



SHIFT Conference 2023 Dominik Bienkowski

The Flexible Packaging Market Size Worth will be \$373.3 Billion By 2030



Flexible Packaging is expected to grow 4.5% CAGR from 2022 to 2030.

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Short Run Pouch Making

The sweet spot of Narrow Web in Flexible Packaging – between digital & CI





The Sweet Spot of Narrow Web In Flexible Packaging





Characteristics of jobs & Trends

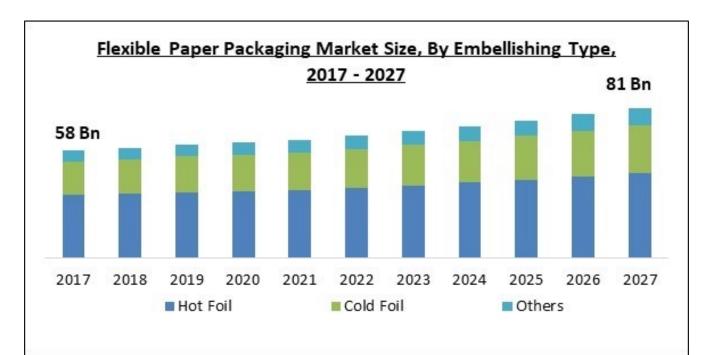
- Almost all pouches are printed with solvent inks.
- More countries are increasing restrictions regarding to use of solvent inks
- Low migration UV inks and water-based inks are available, but relatively expensive vs solvent inks not well accepted by brand owners and printers.



Characteristics of jobs & Trends

Focus on performance or creativity and workmanship?

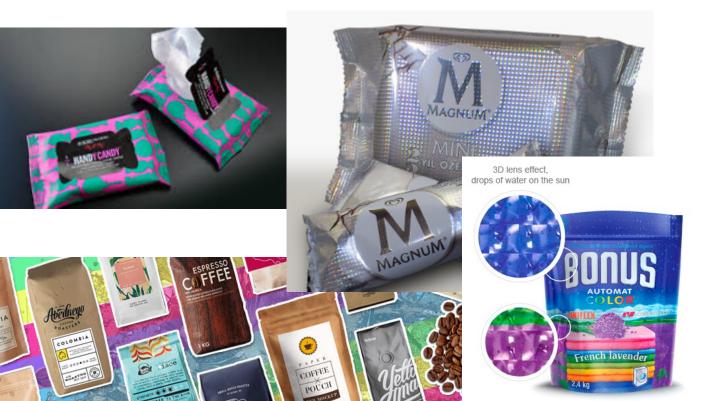
- Mostly performance. Cost per pouch and cost per job.
- Trend towards embellishment, shorter runs.





Characteristics of jobs & Trends

More embellishment.



Flicker effects on the logo and the text



What Machines are used for printing Flexible Packaging?

CI Flexo press

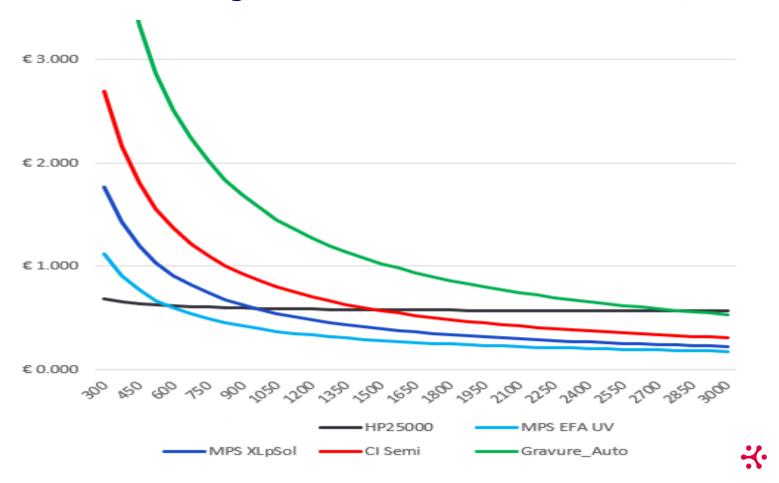




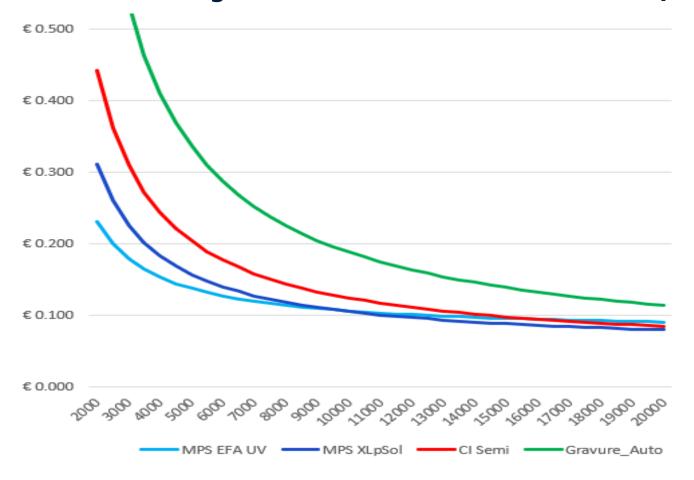




Cross over Points of Digital, Narrow Web, Cl and Gravure presses

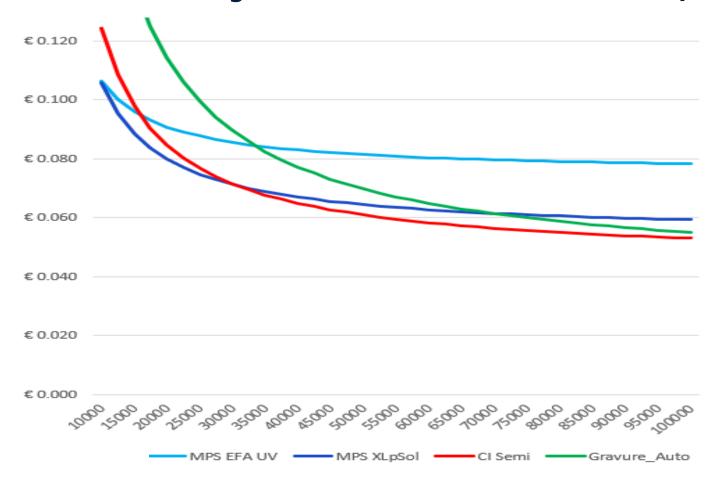


Cross over Points of Digital, Narrow Web, Cl and Gravure presses





Cross over Points of Digital, Narrow Web, Cl and Gravure presses





Advantages of a Narrow Web Press for Pouches

Pro's

 Narrow = Lower cost of tooling vs CI and Gravure and less waste of substrates and inks vs Gravure.

 More economical than CI and Gravure for short runs – below 20,000sqm.

Especially with UV

Advantages of a Narrow Web Press for Pouches

Pro's

- Able to embellish inline
 - Cold foil
 - Cast & Cure
 - Silk screen
- Solvent, Water-based and UV-inks solutions are available

One stop shop (Labels, Pouches, Shrink Sleeves, Wrap around)

Dis-advantages of a Narrow Web Press for Pouches

Con's

- Less suitable for very thin below ca. 12 micron and stretchable substrates like thin PE.
- Max speed is 300 m/min
- Less wide (narrow web of max 680mm).

Dis-advantages of a Narrow Web Press for Pouches

Con's

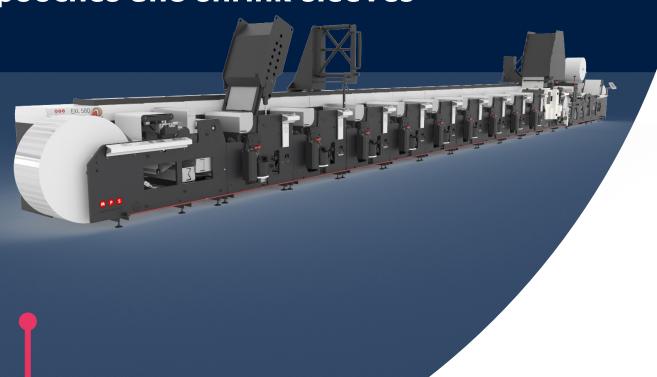
 Less economical for longer runs over ca 20,000 meters vs a Cl press and below ca 1000 meters vs a wide digital press.

The Sweet Spot of Narrow Web Press in Flexible Packaging

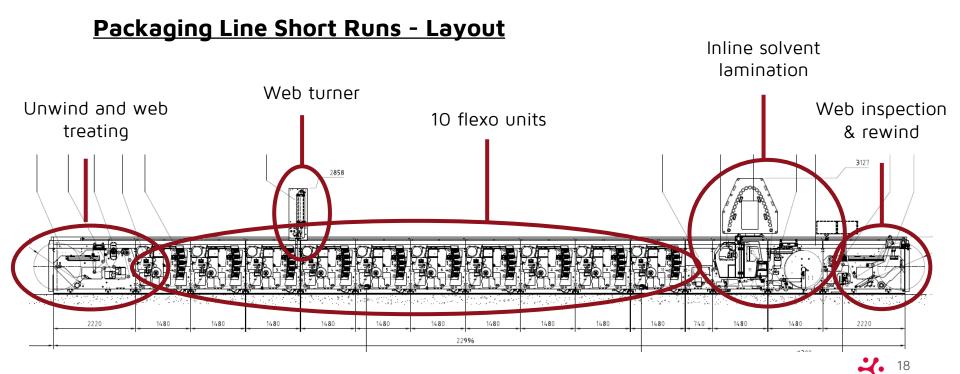


Examples of Narrow Web

Press Configurations for pouches and shrink sleeves



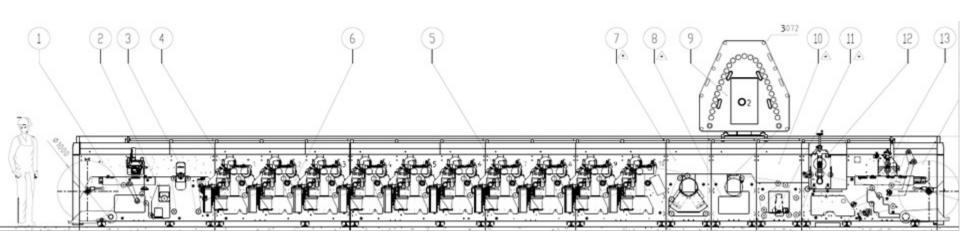
For Solvent Lamination and Printing



Flexible Packaging - Pouches on Narrow Web

For UV Printing & nitrogen

NITROGEN / INERT GAS DRYING (PLUS HOT_AIR DRYING TO REDUCE ODOR)



Thermal Lamination

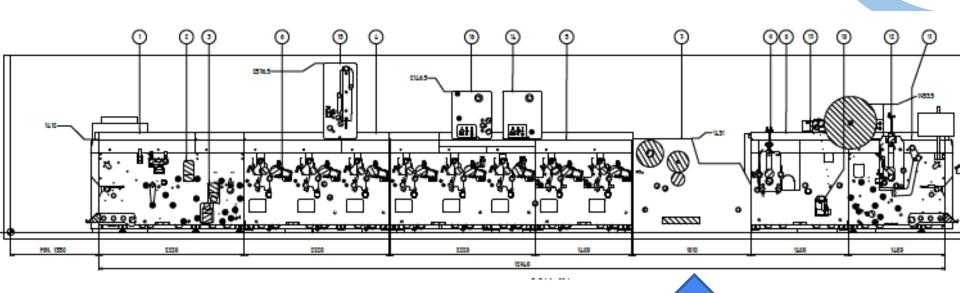


Speed of max. 100 m/min



Thermal Lamination

MPS can integrate a Thermal Laminator inline or on the rail





Questions?

feel free to ask





