

# Mould design to match every filler's requirements

Apart from access to the necessary knowhow, glass container quality is only as good as the quality of equipment and materials employed. Optimal production conditions need detailed attention to mould equipment design and materials. The following contribution evaluates what lies behind sophisticated mould design co-operation and the benefits afforded to container manufacturers.

When the production of a new bottle or jar is planned, besides the mould design itself, attention should be focused on the container design. It depends on the type of container and whether empirical data (weight analysis, deformation studies etc) are already available or comparable.

Heye International specialises in the knowhow necessary to handle new designs. In the case of traditional and lightweight container designs alike, the company uses the Finite Element Method (FEM), deriving values relating to the internal pressure situation, head load and impact stress test. This FEM is a simulation software that ultimately reveals if the container with the stipulated weight and wall thickness data meets the filler's requirements.

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As an alternative, for ultra-lightweight containers, Heye offers customers the support of a pre-test under real production conditions, either at the customer's production site or at a glass plant within the Ardagh Group.

## Co-operation benefits

When it comes to the design of moulds and plungers for new containers, Heye works together closely with its sister company UniMould, which has considerable experience in the manufacture of NNPB/PB plungers, plugs and cooling tubes.

Based in Obernkirchen, Germany, UniMould GmbH has over 60 years' experience in the production of accessories for the glass packaging industry. The company delivers quality and service that exceed customer expectations, in a market where quality standards are constantly raised and surpassed. UniMould continually invests in the latest machine tool technology to deliver the highest quality components possible, on time and at a competitive price.

Several years ago, UniMould developed a special and well-proven plunger coating. Together with the high quality mould and plunger material, this coating optimises the impact and internal pressure condition of the container. Damage to the container's internal surface is avoided by this special plunger material and coating combination.

"This co-operation has resulted in a market leadership position with regard to the performance and stability of glass containers" says Knut Prasuhn, Head of the Service Department at Heye International. "Our customers benefit from this 'one-stop' service and co-operation, generating a wide diversity of valuable experience." ●



UniMould has considerable long-term experience in the manufacture of NNPB/PB plungers, plugs and cooling tubes.

## Further information:

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