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# FLEXIBLE PACKAGING

A DEEP DIVE





# DIGITAL PACKAGING PRODUCTION WHAT ARE THE DRIVERS?

#### THE GLOBAL E-COMMERCE PACKAGING MARKET

#### PROJECTED TO DEVELOP AT A CAGR OF 15.87% PERCENT, REACHING A TOTAL MARKET VALUE OF US\$98.856 BILLION BY 2027

MORE SKUS, SHORTER RUNS, MORE INNOVATION REDUCE, REUSE, RECYCLE





#### PACKAGING







# WHY FLEXIBLE PACKAGING?

- LOWER LIFECYCLE ENERGY CONSUMPTION OVER RIGID PACKAGING
- PRESERVES AND PROTECTS PRODUCTS
- EXTENDS SHELF LIFE
- CONVENIENCE
- SHELF APPEAL
- IN EUROPE FOOD PACKAGING
  - 10% OF ALL MATERIALS
  - 40% OF PRODUCT







# FLEXIBLE PACKAGING PROJECTED GLOBAL GROWTH 2022 – 2027

Flexible Packaging Production by Technology Includes: Bags, Sacks, Pouches, etc. Growth Total 16.24% Growth Digital 53.97% Currently dominated by Gravure and Flexo

Offset litho Gravure Flexo Screen Other analogue Digital





#### TOP FLEXIBLE PACKAGING PROVIDERS







# DIGITAL FLEXIBLE PACKAGING

- STARTED 2016
- OVER \$200M ANNUAL REVENUE
- 600% GROWTH OVER LAST 3 YEARS
- 26 GLOBAL LOCATIONS WITH 36 PLANNED
- RECENT FUNDING ROUND AMCOR



NEW ENTRY – FAMILIAR BRAND







# VARIETY OF DESIGNS



. . . .

100 from \$432.00

 $\bigcirc \bullet \bullet \bullet$ 

58.5 oz. (8.125" x 10" x 3.5")

100 from \$432.00

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+1~ 💿 💿 🔹

+1~

+1~  $\heartsuit$ 

+1~



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+2~ 🔘 🔹 🔍



58.5 oz. (8.125" x 10" x 3.5") 100 from \$432.00

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100 from \$432.00

58.5 oz. (8.125" x 10" x 3.5")

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+1~ 💿 • • •



58.5 oz. (8.125" x 10" x 3.5") 100 from \$432.00



+1~ 🔘 😐 🔹



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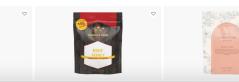


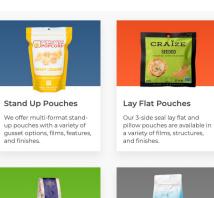
58.5 oz. (8.125" x 10" x 3.5")

100 from \$432.00

100 from \$432.00 0 • • •

58.5 oz. (8.125" x 10" x 3.5")







SEEDED

Flat Bottom Pouches

Flat bottom pouches are a cost-effective way to enhance shelf presence, making them an ideal choice for various products.

**Child Resistant** 

resealable options.

Our certified child-resistant

stand up and lay-flat pouches

are available in single-use and



Rollstock

Our full color rollstock is produced with solventless lamination. Choose your unwind + max outer diameter.





Stick Pack Packaging

Are you packaging on-the-go flavorings, single-serve nutritional supplements, or your gourmet instant coffee for your road warrior client



Flow Wrap Packaging resistant option chosen by many snack brands for its



**Quad Seal Pouches** 

Our quad seal packaging

and vibrant printing for

and protection.

offers custom sizing, materials,

standout product presentation



friendly pouches and roll stock that perform well and look great on the shelf.





Films



We provide an extensive selection of film types, structures, and finishes with a range of barrier properties.





Sustainable Packaging

We offer several types of eco-



# WEB 2 PACK

🛱 BoxFinder				2D 3D 🗄 🖽
Find your packaging by size	Ŕ		Ŕ	
Cardboard	Tuck end box Reverse tuck end	Tuck end box Aero tuck to back	Tuck end box Same panel tuck	1-2-3 bottom box Tuck to back
	1-2-3 bottom box Tuck to front	Auto bottom box Tuck to back	Auto bottom box Tuck to front	Deluxe bellow box With locking flap 1-2-3 bottom
	Deluxe bellow box With locking flap auto bottom	Box with bottle tube neck lock Tuck to front 1-2-3 bottom	Box with bottle tube neck lock Tuck to front auto bottom	Rollover hinged lid Standard
	Rollover hinged lid	Rollover hinged lid	Rollover hinged lid	Rollover hinged lid





- BOPP

Barrier adhesive

metallization

Heat Sealable BOPP

→ AluBond®

BOBST

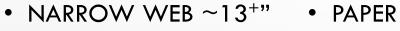
AluBond® &

lamination

technology

# PRESS SIZES AND MATERIALS

Outer layer: strong, printable surface, e.g. PET -Tie layer: e.g. PU PLASTIC(S) Barrier layer: gas barrier, e.g. PVdC or aluminum Tie layer Abrasion resistant layer, e.g. PA Food contact layer: strong, heat sealable, moisture barrier, e.g. PE, PP **BOBST enabling technology** MPET replacement 3 Layers Mixed Material 2 Layer Mono Material > PET Metallization PET – PE OTR: <1 cc/m2/day OTR: <1 cc/m2/day WVTR: <1 gm/m2/day WVTR: <1 gm/m2/day Source: Film courtesy of Flex Films, division of Uflex



- MID WEB  $\sim 30^{+}$ "
- WIDE WEB  $\sim 40^{+}$ "
- FILM(S)
- ALUMINUM FOIL
- MULTI-LAYER

ZWANG & MPAN

**Application Specific Drivers** 



# PLASTIC VS. PAPER

#### • PLASTIC

- MORE DURABLE
- CAN BE RECYCLED...BUT
- LESS RESOURCES TO MANUFACTURE
- NOT ALL PLASTICS ALIKE

- PAPER
  - LESS DURABLE
  - 'COULD' GO IN REGULAR TRASH STREAM
  - HIGHER ENERGY COST TO MANUFACTURE
  - HIGHER CONSUMER ACCEPTANCE

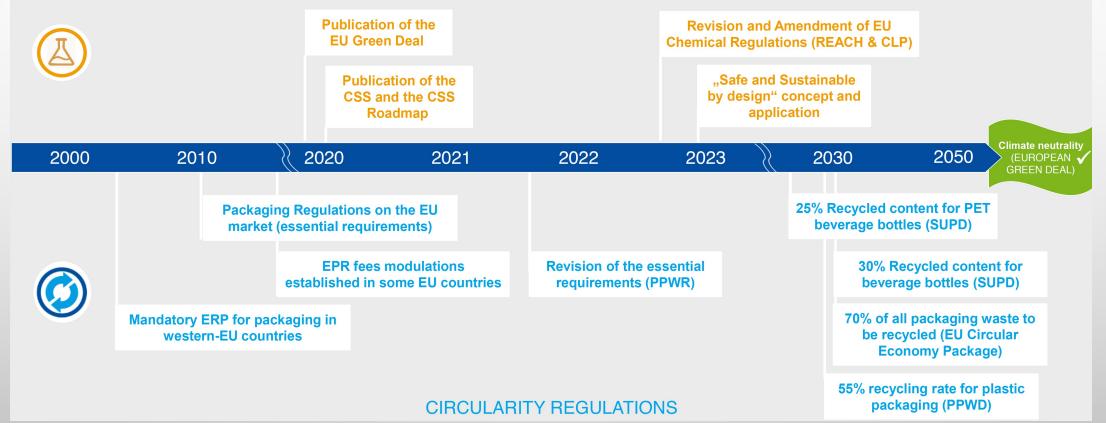
**Application Specific Drivers** 





# SUSTAINABILITY IS MORE THAN JUST A GOOD IDEA

#### CHEMICAL REGULATION FRAMEWORK







#### FLEXIBLE PACKAGING EP



 $^{\odot}\,\text{HP}$  Indigo 25K



 $^{\odot}$  HP Indigo 200K







# FLEXIBLE PACKAGING INKJET – NARROW WEB





### FLEXIBLE PACKAGING UV INKJET – MID WEB



#### Hybrid Presses

- Bobst
- Gallus
- MPS
- Nilpeter
- Omet





#### AQUEOUS INKJET- MID WEB















#### LANDA W10P AQUEOUS INKJET MID WEB



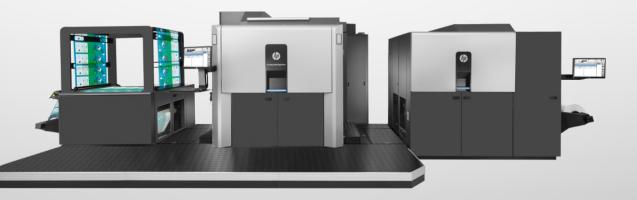




 $^{\odot}$  Screen Truepress PAC

#### PAPER BASED



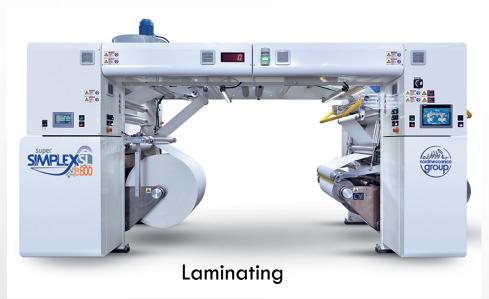




<sup>©</sup> HP 25K or 200K

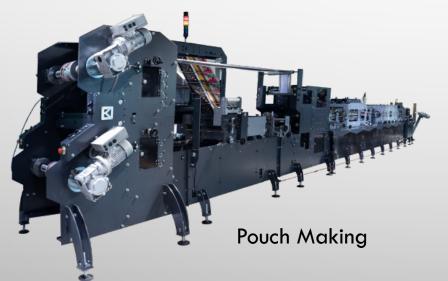


#### PRINTED - NOW WHAT?





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### A FEW TAKEAWAYS

- LABEL PRESSES CAN HELP YOU ENTER MARKET
- MID WEB OFFERS MORE OPTIONS
- EP HAS A TRACK RECORD
- INKJET 'CAN' BE MORE COST EFFECTIVE
- AQUEOUS OFFERS MORE OPTIONS FOR FOOD SAFE AND SUSTAINABILITY
- APPLICATION, APPLICATION, APPLICATION





# THANKS!

david@zwang.com

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