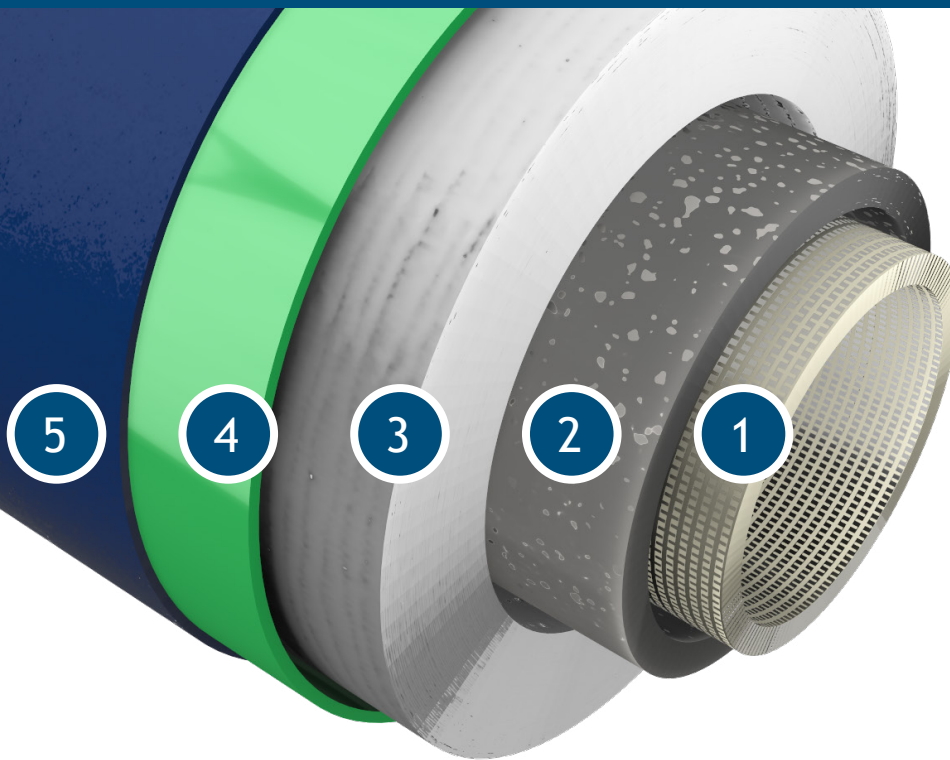
The hardened UV cured outer layer (80-85 ShoreA) makes our sleeve one of the stiffest in the flexo printing market.

CONFIGURATIONS

Plate Sleeves	TECH LIGHT®	TECH PRO LIGHT®
1 x zero line axial	●	●
Rubber sealed edges both sides		●
Milled slot	●	
Metal Reinforced Slot		●
Metal ring incl. registration slot		

All versions can be made conductive by the use of Carbon

TECH VERSION



1

Base Layer

- Expandable and extremely durable base layer (1mm).
- Contains Dyneema that offers maximum strength with minimum weight.
- Dyneema has a good abrasion resistance and is 40% stronger than aramid fibers.
- Resistant to moisture, UV lights and chemicals.

2

Compressible Layer

- High rebound resilience and 50% compressible without bulging.
- Enable the sleeve to expand and have a perfect fit.
- Resistant to permanent deformation, good abrasion resistance from aging and weathering.
- Resistance to cleaning solvents.

3

Tech Core Layer

- Contains Sphere.core SBC which is pre-compressed, stitch-bonded core material based on fiberglass.
- High pressure resistance and excellent form stability.
- Enables sleeve build-ups to all wall thickness requests.
- Water resistance.

4

Outer surface layer

- Contains Vinyl-Ester resin reinforced by a sandwich construction of fiberglass material (2,5mm)
- High chemical and temperature resistance with excellent tape adhesive properties allowing good mounting and demounting of tapes.

5

Compressible surface layer (optional)

- (Tech Sleeve Soft & Tech Bridge Soft application)
- Soft compressible layer is available in three kind of Shore A hardnesses; 40, 50 or 60 Shore A.
- Resistance to permanent deformation, good abrasion resistance from high pressure, aging and weathering
- Excellent chemical resistance.

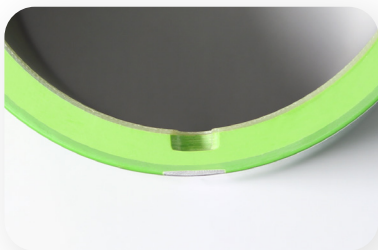
The **Tech** range of sleeves and bridges are built using 2-component vinyl-ester epoxy resin combined with Spherecore and Dyneema®.

All versions of Tech Sleeves® and Tech Bridges® are qualified for high printing speed of up to 800m/min, or 2,624 ft/min.

The **Tech** range of sleeves have also an extra version, the **Tech Pro+**, which includes an **inner metal ring** for increased protection and longevity of sleeves.



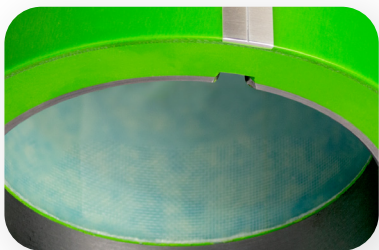
BENEFITS OF TECH SLEEVES



HIGH-END MATERIALS



DURABILITY



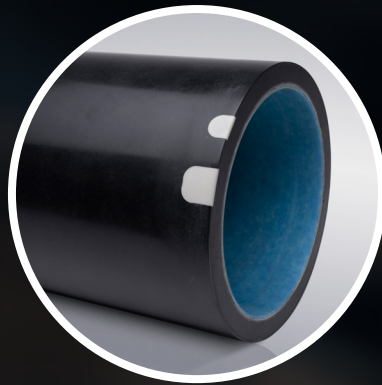
FORM STABILITY

CONFIGURATIONS

Plate Sleeves	TECH	TECH PRO®	TECH PRO+®
1 x zero line axial	●	●	●
Rubber sealed edges both sides		●	●
Milled slot	●		
Metal Reinforced Slot		●	
Metal ring incl. registration slot			●

All versions can be made conductive by the use of Carbon

SLEEVE OPTIONS



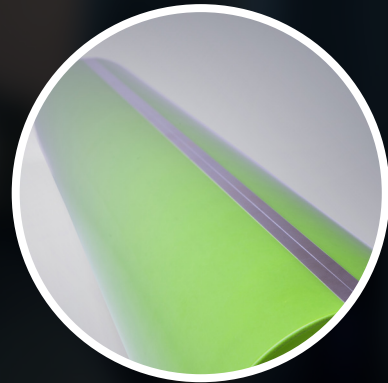
Smart Sleeve (RFID)

RFID embedded sleeve which allows for reading and writing for the purpose of identification. Works with new and our existing systems.



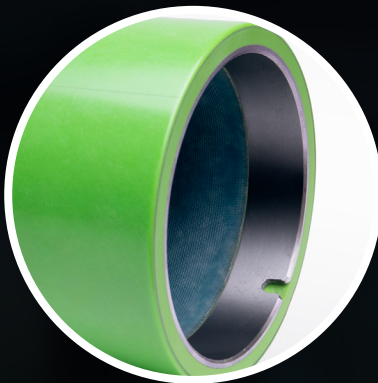
Rubber sealed Edge with Metal reinforced slot

Increase the lifetime of a sleeve by making the end of the sleeve resistant to impact. Prevents damages to the positioning pins in the press and mounting machines without weakening the registration slot.



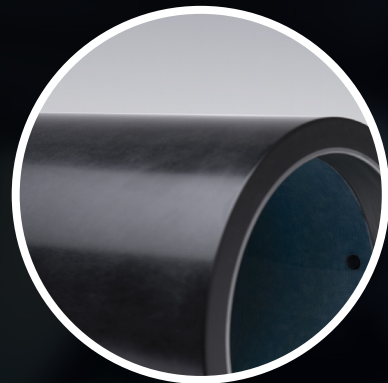
Full metal inner ring

Most durable registration slot solution by incorporating the registration slot in an inner ring. Ensures constant sleeve positioning by offering a wear resistant registration slot.



Metal cutting line

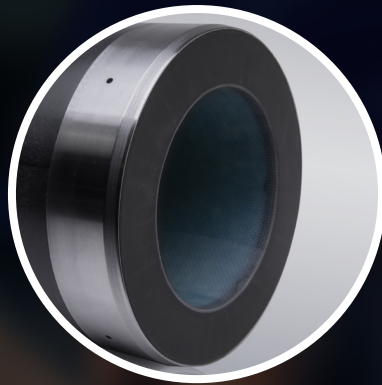
Allows the prevention of cutting damages to the sleeves surface layer by placing a 1,0mm thick metal strip at the surface. Possibility to place under any angle respective to the registration slot.



Conductivity

Tech Sleeves offers sleeves and bridges with certification of compliance in accordance with ATEX and NEC HAZLOC for conductive equipment in potentially explosive atmospheres.

BRIDGE OPTIONS



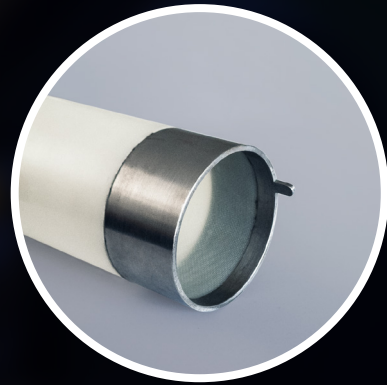
Lead Edge full metal ring

Protects the front edge of the bridge from damage by repeated handling of sleeves.
Increases durability and lifetime.



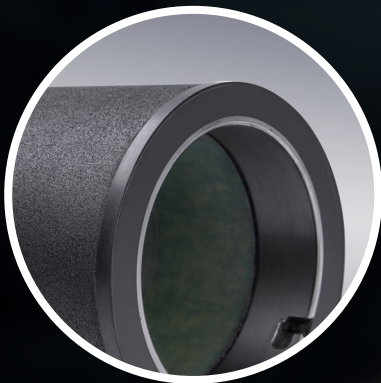
Separate Air

Bridge to which the air is supplied by a separate air connection on the drive side of the press or mounting machine.



Separate Air

(Only applicable to hard bridges) Provides the possibility to use sleeves of different widths on one bridge. The spacer sleeve provides a registration pin to align all sleeves on the operator side.



Soft Coated Bridge

The Soft Coated Tech Bridges are used to carry flexible, thin sleeves (seamless sleeves) which are available in densities of 40, 50 and 60 ShA. They can be Separate air connection or air-through.



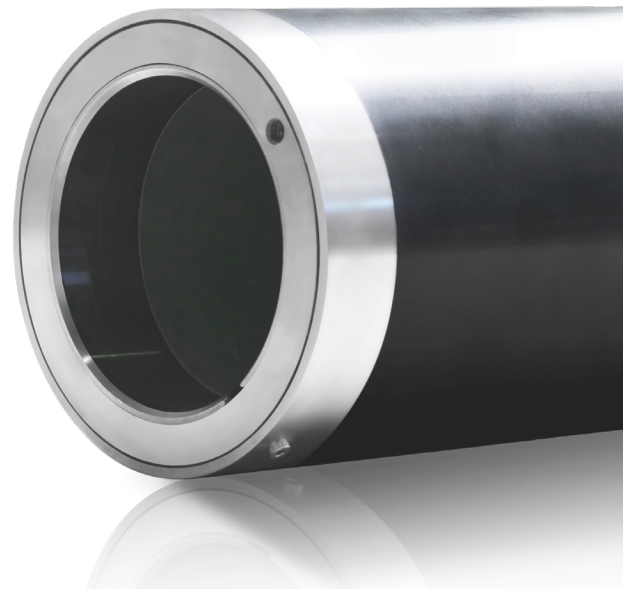
Millar Valves

(Only applicable to Hard Separate air bridges) Control the air flow of the bridge by covering the air holes with valves. Direct the air flow to where required therefore creates flexibility to use multiple sleeve width on one bridge with alignment on the drive side.

BRIDGES/ADAPTERS

Tech Bridge is one of the **most advanced bridge/adapter** in the market. It is made using the same strong materials as the Tech Sleeve, and it is available in either Separate Air or Air-Through. This bridge is **extremely durable** and resistant to chemicals, heat and the stresses faced in a printing press.

One of the biggest advantage of the Tech Bridge, is that it comes standard with an **outer metal ring on both sides**. It protects the bridge and prevents end damage.

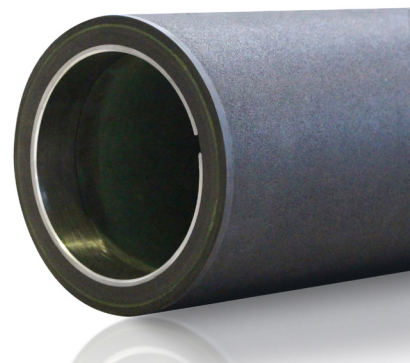


CONFIGURATIONS

Bridge Sleeve Hard			TECH PRO+®
Sealed edges on both sides			●
Outer metal ring incl. Pin			●
Inner metal ring incl. registration slot			●
Lead edge production ring			●

Tech Bridge Compressible is used to print with In The Round sleeves ('ITR'). The soft outer layer of the adapter provides the compressibility needed for the required print impression.

Available in different shore hardness (40,50 or 60 ShA).



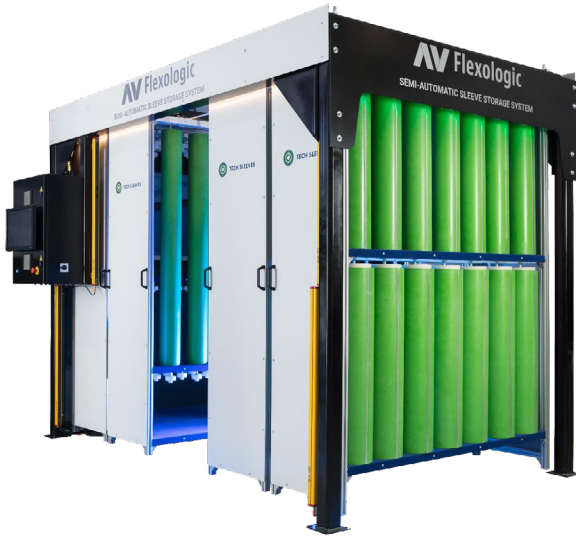
Bridge Sleeve Soft			TECH PRO+®
Sealed edges			●
Rubber End Stop Ring			●
Inner metal ring			●
Lead edge production ring			●

TECHNICAL SPECIFICATIONS TECH SLEEVES®

1.	GUARANTEE	12 MONTHS FOR ALL PRODUCTS AND 24 MONTHS FOR TECH PRO +® VERSION.
2.	TOLERANCE	TECH SLEEVES® ARE GUARANTEED TO HAVE A TOLERANCE ON DIAMETER OF +/- 0.020 MM / < 0.001 INCHES.
3.	PRECISION GRINDING	TIR < 0,020MM/ 0,001 INCHES, MEASURED ON A CARRIER/ CYLINDER WITH A TIR ≤ 0,005MM/ 0,0002 INCHES.
4.	OUTER SURFACE	SMOOTH WITH POLISHED FINISH
5.	MOUNTING	ON AIR CYLINDERS/ CARRIERS WITH MINIMUM AIR-PRESSURE OF 6,5 BAR AND AN AIR-FLOW OF 12 LITER/SECOND
6.	WALL THICKNESS	0.9 - 110 MM (THICKER UPON REQUEST) / 0,035 – 4,330 INCHES.
7.	SLEEVE LENGTH	MAX. LENGTH OF 2100 MM / 82,677 INCHES.
8.	REPEAT LENGTH	240-1500 MM / 9,449 - 59,055 INCHES.
9.	REGISTER LINE	STANDARD 1X ZERO AXIAL LINE INCLUDED. ADDITIONAL AXIAL AND/OR RADIAL LINES ON REQUEST.
10.	REGISTER SLOT	AS ORDERED BY THE CUSTOMER.
11.	TEMPERATURE	TECH SLEEVES® AND TECH BRIDGES® HAVE A MAXIMUM OPERATING TEMPERATURE OF 80 DEGREES CELSIUS (176 DEGREES FAHRENHEIT)
12.	CHEMICAL RESISTANCE	RESISTANT AGAINST ALL SOLVENTS USED IN THE FLEXOGRAPHIC INDUSTRY FOR PLATE CLEANING.
13.	CLEANING ADVICE	CLEAN WITH ETHYL ALCOHOL MIXED WITH MAXIMUM 15% ETHYL ACETATE
14.	LABEL	THE DIMENSIONAL SPECIFICATIONS ARE SHOWN ON THE LABEL INSIDE THE TECH SLEEVES®.

SUPPORTING EQUIPMENT

SLEEVE STORAGE SYSTEM



Our customized Sleeve storage system has been co-developed with AV Flexologic for workspace optimization in the press, while providing optimal protection for your sleeves. Our sleeve storage system has unique features that:

Features:

- Saves valuable operator time
- Prevents sleeve damage
- Saves costs due to damages

ADVANTAGES	BENEFITS
<ul style="list-style-type: none">• Easy and fast retrieval of sleeves	<ul style="list-style-type: none">• Custom Engineered
<ul style="list-style-type: none">• No manual labour required to move sleeve racks (semi-auto version)	<ul style="list-style-type: none">• Sturdy modular design
<ul style="list-style-type: none">• Possibility to connect to ERP system for further automation	<ul style="list-style-type: none">• Made from tubular steel
<ul style="list-style-type: none">• Automatic security system	<ul style="list-style-type: none">• Organized way of storage
<ul style="list-style-type: none">• Fully customized project	<ul style="list-style-type: none">• Prevents sleeve damage



TIR MEASUREMENT SYSTEM



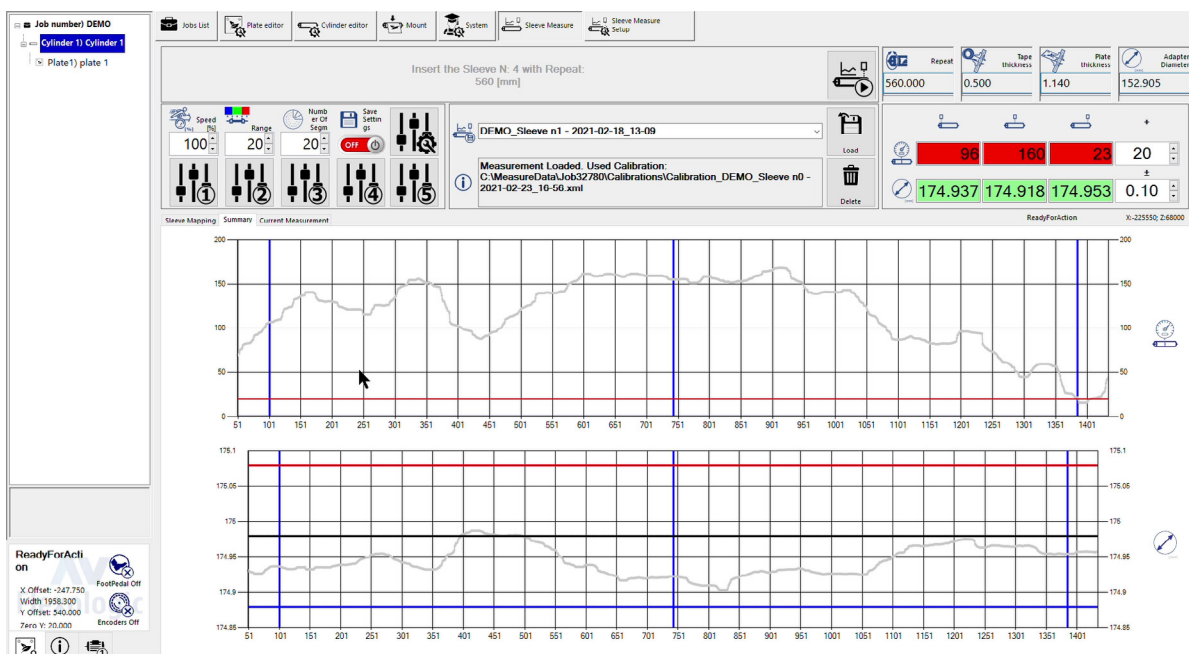
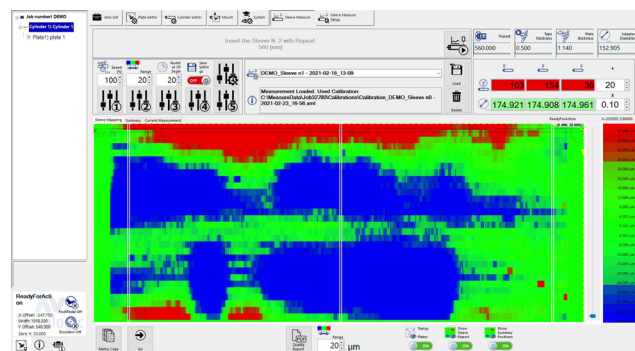
The TIR measurement system is the winner of the International print & innovation award 2015. It analyses the quality of the sleeve or cylinder by measuring the '3D landscape' of the surface. A high quality laser takes the measurement with an accuracy of 5 micron. This information provides a thorough insight on its condition. Subsequently, it can be placed with right pre-settings in the press to prevent press downtime. It calibrates any irregularities to ensure precision on micron level. A full report is generated to keep track of any irregularities. TIR also stores records for future reference.

ADVANTAGES

- Reduction in press downtime due to worn out printing sleeves which end up in the flexographic printing press
- Quick and easy usage
- Rigid steel construction
- Prevent press downtime
- Identify out-of-spec sleeves
- Allows better control over the printing process
- Stores the measurement report

OPTIONS

- Pressure roller for easy and safe tape application without air bubbles
- Cutting knife with an adjustable depth to prevent sleeve damage while cutting tape



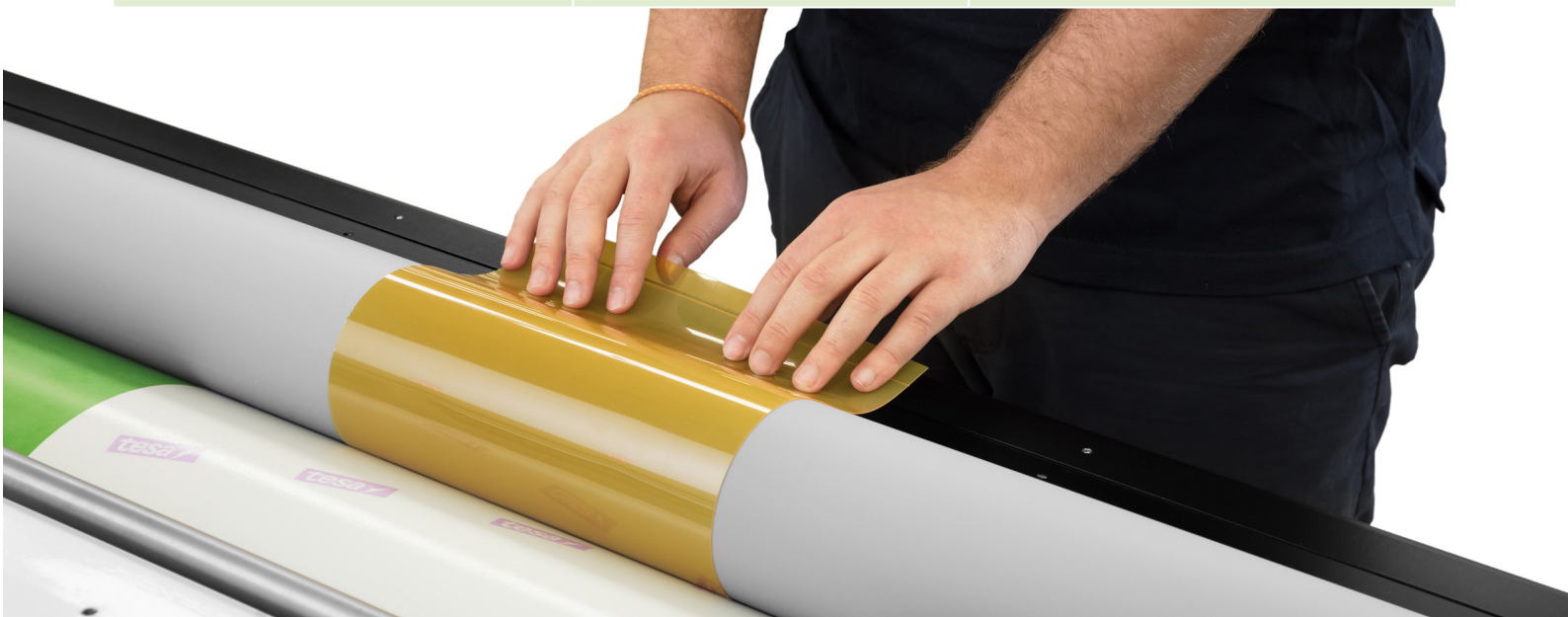
DEMOUNTER



The Plate Demounter is a machine mainly designed to prevent damaging the printing plates and sleeves. It efficiently removes the printing plates and mounting tape from sleeves, without any damage. A motor driven silicon roller generates friction to pull the printing plates or mounting tape off the sleeve or cylinder. It distributes equal force across the width, as opposed to edges, to demount the plates safely. Along with saving plates, it also saves time to allow the operator to focus on other activities in the prepress department.

ADVANTAGES	OPTIONAL
<ul style="list-style-type: none"> Reduces costs due to damaged printing plates allowing a quick return on investment 	<ul style="list-style-type: none"> Pneumatic cones for applying tape
<ul style="list-style-type: none"> Saves time in prepress department 	<ul style="list-style-type: none"> Cutting knife
<ul style="list-style-type: none"> Easy to use and minimal force required 	
<ul style="list-style-type: none"> Rigid steel construction 	
<ul style="list-style-type: none"> Plug-and-play 	

PLATE DEMOUNTER	FOR SLEEVES	FOR CYLINDERS
Any plate thickness	yes	yes
All types of tapes	yes	yes
Widths: 1700, 2000 and 2500 mm	yes	yes



TECH CART



The Tech Cart is a sleeve carriage or a sleeve cart, specifically designed to eliminate discomfort. By holding the sleeves horizontally, it ensures that you can load and unload the sleeves without any extra physical effort. With the 360° rotating wheels and cart handle, you can easily manoeuvre the cart around.

Along with convenience, Tech Cart® also ensures safety for the sleeves. The felt covered sleeve holder prevents the inner core of the sleeve from scratches. The edge of the sleeve is protected by the rubber end ring on each sleeve holder. The tubular steel structure makes the cart extremely sturdy. Moreover, Tech Cart® can be customized to hold the number of sleeves you need and suit the sleeve sizes as per your requirement. Tech Cart® is thus the ultimate way to transport your sleeves.

FEATURES	BENEFITS
• Customized engineering	• Easy transportation of sleeves
• Ergonomically designed	• Easy loading/unloading
• Sturdy tubular steel structure	• No physical heavy lifting
• Rubber end rings	• No damages to sleeves during transportation
• 360° rotating wheels	
• Cart handle	





TECH SLEEVES

THE FUTURE IS NOW

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