

# BMI/BIW

Outer Sleeve Forming



## BMI / BIW

Drinking Cups  
Ice Cream Cups  
Noodle Cups

Fast Food Containers  
Insulated Double Wall Cups

The BMI/BIW outer sleeve machines complete the range of paper cup forming machines within the HÖRAUF production program. These machines were developed upon market demands and customer requirements, and are based on the proven systems of HÖRAUF's cup forming equipment. Different systems are available for each individual requirement.

### The BIW - Principle

The pre-formed inner cups are fed into the machine overhead. There, the cups are separated and individually positioned on the mandrel of the forming star. This forming star is basically a copy of the proven system found on the cup forming machines. At the same time, the outer sleeve blank is fed into the machine passing the

gluing stations where glue is applied to the outer sleeve blank. The wrapping process itself is also a copy from our proven cup forming systems, yet here the blank is wrapped around the finished inner cup on which glue can be applied too. The pressure bar immediately assures a sufficient seal before the finished double wall cup is transferred out of the machine.

### The BMI - Principle

The outer sleeve machines correspond in size range with the HÖRAUF paper cup forming machines. Therefore, they are suitable for all common coffee cup sizes (including the 22/24oz coffee cup size ranges) as well as for the noodle cups with larger top diameters, which are very popular in the Asian markets.

The in-feed and forming process of the outer sleeve is basically the same as known from the cup forming machines, but with a gluing system instead of the hot air sealing system for the side seam sealing.

The completely formed outer sleeve with and without the in-curved bottom edge is then transferred into another turret/table (depending on machine model).

Parallel to this process, the inner cup is fed overhead into the machine and, by means of a mandrel-turret, inserted into the finished outer sleeve. Beforehand, glue is being applied to the inner cup. Multiple stations allow final and accurate positioning and marriage of the two components, which together makes it the most advanced (air)-insulated double wall cup.

### Technology

The HÖRAUF outer sleeve machines operate mechanically with indexing gears for accurate movement and transfers to the following processing stations at high speed.

All stations offer the necessary controls to stop the machine in case of any fault. All heaters (where applied) are microprocessor controlled and allow production only after reaching the set temperature. Integrated, fully automatic lubrication system and oil mist lubrication for the drive are standard.

### Advantages

- > Compact machine design requiring little floor space
- > High capacity
- > Great flexibility due to fast tool conversion
- > Easy access to all processing stations as well as to the drive system (for maintenance)
- > Production status and trouble shooting via control panel

### Standard Equipment

- > Central electrical control cabinet
- > Variable speed of main drive
- > Oil mist lubrication for drive parts
- > Central lubrication
- > Min./max.-controls for cup infeed

### Optional Equipment

- > Blanker unit (roll-fed-system)
- > Prepile belt (to pre-load blank material)
- > Available in size ranges to match with HÖRAUF paper cup forming machines

### Accessories

- > Vacuum pump
- > Cup counting and collecting device
- > Film sleeve packaging machine



Gluing and heating of the blank



In-curling and calibration



Folding of the outer shell



Transfer of the outer shell



Insertion of the cup into the pre-glued outer shell

# BMI

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Compact and Efficient

## BMI

The BMI-machines form an outer sleeve with and without an in-curl at the bottom edge and combine the sleeve with the paper cup to make it an (air-) insulated cup.

Depending on the size range, application and customer's requirements, different machine models are available.

## BIW

Based on the concept of the proven forming turret of the HÖRAUF paper cup machine, this unit wraps an outer sleeve around a pre-formed cup.

The blank infeed and wrapping process are taken from the proven BMP-System and therefore offers the most accurate wrap.

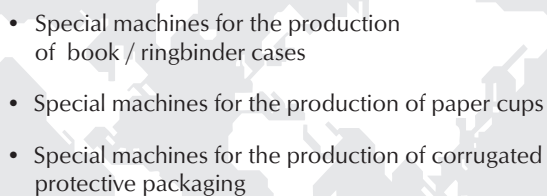
The finished product offers the insulation effect while still being nearly as stackable as a regular single wall cup.



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## Outer Sleeve Forming

HÖRAUF is a renowned manufacturer  
of special machines for the paper processing industry.

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- Special machines for the production  
of book / ringbinder cases
  - Special machines for the production of paper cups
  - Special machines for the production of corrugated  
protective packaging

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# HÖRAUF

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