

# Shaped Paper Pods Form-Fill-Seal Technology.

TPU 1000

## SHAPED PAPER PODS

Shaped paper pods are 3-dimensionally formed paper-based packaging solutions for portion packs, that have been jointly developed by the paper manufacturer BillerudKorsnäs and Syntegon. Various products can be filled and packed, ranging from non-food applications to cosmetics and foods, like chewing gums, spreads, dips, cookies, and chocolates.

## A COMPACT MACHINE FOR PRECISION PAPER FORMING

The TPU 1000 is a compact and modular form-fill-seal machine designed for product launch, small or medium size production and multi-purpose solutions. With a speed of up to 15,000 packs per hour, the machine is suitable for various products and filling technologies. Working from the paper reel, the material is formed with precision servo drive technology, enabling high quality shapes and embossing of the pods. The volume of the shaped paper pods ranges from 10 up to 100 ml. The touch and feel of the material creates a unique consumer experience.

## SUSTAINABLE PACKAGING DESIGN

FibreForm® is a stretchable paper material from BillerudKorsnäs, allowing up to 10 times deeper embossing compared to conventional paper. This creates unique 3D effects with tailor-made haptics and optics that differentiate from existing solutions in the market. Various types of barriers can be applied to the paper to ensure the necessary product protection. With shaped paper pods, we come closer to packaging solutions that require less fossil resources and which also can be realized as a fully bio-based solution.

## CONVINCE YOURSELF

Shaped paper pods are an alternative to polymer packaging and can be transferred to production scale. Make use of our testing services: we can produce customized prototypes for your packaging and consumer tests.



## Your benefits

- ▣ Replacing fossil with renewable packaging materials and adapted barrier and sealing layers
- ▣ Tailor-made and eye catching packaging with a unique sensory experience
- ▣ Perfect combination of technology and material for scalable and future-oriented solutions
- ▣ Compact and modular form-fill-seal machine design with high precision forming technology



# Shaped Paper Pods.

Product Handling			Primary Packaging			Secondary Packaging			
Distribution	Feeding	Pick & Place	Horizontal Form-Fill-Seal	Vertical Form-Fill-Seal	Filling Machines Liquid	Top-loading	Cartoning	Case Packing	Sleeving
Paper Form-Fill-Seal									

## Machine Features:

Modular machine design

## Standard Features:

- ❑ Heating of material
- ❑ Forming of material
- ❑ Filling option
- ❑ Heat sealing
- ❑ Die cutting
- ❑ Waste disposal container
- ❑ Interface to downstream equipment
- ❑ Eye mark detection (top and bottom)
- ❑ HMI

## Machine Options:

- ❑ QR-code-printer
- ❑ Inspection option

## Filler:

- ❑ Pick & Place
- ❑ Viscous filler with CIP option

## Hygienic Package:

- ❑ Material decontamination
- ❑ Modified atmosphere
- ❑ Laminar flow

## Packaging Options:

- ❑ Single cavity
- ❑ Multi cavity
- ❑ 2x2 allocation: 8,000 to 15,000 packs/h

## Material:

- ❑ FibreForm® (100 g/m2, 150 g/m2, 200 g/m2, 310 g/m2)
- ❑ Barrier layer: polymer-based thermo-formable materials

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## Technical Specifications

Feature	min.	max.
<b>General</b>		
Machine speed	5 strokes per min	45 strokes per min
Web width		300 mm
Reel diameter (bottom web)		600 mm (core: 152,4 mm / 6")
Reel diameter (top web)		400 mm (core: 76,2 mm / 3")
Package format (length x width)		190 X 240 mm
Draw-off length	100 mm	200 mm
Machine dimensions (width x length x height)	1,000 X 5,500 X 2,500 mm (doors closed, without waste disposal container)	2,700 X 6,500 X 2,500 mm (doors open, incl. waste disposal container)
<b>Heating Station</b>		
Heating plate temperature		165 °C
Heating pressure		15 kN
<b>Sealing Station</b>		
Sealing temperature		220 °C
Sealing force		15 kN
<b>Cutting Station</b>		
Cutting speed		0,14 m/s
Cutting stroke length		80 mm
Max. cutting format		190 X 240 mm