Solving Your Print Challenges of Today and Tomorrow

tesa tape

Alix Guyot, ASE

Keara Wingert, RMSM

Booth # 629

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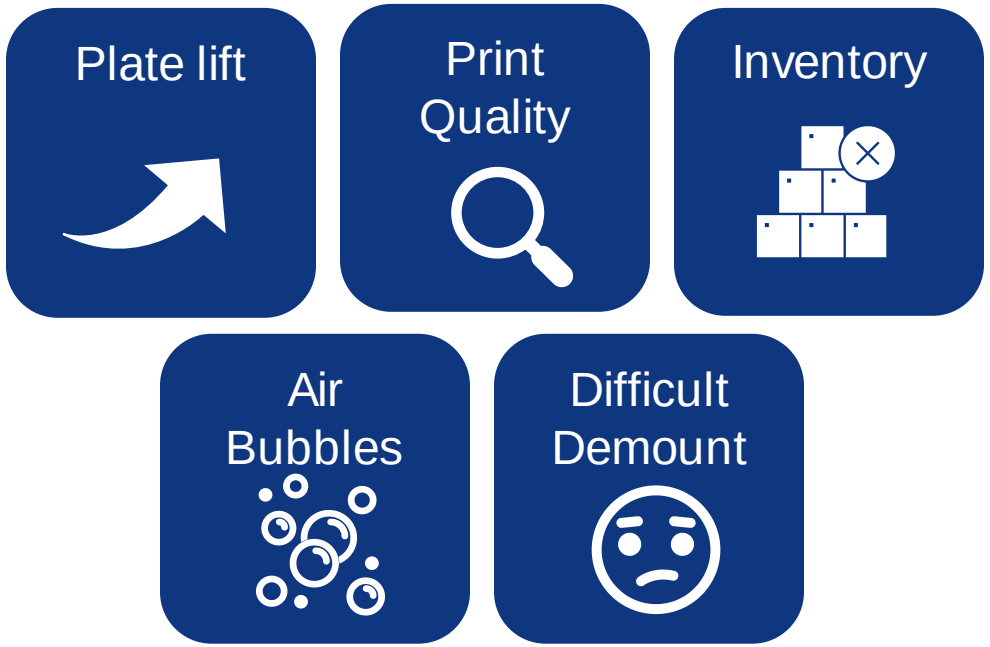
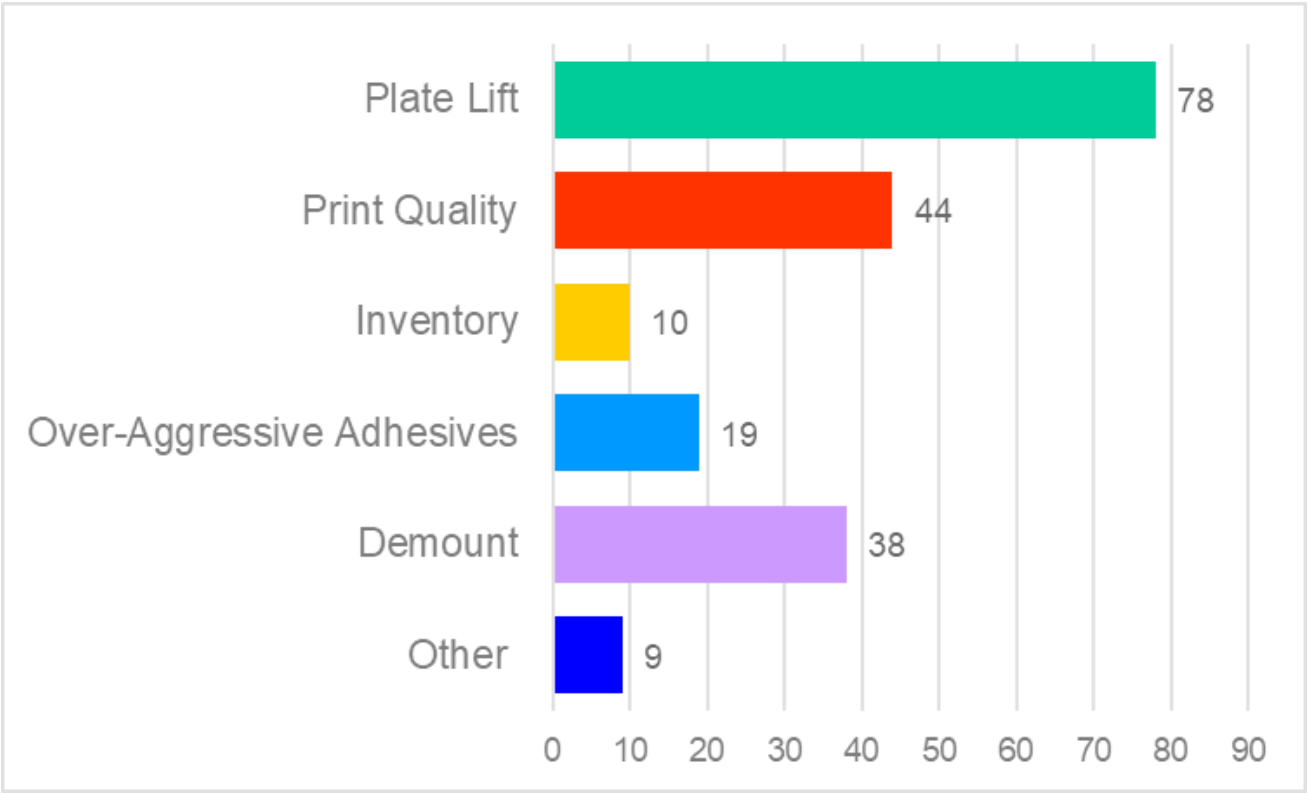
Print Challenges of Today

Survey Results



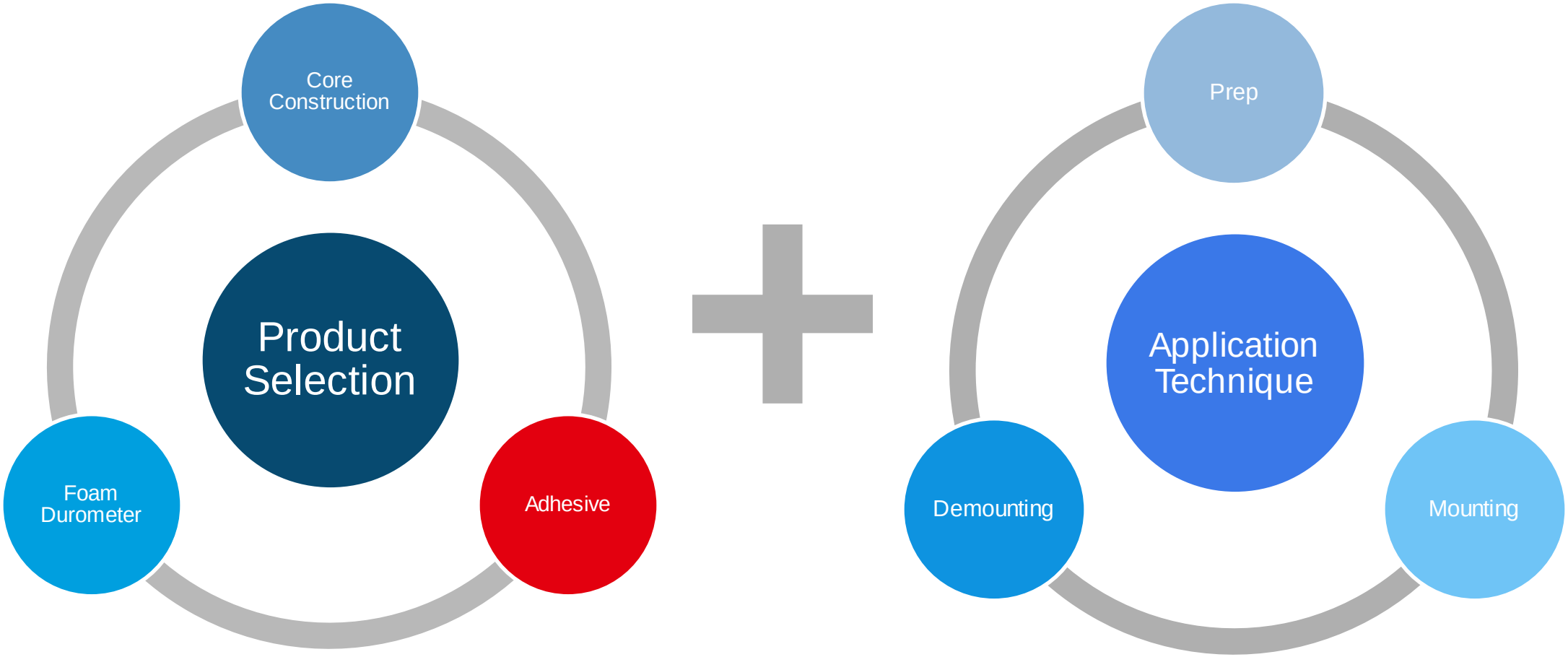
Flexo Magazine Poll: What are Major Tape Related Concerns?



Source: R. Moran, "Mounting Materials," Flexo Magazine, *March 2023*

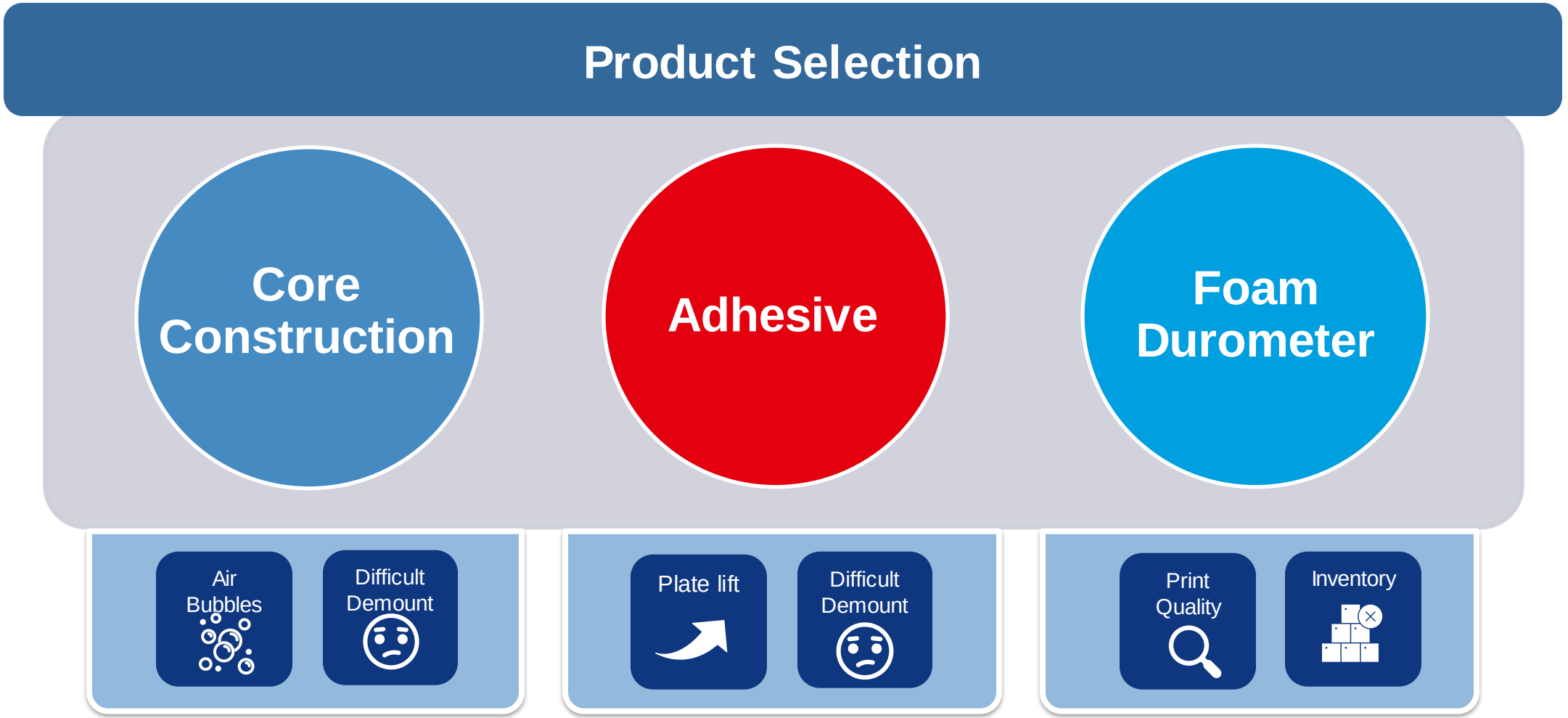
Solving Your Print Challenges **Today**

Product Selection + Application Technique



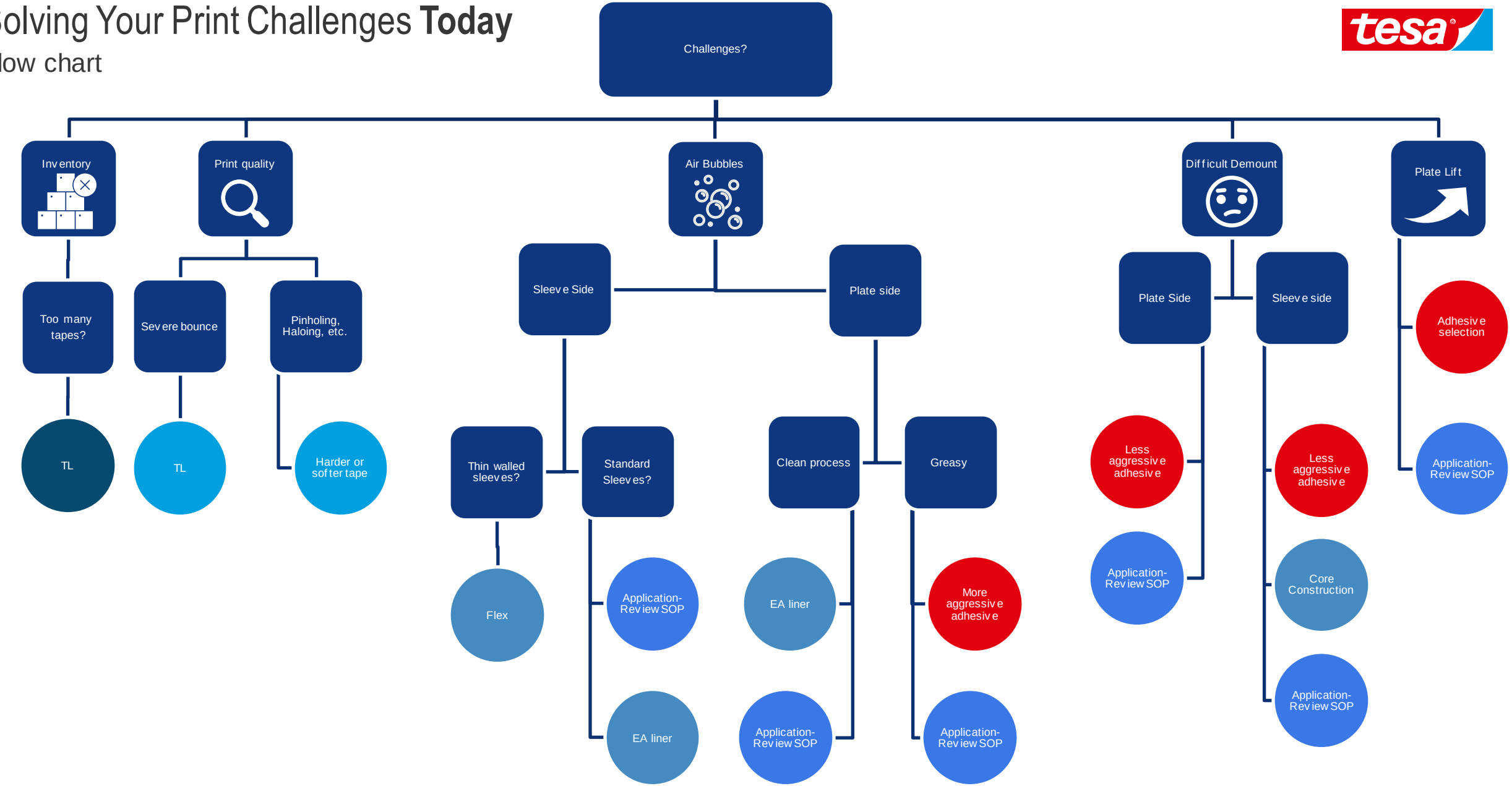
How does Product Selection Impact Print Challenges?

The right product for the job



Solving Your Print Challenges **Today**

Flow chart




How does
Core Construction
Impact Print Challenges?
tesa
INFOFLEX
INNOVATION
CENTRAL

tesa Softprint®

Core Construction Selection

Exclusive supplier of **two independent core product designs**

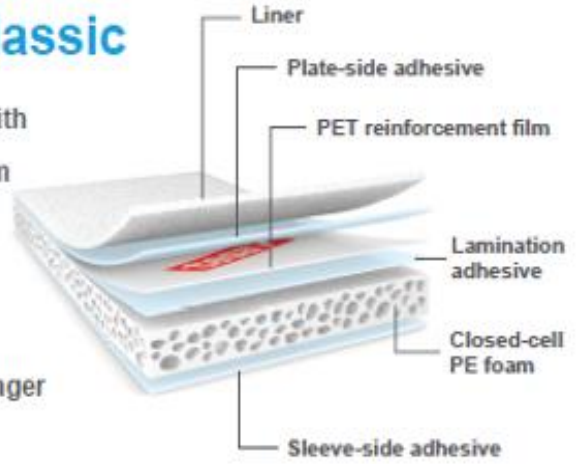
- Classic and FLEX core construction

CLASSIC-design

FLEX-design

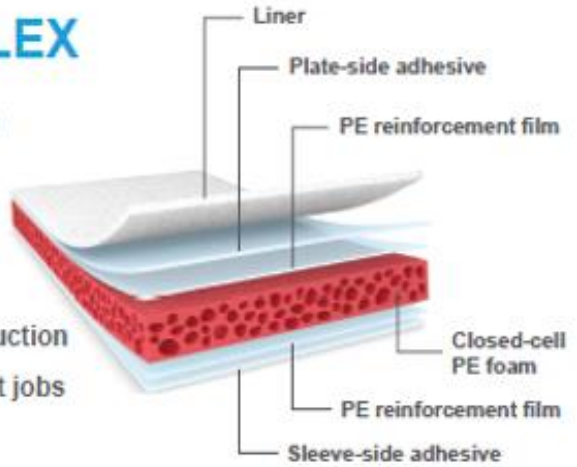
Softprint® Classic

- Easy tape handling with PET reinforcement film
- Wide range of adhesives available
- Highest quality for longer print runs



Softprint® FLEX

- PE reinforcement film
- Best for thin-walled or scratched sleeves
- Most versatile construction for wide range of print jobs



Core Construction

Air Bubbles

Difficult Demount

INFOFLEX

INNOVATION CENTRAL

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FLEX Liner Selection

Two liner designs on FLEX FE-X

EA Liner: Unique liner structure

- “Snake skin” pattern
- Micro channels within the adhesive
- Helps **air escape** during mounting and printing

PV 0 Liner: Traditional

- “Orange peel” pattern
- Effortless application during **automatic** mounting

Both have the same foam and adhesive

- Adhesive prevents plate lift while allowing easy plate repositioning and demounting. Foam delivers consistent and excellent print results.

How does Adhesive Selection Impact Print Challenges?

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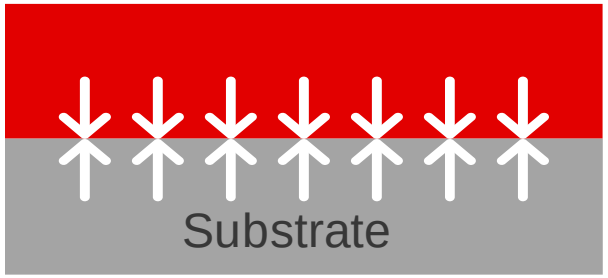
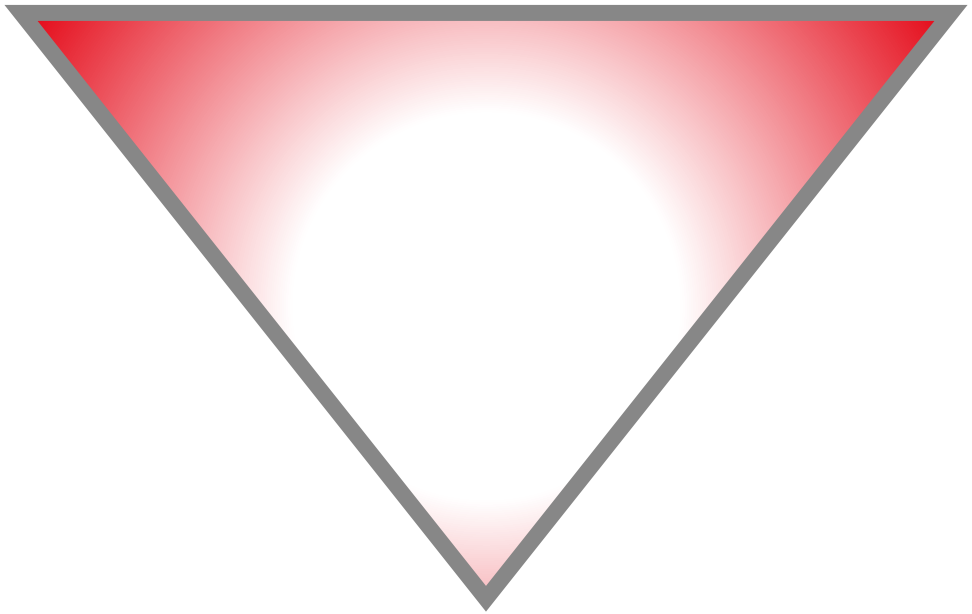
Adhesive Terminology

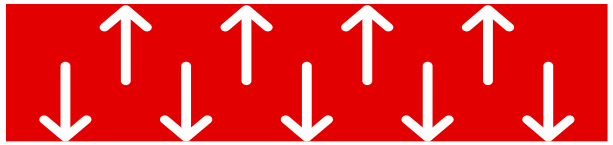
Adhesion



Bonding strength of the adhesive to the substrate

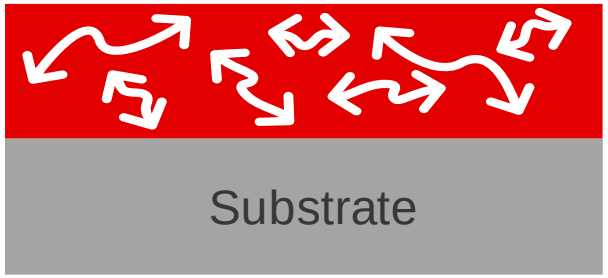


Tack



"Contact adhesion" of the adhesive to the substrate

Cohesion



Inner strength of the adhesive, "holding power"

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Adhesive Options

Adhesive

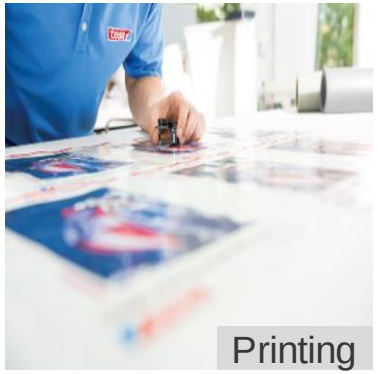
Air Bubbles

Difficult Demount

Customer demand vs technical demand for each process step


Mounting

Customer demand	Technical demand	PSA Property
Fast and simple	Surface tack	Low tack
Solve dirt conditions	Surface tack	High tack


Printing

Customer demand	Technical demand	PSA Property
No plate/ edge lifting	Adhesive properties	High adhesion
	Temperature resistant	High cohesion
	Solvent resistant	High cohesion


Demounting

Customer demand	Technical demand	PSA Property
Easy demounting	Adhesive properties	Low tack
	Ink resistant	High cohesion

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Adhesive Options

tesa Softprint® 380 µm / 15 mil	tesa Softprint® 500 µm / 20 mil			
Standard product	Lower bonding towards sleeve side	Standard product	Higher bonding towards sleeve side	Product explanation
FE		FE	FE-X	Very low tack adhesive for easy and fast plate mounting and demounting. Secure bonding with excellent resistance to edge lifting in clean and standardized conditions.
SEC			SEC-X	Low tack adhesive for easy and fast plate mounting and demounting. Secure bonding with excellent resistance to edge lifting in clean and standardized conditions.
TP	SLM	TP	TP-X	Medium tack adhesive for reliable plate mounting under most conditions. Secure bonding with excellent resistance to edge lifting especially under warm and high humidity conditions.
STM		STM		High tack adhesive for plate mounting in unclean and cold conditions. Secure bonding with excellent resistance to edge lifting.

Marked tesa Softprint® products are available in CLASSIC and FLEX design(20mil)

Marked tesa Softprint® product in FLEX design(15mil)

Adhesive

Air Bubbles

Difficult Demount


How does
Durometer Selection
Impact Print Challenges?

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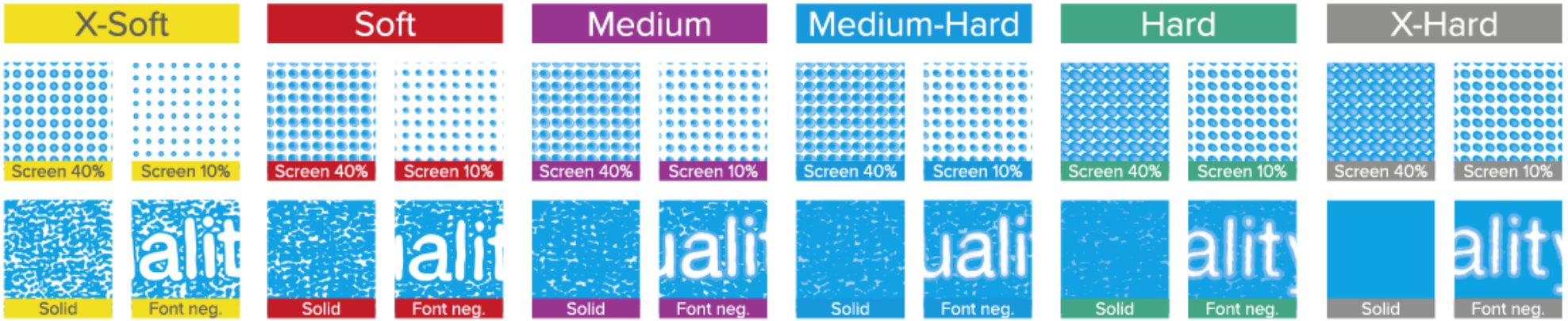
Foam Durometers

Foam Durometer

Print Quality

Inventory



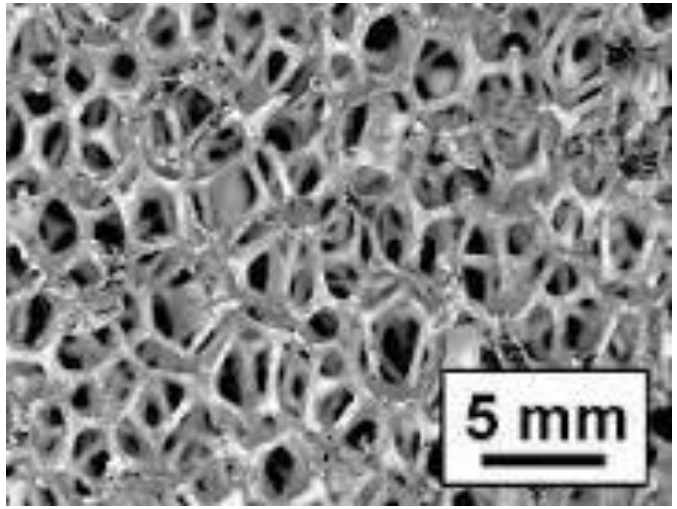
tesa Twinlock ®

Print Quality Control

Foam Durometer

Print Quality

Permanent adhesion, without end

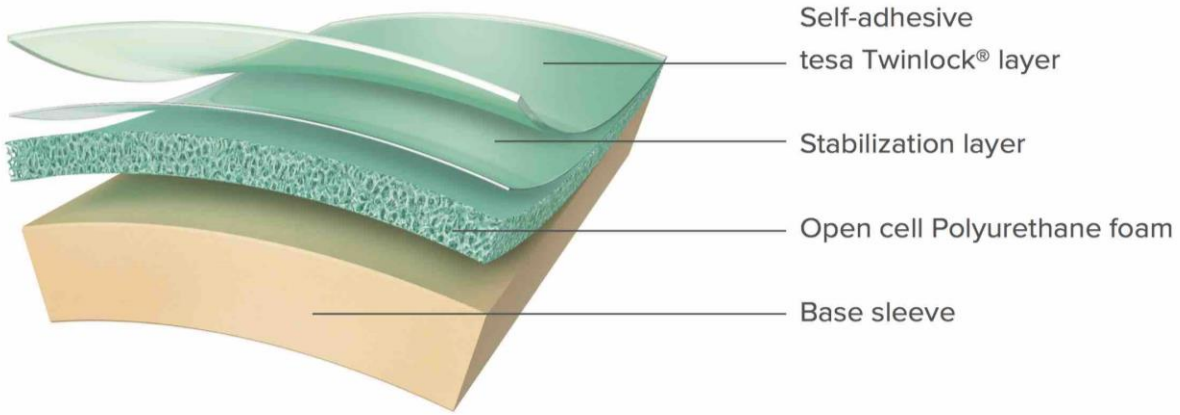


Twinlock-foam is Polyurethane foam:

- Open cell foam does not collapse under print pressure
- Twinlock on top of the foam functions as an extra bumper
- No increased print pressure, therefore more consistent print quality

Unique Quality Control

- Every sleeve is measured by a laser during and at the end of the production process
- Tolerance of a Twinlock sleeve is +/- 2/100mm
- By producing the tesa Twinlock® layer on every 1/100mm we can “tailor make” each sleeve



tesa Twinlock®

3 Foam Durometers to Print Every Job in Flexo

Foam Durometer

Inventory

Soft/Medium/Hard

- > 85% of what we produce is medium
- < 15% of what we produce is hard/soft

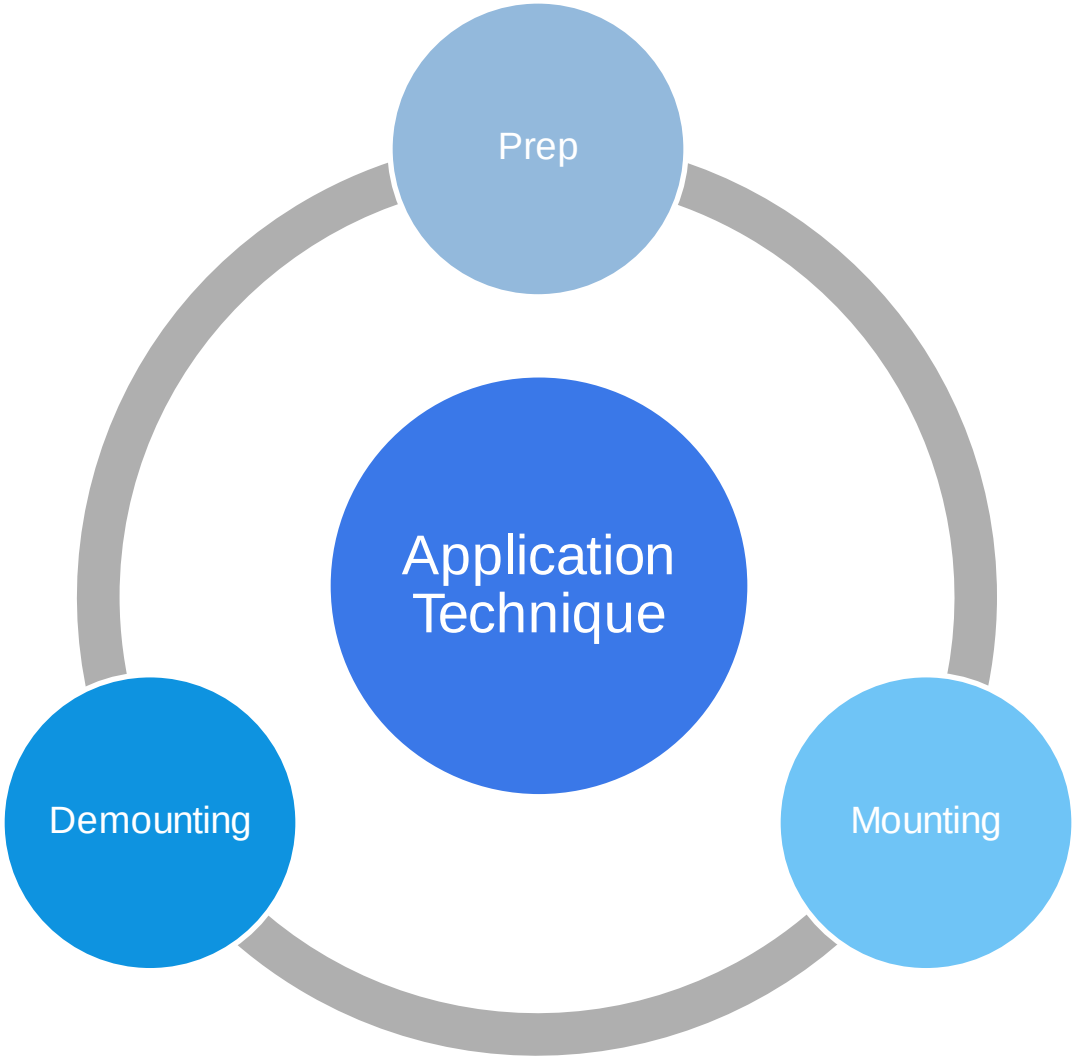
	Foam	Color code	Print motif
tesa Twinlock® Soft Sleeve	Polyurethane	White	
tesa Twinlock® Medium Sleeve	Polyurethane	Green Blue	
tesa Twinlock® Hard Sleeve	Polyurethane	Black	

Using the right product

but still facing print challenges?

tesa® Plate Mounting Certification

- Standardize process across all shifts
- Update best practices
- Provides tools to troubleshoot issues
- Hands on
- Continued Education
  - Certification included
  - “Train the trainer”



Printing Challenges of **Tomorrow:** What's next?

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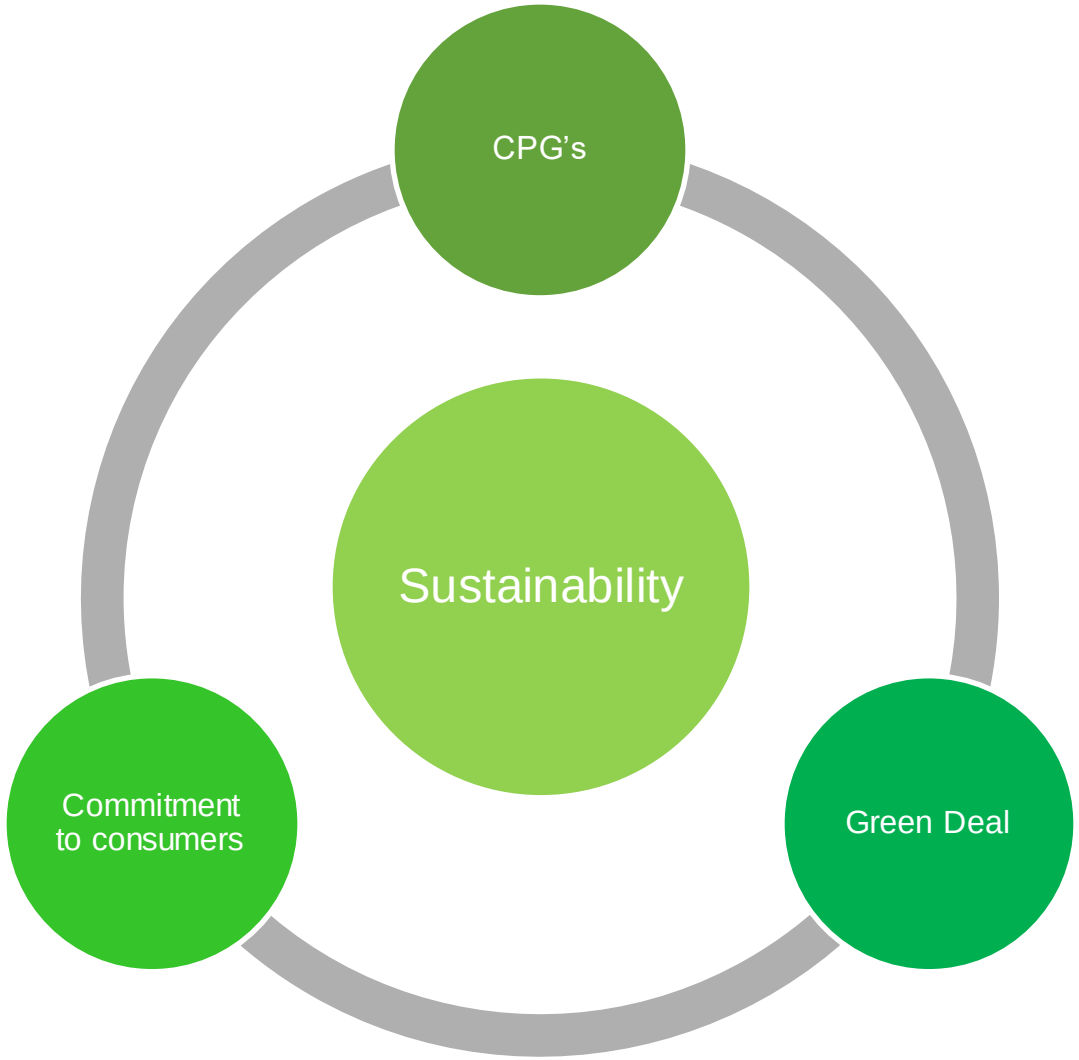
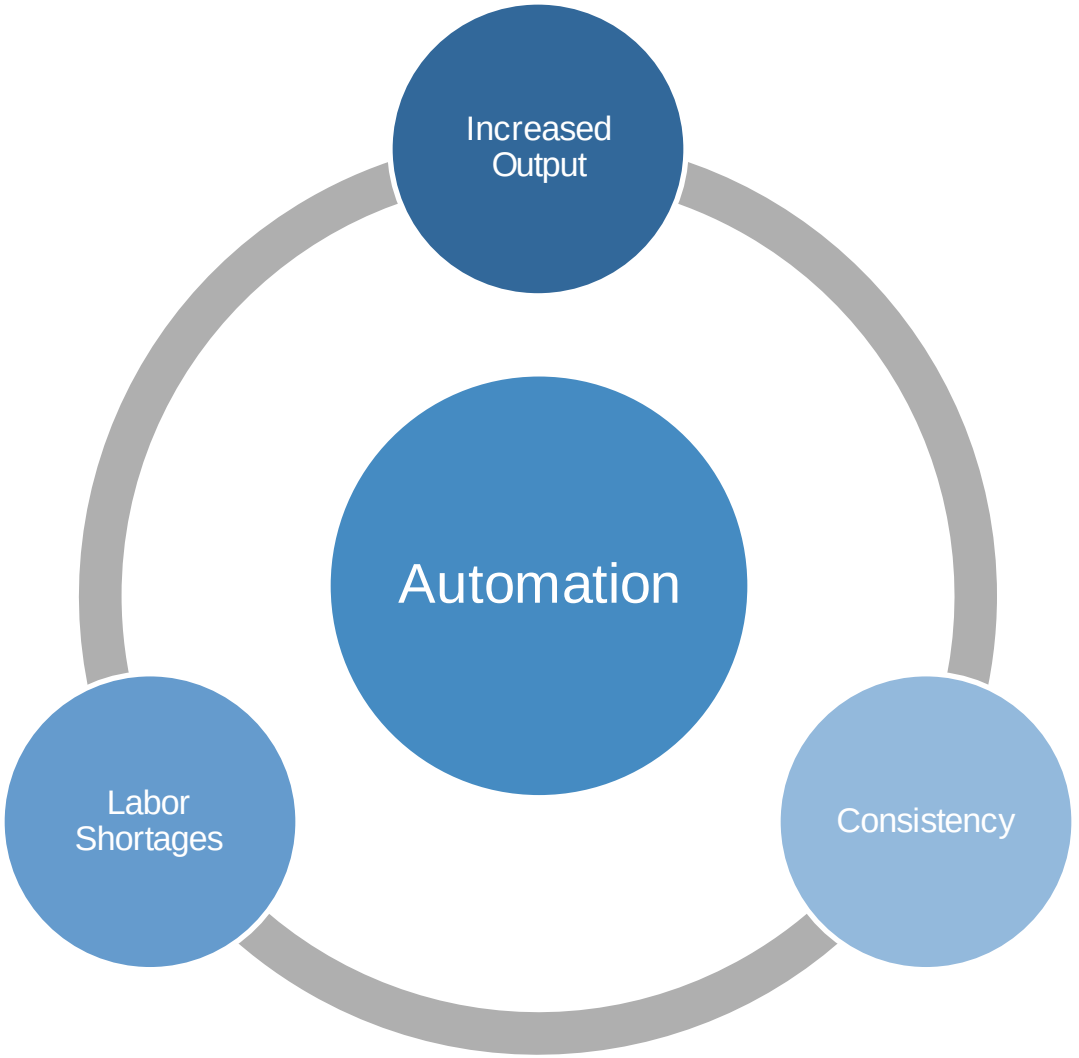
Print Challenges of **Tomorrow**

What's Next?





Print Challenges of Tomorrow

Sustainability

Our Sustainability Goals:

- Reduction of emissions
- Responsible sourcing
- Use of recycled and bio-based materials
- Circularity and reduction of waste
- Enable sustainability at our customers

How can we help our customers meet their goals?

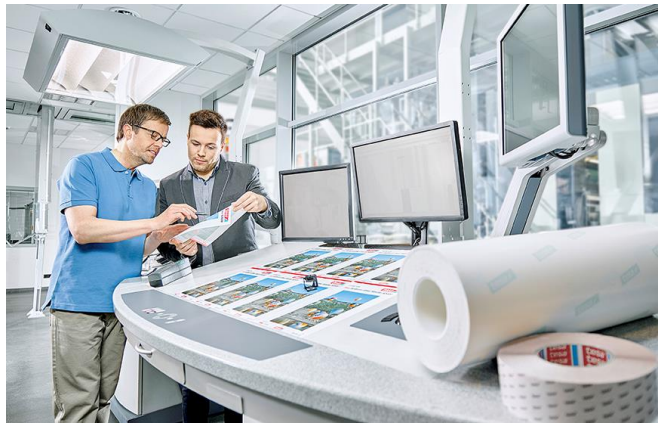
- Review our product assortment
  - Redesign where possible – add additional value
- Add new products where it makes sense
  - Twinlock

Print Challenges of Tomorrow

Automation

How can we help design our products to be more efficient?

- Adapting to the latest technology
  - Plate mounting tape compatible with AVF's RoboTAPE
- Developing splicing tapes that allow our customers to maximize their equipment
  - 51948- Filmline Black X
    - Splices at 2,000 ft/min



Thank you for your attention!

Alix Guyot

Keara Wingert

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Learn more about our company
www.tesa.com/en-us/industry/paper-print