
Chocolate: Mould Design

Chocolate moulds form an integral part of depositing systems of different conception and size. They are the decisive element—regardless of the process—for the depositing of the chocolate.



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The most important moulding processes are:

- solid moulding plants
- displacement process (formation of the shell by means of the “frozen cone” cooled punch system)
- shell moulding and hollow figure plants
- one-shot process

What then are the special requirements and limitations of the design with respect to the various processes? I distinguish between two criteria—cavities and mould.

CAVITIES

The cavities are the portrayal of your chocolate article. They typify the image of your company. The mould manufacturers, therefore, place the utmost emphasis on close collaboration with you and your marketing and technical departments. Knowledge and experience accompany you from the initial idea to the finished product. If necessary, the service also

includes contacts with the manufacturer of the system and/or packaging.

Special attention must be paid to discretion. We know that nobody wants to reveal too many details in our trade and we strictly observe this rule.

What factors play an important role for moldability apart from the attractive appearance of the article? What are the quality features of a product? What are the requirements and limitations of the design?

Engravings

Engravings, such as name, logo or creative design are the decoration of an article and document the image of your company. But they have a further, far more important, significance for the production of the chocolate article.

They serve to enlarge the surface of the article and thereby enhance the shrinkage process and removal from the mould with uniform cooling. In addition, they help to prevent blemishes. If additives such as nuts, rice crispies, granulated sugar, etc. are used, which increase the abrasion of the plastic surface, the decoration helps in large measure to stop or prevent dulling.

The engravings must be clearly defined and should generally be neither deeper nor raised more than 0.2 mm. It is important in this connection that they also have a taper of at least 20°. These two criteria counteract the formation of air bubbles and promote optimum removal of the article from the mould.

Structured surfaces of various thicknesses and textures, from high gloss and silk gloss to a matte appearance, are further possibilities to impart the desired appearance and

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