

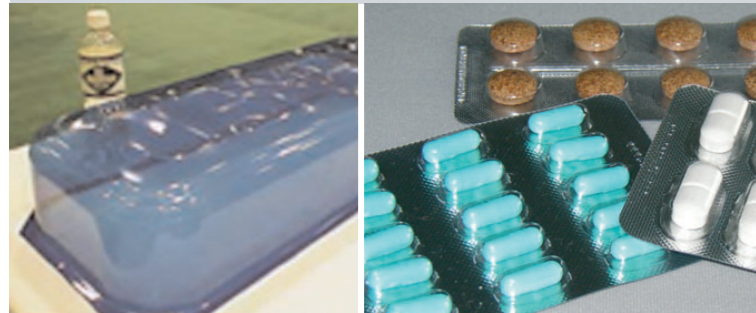
UNIVERSAL machines can be equipped with the following options:

- Central air exhaust porting for clean room operation
- Alarm functions for air pressure/temperature monitoring
- Code embossing via steel characters mounted in the tooling or sealing plate
- Packing of items up to 1500 mm in length (special sized machines)
- Gas flushing
- Centralized table height adjustment system
- High pressure seal station
- Allen Bradley PLC control (Omron Standard)
- Customization for your packaging needs



universal
BLISTER PACKAGING MACHINE WHICH FORMS AND SEALS IN ONE OPERATION

BLISTER PACKAGING SOLUTIONS



UNIVERSAL

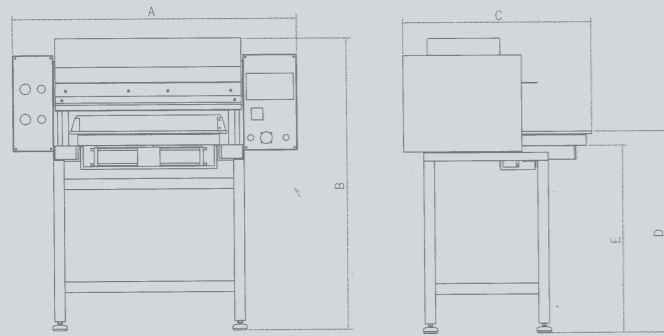
- an easy to operate, versatile machine, based on more than 30 years of experience - at absolutely competitive prices!



Malervej 6 • DK-67010 Esbjerg V
 Phone: +45 75 15 32 00
 Fax: +45 75 15 02 32
 E-mail: tn@tommy-nielsen.dk
 www.tommy-nielsen.dk

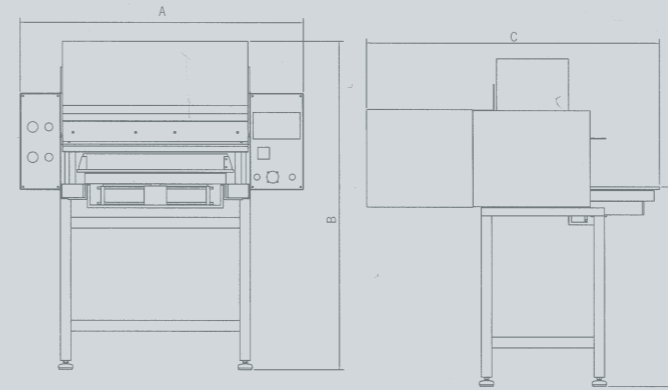
301 FS - 501 FS

UNIVERSAL 301 FSX - 501 FSX



UNIVERSAL	301 FS	501 FS
A	1085	1280
B	1105	1105
C	710	840
D	755	755

UNIVERSAL	301 FS	501 FS
Function	Forming & sealing	Forming & sealing
Turntable	Automatic	Automatic
Program change	Automatic	Automatic
Heating plate (mm)	200 x 400	300 x 500
Max. blister depth (mm)	100	100
Max. sealing pressure at 7 bar (kg)	2000	2000
Heating plate output (W)	1600	2100
Air consumption (litre/cycle at 7 bar operating pressure)	30	30
Max. load (amp)	10	10
Mains connection (V)	230 + PE	230 + PE
Weight (kg)	180	210



UNIVERSAL	301 FSX	501 FSX
A	1085	1280
B	1240	1240
C	1120	1345
D	755	755

UNIVERSAL	301 FSX	501 FSX
Function	Forming & sealing	Forming & sealing
Turntable	Automatic	Automatic
Program change	Automatic	Automatic
Heating plate (mm)	200 x 400	300 x 500
Max. blister depth (mm)	100	100
Max. sealing pressure at 7 bar (kg)	2000	2000
Heating plate output (W)	2500	3500
Air consumption (litre/cycle at 7 bar operating pressure)	38	38
Max. load (amp)	16	16
Mains connection (V)	3x400 + PE	3x400 + PE
Weight (kg)	210	240



UNIVERSAL FS and FSX

UNIVERSAL machines are semi-automatic blister packaging machines that form and seal the blister in the same cycle. **UNIVERSAL** machines can be easily reprogrammed to either form or seal only depending on your needs. For machine operation, you need either precut sheets or pre-punched blanks of blister material and lid.

UNIVERSAL machines are flexible for all types of blister packaging applications and uses in a wide range of industries. Packaging of items as pencils and hardware to the packing of medical devices and pharmaceutical products are all ideal applications.

The **UNIVERSAL** machines utilize a wide range of forming materials including, PVC, PETG, PETGAG, APET, and POLYSTYRENE. Almost all heat sealable lid materials are compatible including CARDBOARD, PLASTICS, ALUMINUM FOIL, TYVEK, MEDICAL PAPER or MYLAR.

Materials up to 90 mil (2 mm) thickness can be formed on the **UNIVERSAL** machines.

The machines work with 2 identical tool blocks which are placed on a rotary turntable – each block is used for both forming and sealing of the blisters which ensures a continuous working process.

Capacity depends on the blister form, packaging material and operator capability. More than 600 packages per hour are possible with many applications

What advantages are there by using a **UNIVERSAL** machine for the production of your blisters?

Low machine investment costs

Portable

Easy validation

Inexpensive tooling (the same tooling is used for forming and sealing)

Fast machine setting/resetting, change of tools is 5 minutes or less

No need to stock preformed blisters (avoids particulate contamination, saves space)

Easy touch screen operator interface

UNIVERSAL FS and FSX

UNIVERSAL FS Series machines utilize 1 heating plate for both the forming and sealing operations.

UNIVERSAL FSX Series machines employ 2 heating plates, where the second heating plate, (seal plate) automatically cycles in during the sealing process. The use of the **FSX** series is recommended when:

Material forming and sealing temperature are not identical (ie. PVC is formed at about 120c - aluminum foil lid is sealed at about 160c to 200c)

When specialized sealing plates are employed for tablet blisters (knurled pattern) or Tyvek (machined pattern seal shape)

Applications for blister to board or card/wallet sealing

Thus the **UNIVERSAL FSX** machines are ideal for the packing of medical devices and pharmaceutical products. Additionally offered is a **UNIVERSAL** Series machine for package sealing only - the **UNIVERSAL S**-type. This machine is delivered without forming components or PLC, but can be easily upgraded for seal pressure or temperature monitoring.