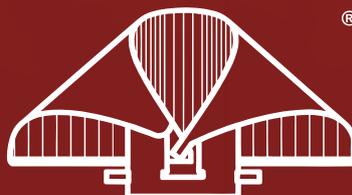


TOSS film forming system

... perfect bag forming – guaranteed ...



Made in Germany



TOSS



Your partner for packaging solutions and accessories

About us



TOSS-GmbH was established in 1967 and later became the TOSS Group. Today, the group maintains a staff of 174 employees at its sites in Alten-Buseck, Berlin and Freital (Dresden) in Germany. The North American market is serviced by TOSS Machine Components, an independent subsidiary.

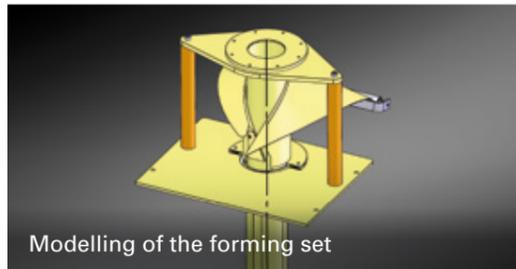
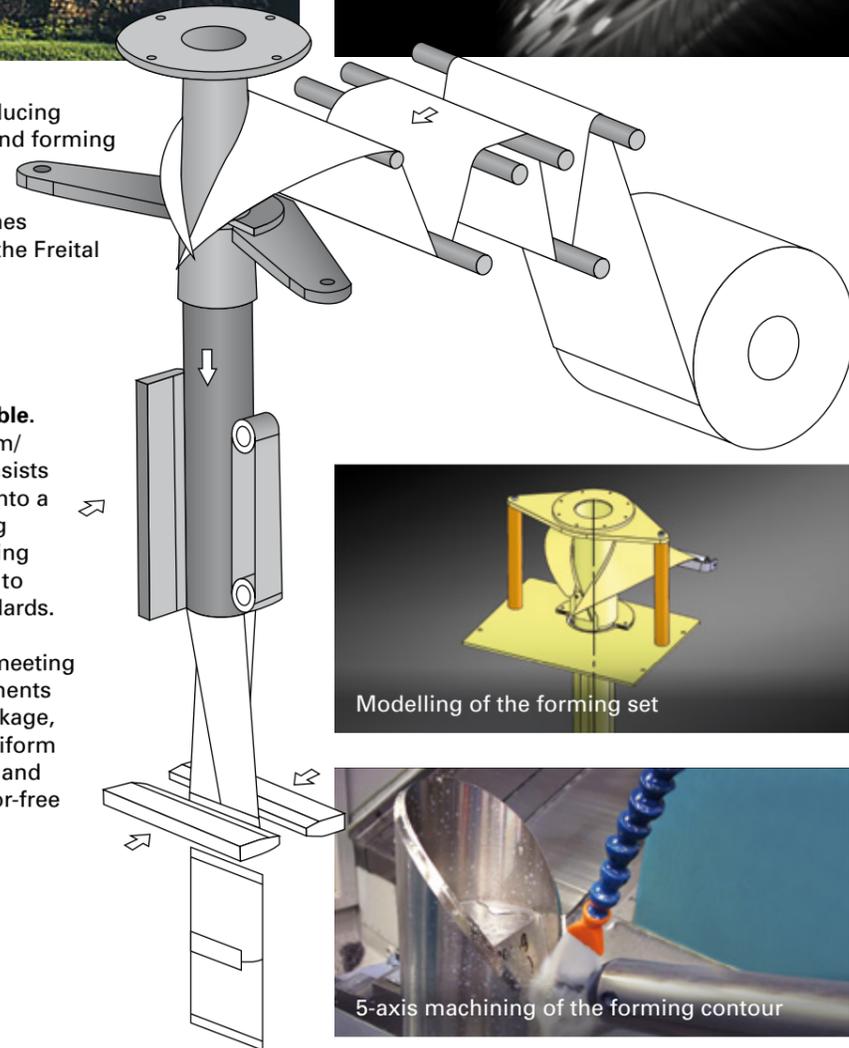
The processing of polymeric films used in product packaging has been our focus from the very beginning.



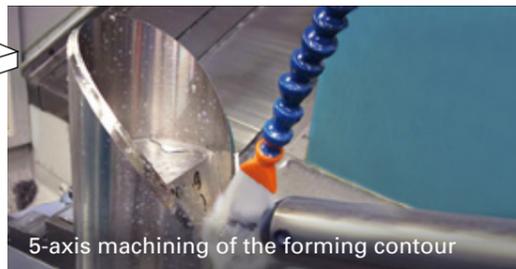
TOSS has been producing forming shoulders and forming sets for numerous manufacturers of form/fill/seal machines for over 20 years in the Freital (Dresden) factory.

They are indispensable. The heart of any form/fill/seal machine consists of forming flat film into a tube. Today, forming shoulders and forming sets are engineered to meet very high standards.

They are crucial for meeting the specific requirements of the individual package, for maintaining a uniform look of the package, and providing for an error-free machine run.



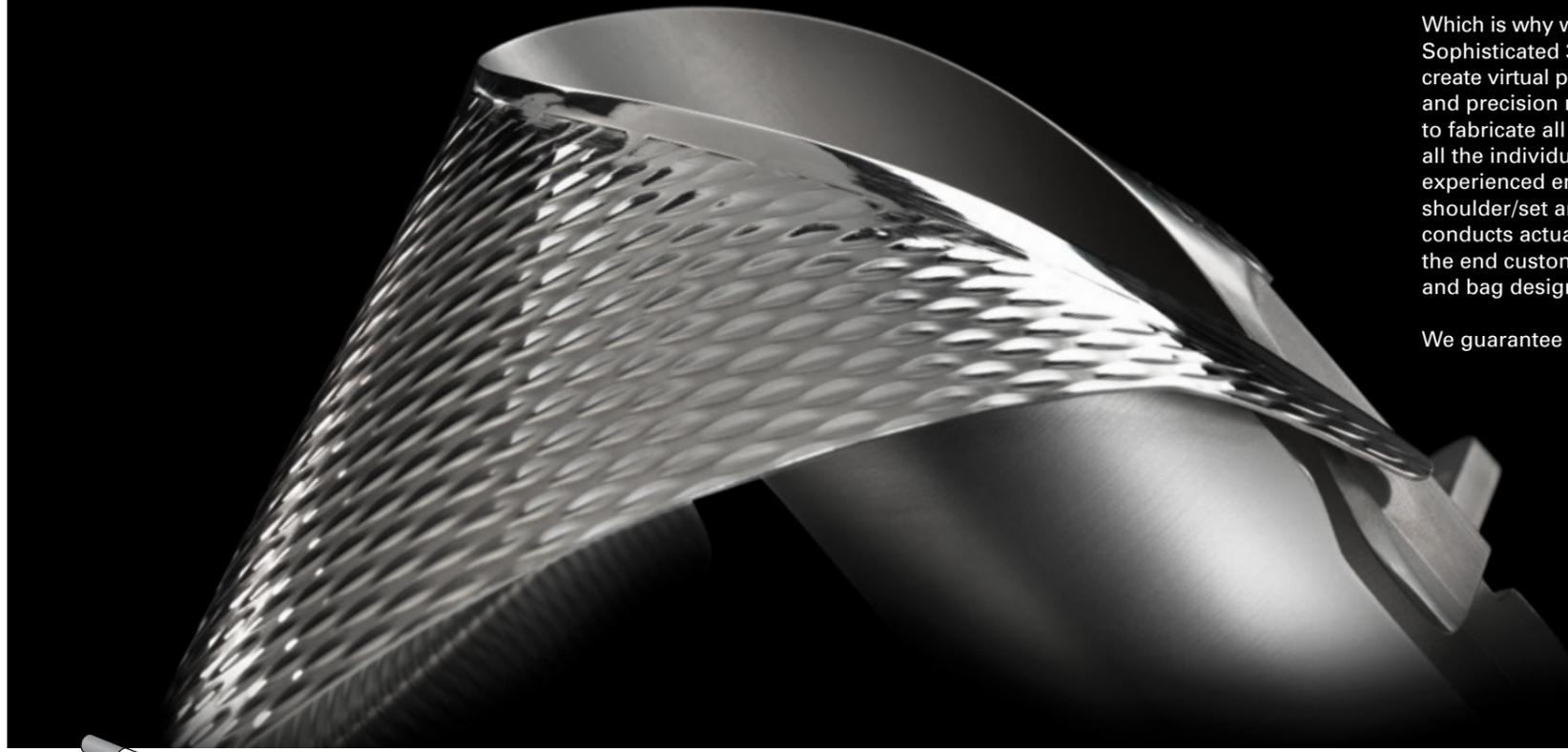
Modelling of the forming set



5-axis machining of the forming contour

TOSS film moulding systems forming shoulder systems

The form is crucial ...



Which is why we do not leave anything to chance. Sophisticated 3D imaging software is used to create virtual prototypes of our forming shoulders and precision machining techniques are used to fabricate all the required components. Once all the individual components are complete, experienced employees assemble the forming shoulder/set and our quality control team conducts actual testing with film supplied by the end customer to insure proper film tracking and bag design.

We guarantee the properties of our products.

Friction cannot be avoided, particularly for forming shoulders, and friction inevitably results in wear. For this reason, we pay close attention to the interaction of film and forming shoulder surface during construction so as to provide for evenly distributed wear. This results in a longer service life of the shoulder and can also benefit the service life of pull belts. In addition, modern hard coating can make the surface more durable than uncoated stainless steel.



Final assembly and finish

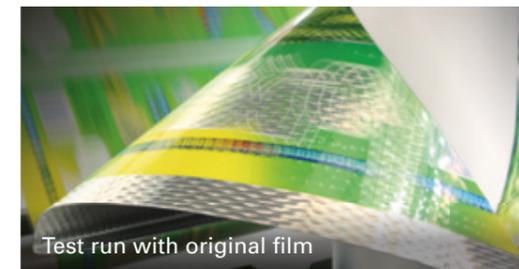
Is this much effort necessary?

The design principle of a forming shoulder would be made simpler if only one type of film was used for all applications.

But in reality, new films are engineered every day and all possess very unique properties. They can differ with regard to structure, thickness, surface quality and sealing capabilities. Add these to the bag form, size and production speed and designing a high quality forming shoulder/set just became more difficult. We must account for all of these various factors in order to design and produce a forming shoulder capable of providing superior film tracking across the entire width.

Thus avoiding superficial damage of the packaging material.

Investing in a high-quality forming shoulder is definitely worth it.



Test run with original film

TOSS film moulding systems forming shoulder systems

Round shoulders

Round shoulders

They represent the most common design. They are suited for simple packaging tasks and can include the packaging of sweets, snacks and frozen products.



The classic



Forming shoulder for stick packs



Fin seam in centre facing forward



Forming shoulder with integrated last tensioning/tracking roller

Rectangular forming shoulders

Rectangular shoulders

These can be used to produce packaging with complex designs. This includes block packaging and bags with edge folding or sealing. They are also suitable for extra large bag formats and bags with the seam at a corner, which a round shoulder on the same machine cannot reach.



Forming shoulder for edge sealing, fin seam at the top right bag edge



Hygienic design



Reforming of centre folded film

Filling pipe and funnel

Filling pipe and funnel, together with the forming shoulder make up the indispensable elements for a form/fill/seal machine. They guide the product into the bag.



TOSS film moulding systems forming shoulder systems

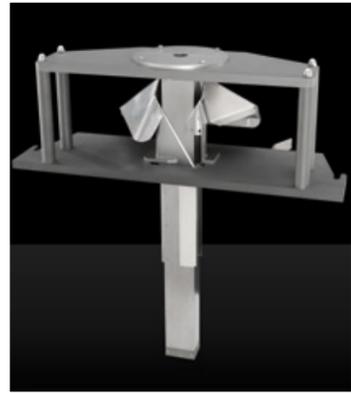
Forming sets

The **forming set** generally consists of a forming shoulder, filling pipe with spreader ring or chute and one holder. Forming sets can also be equipped with funnels, exhausts, gas supply and many more components.

It consists of all the parts required to completely assemble and fill the desired package.



Forming set with valve channel



Options

Various options are available to provide for additional functions that may be required in the production of unique bag designs.

These include:

- Wear-resistant coating
- Bag expansion elements
- Gas supply and vacuum channels
- Chutes for changing the tube form (e.g. from round to rectangular)
- Calibration elements for highly accurate cross-sections



TOSS film moulding systems forming shoulder systems

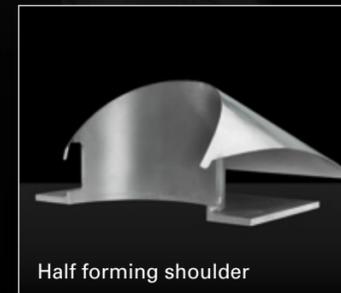
Special is standard for us



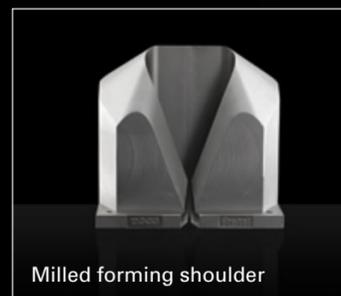
Forming shoulder with oval cross section



Integrated last tensioning/tracking roller



Half forming shoulder



Milled forming shoulder



Forming shoulder for manufacturing empty tubes

Package design plays an important role in the successful marketing of products. Beyond the use of bold colours and fancy printing, packaging design teams understand the importance of packaging shape. Striking effects can be achieved with unique edge folding or sealing and the form and the position of the vertical seams can also have a decisive influence on the overall packaging appearance.

TOSS film moulding systems forming shoulder systems

Accessories

Our complete product range includes heat sealing controllers and power transformers along with a wide array of ancillary products for packaging machines including impulse heat sealing bands, PTFE cloth, PTFE tapes and Silicone rubber profiles.

Delivery of these items from one source significantly simplifies supply. One stop shopping makes it easier for the machine builders.

Alloy 20 Impulse Heat Seal Bands Blank or PTFE coated

Tapered, beaded and reflex bands
Triangular, oval, T-profile
Bulk goods or ready to use bands
Ends Copper/Silver-plated

PTFE glass fabric

Thickness 0.08 - 0.13 - 0.15 - 0.25 mm
(3 - 5 - 6 and 10mil)
Non-adhesive/self-adhesive
PTFE tapes with adhesive free zones

Insulating materials

Silicone profiles
Silicone rubber sheet goods
Silicone foam
Durit 350 + 500
Siglaha

Stainless steel endless/continuous heatseal bands

All dimensions
Blank or PTFE-coated

Pull or Draw off belts

for form/fill/seal machines

Ancillary products

PTFE spray
Silicone paste
Seal bar cleaner



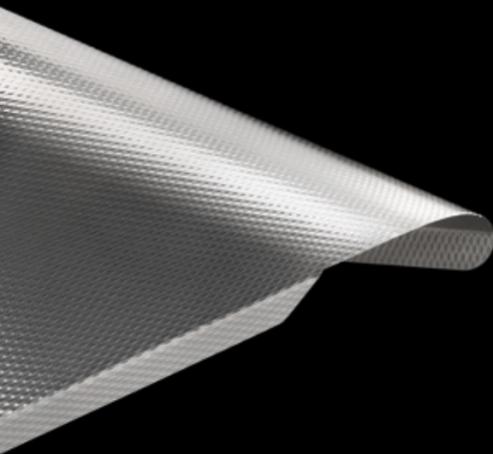
Our yesterday's experience



with today's performance



is tomorrow's progress!



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□ ■ ■
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