Smart Bonding for Flexo

Tools that make every job an efficient one

A crucial part of smart bonding for flexo is the DuploFLEX® Toolbox. Each of its individual tools helps to make sure you always end up with the perfect mounting process. Additional components, e.g. cleaners or primer pens, can be ordered separately.



Duplo**FLEX® 5**

For the 0.50 mm / 20 thou application thickness

Fine process work, brilliant halftones, a perfect solid and clean fonts. Whatever print image you set out to achieve – the DuploFLEX® 5 range ensures excellent results, because it's the established and proven allrounder using state-of-theart-technology

Common set up:

- Viscoelastic composite structure for excellent printing quality
- Best in class plate mounting and demounting with engineered acrylic adhesive
- Embossed liner for easy handling
- 0.55 mm / 22 thou tape thickness

Desired print image	Foam	Product
Fine process work, highlights and very fine lines (minimized dot gain)	Soft	DuploFLEX® 5.1
Process work, brilliant half- tones and fine lines	Medium soft	DuploFLEX® 5.2
Halftones and lines, a combination of solids, line work and screen	Medium firm	DuploFLEX® 5.3
Solids, lines, large fonts (dense ink coverage)	Firm	DuploFLEX® 5.4

Duplo**FLEX® 5 GRIP**

Reliable printing quality combined with improved sustainability

DuploFLEX® 5 GRIP offers you an optimized grip to plate and sleeve, with the adhesion being balanced by a smooth peel, making edge lifting no longer a problem. Do not worry about temperature, solvent resistance or humidity extremes – the more robust adhesives of DuploFLEX® 5 GRIP are well equipped to withstand those influences.



Best in class plate mounting and demounting with engineered pure acrylic adhesive

Viscoelastic composite structure for excellent printing quality

New solvent-free pure acrylic adhesive formula with perfect **GRIP** to the sleeve side

The new DuploFLEX® 5 GRIP offers:

- Excellent grip to the sleeve side
- Increased sustainability with 50 % reduction of solvent used in the adhesive coating process
- Industry proven print quality due to multi-layer composite structure

What printers have observed when switching to DuploFLEX® 5 GRIP:

- "The tape sticks very well on the sleeve, facilitating the plate demounting and we can re-use more often."
- "The solvent-free adhesive and the 100 % recyclable packaging are in line with the targets of our company strategy regarding sustainability."
- "With this tape we could significantly reduce the rate of edge lifting / damaged plates (and related waste) in comparison to a competitive product."

Duplo**FLEX® 3 & 4 EB**

For the 0.38 mm / 15 thou application thickness

Our premium brand offers plate mounting tape solutions for the 0.38 mm category (0.38 mm / 15 thou and 0.44 mm / 17 thou tape thickness) in different foam hardnesses. The new "Engineered Bonding" (EB) adhesive formulation offers an improved reusability performance.

DuploFLEX® 3 EB: 0.38 mm / 15 thou tape thickness

Desired print image		Foam	Product
	Process work, fine lines, halftones (minimized dot gain)	Soft	DuploFLEX® 3.2 EB
	Solids, lines and large fonts (dense ink coverage)	Firm	DuploFLEX® 3.4 EB

DuploFLEX® 4 EB: 0.44 mm / 17 thou tape thickness

Desired print image		Foam	Product
	Highlights, delicate process printing and very fine lines (minimized dot gain)	Soft	DuploFLEX® 4.1 EB
	Combination of solids, line work and screens	Medium	DuploFLEX® 4.2 EB
	Solids, lines and large fonts (dense ink coverage)	Firm	DuploFLEX® 4.4 EB

Duplo**FLEX® FS 55**

Flying splice of flexible packaging material

Customer benefits:

- High tack and good adhesion for low surface energy surfaces
- Very good splitting/separation capability for a smooth and safe roll change
- Can be torn by hand; easy-release split liner
- Easy to apply no requirement for complex tape patterns or multiple tapes

Application fields:

The product is used for flying splices of flexible material in any kind of converting process like flexo and rotogravure printing as well as laminating processes.



FlexoLAB

Our facility for testing, anyalzying and optimizing your process

- Print simulator in a climate chamber
- Plate mounting machines
- Laboratory print unit DuploFLEX® CoronaPen
- Densitometer
- Flexo tape cylinder peel tester
- Printing plate washing unit
- Adaption and analysis of customer processes to create customized best practice solutions
- R&D for flexoprinting applications and technologies
- Trainings, seminars, conventions and workshops for customers, partners and suppliers

Get in touch

More information

With decades of know-how in flexo-industry, our Lohmann FLEXperts will happily accompany you throughout the flexo process and answer all your questions.

Get in touch with us for example by visiting the FlexoLAB, take advantage of personal consultations, a free FlexoLAB analysis or to learn more about our unique DuploFLEX® portfolio. Another way to learn more about our FLEXperts is to just scan the QR-Code.

www.lohmann-tapes.com/flexoprinting





certified since 2011

Cleaner

Start out neat and tidy

Superior cleanliness is vital during the mounting process, as it ensures a smooth workflow of the printing operation and optimized print results. In order to safeguard the best possible adhesion of the tape and the plate, any trace of grease, dust or ink must be avoided. Both sleeve and plate have to be cleaned prior to mounting with an isopropanol-water mixture. Different cleaning agents can interact with the adhesive and/or damage your plate and sleeve.



Squeegee

Precision in every step

The tape can be mounted bubble-free and secure on the cylinder by using a squeegee. Sufficient pressure has to be applied to the tape, especially on the edges, to gain best printing results.



Primer

Optional: when pretreatment is required

When the print design is very challenging and the risk of plate lifting has to be minimized, the edges of the plate can be treated with a primer to increase the tack along the edges and avoid edge lifting. In order to ensure superior attachment or adhesive strength, the solvent of the primer should be completely dry before the plate is mounted.



Duplo**FLEX® Corona Pen**

The future of plate pretreatment

In order to increase the surface energy to prevent edge lifting, the DuploFLEX® Corona Pen can be used as a quick and reliable pre-treatment method. It emits cold plasma (corona treatment) that enables the substrate surface to allow better adhesion between plate and adhesive.

Customer benefits:

- High performance surface pretreatment without heating of substrates
- Improved process security during flexoprinting job by minimized edge lifting
- Easy repositioning of flexoprinting plates even by improved bonding forces (due to localized pretreatment)
- No chemical residues after plate demounting (e.g. primer, adhesives)
- Fast plate pretreatment due to no drying time (e.g. primer, chemical plate sealers)



Roller

Keep your plate damage-free

Exemplary image of a roller

For best printing results a roller is used to squeeze out air bubbles between plate and tape. Sufficent pressure has to be applied on both tape and plate, especially on the edges.



Optional: for the most challenging tasks.

The plate edges can be additionally sealed in order to prevent edge lifting, which may occur during longer print runs or may be caused by washing the plates before or during the press run. An easy and safe method is to protect the edges with the single-sided adhesive tape DuploFLEX® Edge sealing tape





Duplo**FLEX®** Guide

Plate mounting tape solutions for your quality print



