WORLDWIDE FLEXO SLEEVE SOLUTIONS

At Tech Sleeves, we constantly improve our products to enhance the overall performance and quality of our sleeves and bridges. We provide high-quality products with reliable delivery times.

We develop and use new technologies on our sleeves and bridges to become global leaders in this field.

Tech Sleeves is an integral part of a flexo-focused group of companies, our global sales and support network has enabled us to expand our footprint rapidly and offer our premium products into the flexo market.
Our vision is to provide all-round excellence.

Our mission is to create value and eliminate waste.
1 - Base Layer
- Expandable strong innercore without cracking. It prevents slipping on the mandrel.
- This inner core is 100% moisture, UV light and chemical resistant.

2 - Compressible Layer
- This layer enables the sleeve to expand and retract for a smooth fit onto the cylinder or bridge.
- Due to the edges of our sleeves being completely sealed, this layer is always fully protected.

3 - Tech Core Light Layer
- Lightweight core material designed to limit bounce and maximize the durability of the sleeve.
- Allows sleeve build-ups to all wall thicknesses and offers the lightest sleeves on the market.

4 - UV-cured Vinyl Ester resin outer layer
- Guaranteed 82 Shore D outer layer hardness, which is significantly higher than market standard.
- This outer layer offers an extremely stiff, long-lasting firm sleeve with excellent tape adhesion properties.
Tech Sleeves® manufactures light weight composite sleeves and bridges for the global flexographic printing industry. By using the highest quality grade of materials, Tech Sleeves® is able to outperform any sleeve on the market in terms of durability, consistency and dimensional accuracy.

Tech Sleeves® and Tech Bridges® are qualified for high printing speeds of up to 800 m/min, or 2,624 ft/min and within the industry they are recognised as one of the lightest, stiffest and stable sleeve and bridges on the market with weight savings of up to 40%.

**ADVANTAGES OF OUR SLEEVES & BRIDGES**

**LIGHTWEIGHT SLEEVES & BRIDGES**
Advanced lightweight technology reduces the weight of the sleeve and minimises overall press bounce for outstanding printing results

**DURABLE & STIFF SLEEVE**
Our researched build-up formula with Vinyl Ester Resin ensures the core of the sleeve withstands the the constant pressures of cylinder loading and unloading

**VINYL ESTER RESIN OUTER LAYER**
The hardened UV cured outer layer (82 ShoreD) makes our sleeves the hardest and the stiffest in the flexo print market. A stiffer outer layer ensures that the sleeve will last longer
**SLEEVE OPTIONS**

**RUBBER SEALED EDGES WITH REINFORCED SLOT**

Increases 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.

**SMART SLEEVE (RFID CHIP & MAGNET)**

RFID embedded sleeve which allows reading and writing for the purpose of identification. Works with the new and our existing systems. It improves the printing process and prevents mistakes from using the wrong sleeves in the press.

**CONDUCTIVE SLEEVE**

All the sleeves from Tech Sleeves can become conductive sleeves with the use of carbon. Conductive sleeves conduct electrostatic charges, which can occur in the printing area and go into the grounded printing press. Many companies choose this type of sleeves for printing.

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**CONFIGURATIONS**

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>ADVANTAGE</th>
<th>TECH LIGHT®</th>
<th>TECH PRO LIGHT®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial zero line</td>
<td>Helps in defining the zero position</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Milled slot</td>
<td>A durable slot solution</td>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td>Sealed edges</td>
<td>Ensures chemical and moisture protection providing dimensional stability</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Rubber edges</td>
<td>Provides maximum durability</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Metal Reinforced Slot</td>
<td>Great notch durability, bonded in the rubber for maximum durability so not possible to come loose</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

“O”: Optional
CASE STUDY:
FORCE VS. DEFLECTION

Tech Sleeves uses high-quality materials with a researched build-up formula that maximizes the robustness of the sleeve.

Based on a recent deflection study, Tech Sleeves proved to have significantly less deflection compared to the industry leading competitors. The graph above shows that the sleeves from Tech Sleeves need almost twice the force required to achieve the same level of deflection.
The **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.
BRIDGE VERSIONS

SEPARATE AIR
A Separate-Air bridge works using a separate air source that is not the mounting mandrel. The operator can choose which source of air to turn on and load the sleeve or the bridge separately.

AIR THROUGH
The Air-Through bridge works by directly providing air via the mandrel. The bridge has air vents that can be lined up with the mandrel and allow the required air to flow. It is used in cases where the wall thickness of the adapter is quite thin.

SOFT COATED
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.

BRIDGE OPTIONS

Spacer
(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.

Miller 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 therefor creates flexibility to use multiple sleeve width on one bridge with alignment on the drive side.
# TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerance</td>
<td>Tech sleeves®️ are guaranteed to have a tolerance on diameter of +/- 0.020 Mm / &lt; 0.001 Inches.</td>
</tr>
<tr>
<td>Precision grinding</td>
<td>TIR &lt; 0.020mm/ 0.001 inches, measured on a carrier/cylinder with a TIR ≤ 0.005mm/ 0.0002 inches.</td>
</tr>
<tr>
<td>Outer surface</td>
<td>Smooth with polished finish</td>
</tr>
<tr>
<td>Repeat length</td>
<td>240-1500 Mm / 9,449 - 59,055 inches.</td>
</tr>
<tr>
<td>Register line</td>
<td>Standard 1x zero axial line included. Additional axial and/or radial lines on request.</td>
</tr>
<tr>
<td>Register slot</td>
<td>As ordered by the customer.</td>
</tr>
<tr>
<td>Mounting</td>
<td>On air cylinders/ carriers with minimum air-pressure of 6.5 bar and an air-flow of 12 liter/second</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.9 - 110 Mm (thicker upon request) / 0.035 – 4.330 inches.</td>
</tr>
<tr>
<td>Sleeve length</td>
<td>Max. Length of 2100 mm / 82,677 inches.</td>
</tr>
<tr>
<td>Temperature</td>
<td>Tech Sleeves®️ and Tech Bridges®️ have a maximum operating temperature of 80 degrees Celsius (176 degrees Fahrenheit)</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>Resistant against all solvents used in the flexographic industry for plate cleaning.</td>
</tr>
<tr>
<td>Cleaning advice</td>
<td>Clean with ethyl alcohol mixed with maximum 15% ethyl acetate.</td>
</tr>
<tr>
<td>Label</td>
<td>The dimensional specifications are shown on the label inside the Tech Sleeves®️.</td>
</tr>
</tbody>
</table>
Tech Sleeves has a global team of 20 sales and support professionals available in all working hours worldwide.

With more than 50 agents worldwide, Tech Sleeves ensures local sales and support in your native language.

Leveraging 30 years of experience in the flexo industry, Tech Sleeves has supreme knowledge in all aspects of flexo printing.

Are you having an issue?
You can easily create a ticket online at: www.tech-sleeves.com
Our experts will get in touch with you with a solution in a short time.

You can also find useful information regarding the use and maintenance of your sleeves. For more information, scan the QR code below.
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.

**BENEFITS**

- Custom Engineered
- Sturdy modular design
- Made from tubular steel
- Organized way of storage
- Prevents sleeve damage and swelling

- Protective mat floor
- Vertical sleeve storage to prevent sleeve swelling
- Pins for holding the sleeves in place
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
- Allows better control over the printing process
- Identify out-of-spec sleeves
- Stores the measurement report

### OPTIONS

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

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Sleeve scanning with an accuracy of 1 micron
The 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
- Reduces costs due to damaged plates
- Quick return on investment
- Saves time in prepress department
- Easy to use and minimal force required
- Rigid steel construction
- Plug-and-play

### OPTIONS
- Pneumatic cones for applying tape
- Cutting knife

**Optional cones for tape application**

**Pressure roller that creates friction without damaging the plate**
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 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**
- Customized engineering
- Ergonomically designed
- Sturdy tubular steel structure
- Rubber end rings
- 360° rotating wheels
- Cart handle

**BENEFITS**
- Easy transportation of sleeves
- Easy loading/unloading
- No physical heavy lifting
- No damages to sleeves during transportation
REQUEST A QUOTATION:

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