

Van den Brink has for many years been specializing in the design and manufacture of moulds for the packaging industry: Pails, lids, lettuce boxes, pots, cups etc. Not only packaging material but also a diversity of other products such as baskets, flowerpots, glasses, shells, washing-up bowls etc.

Van den Brink moulds:

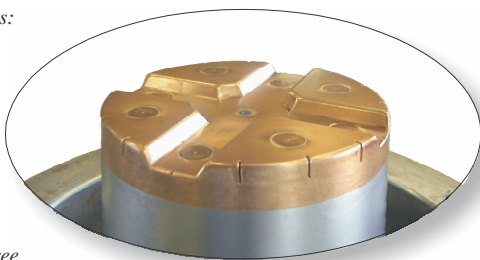
- ✓ Long-life moulds for continuous production
- ✓ Specialism in thin-walled and special product forms
- ✓ Short cycle times thanks to optimum mould design
- ✓ Single and multiple moulds
- ✓ Own test production machines

Cycle time and operational reliability.

These are the key words for Van den Brink moulds. For moulds used in continuous production, 24 hours a day, year in year out, the cycle time is of paramount importance. A few tenths of a second saved per shot are enough to make the difference between loss or profit. We are very much aware of this. But there is more. Also the total downtime of a mould must be restricted to an absolute minimum. Downtime costs money, which is why supply reliable moulds covered by a full guarantee.

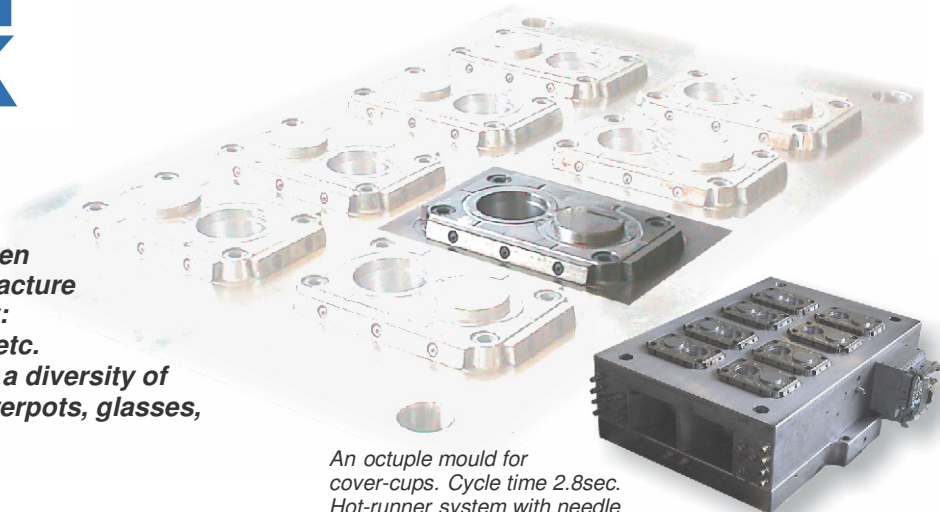
The flowerpot sector demands special moulds:

1. Highly heat conducting metal; produces intensive cooling and shorter cycle times.
2. Cemented carbide insert opposite to the point of injection; for reduction of wear in recycling material and for high injection pressures.
3. Special construction of hydraulic bottom pins; compensates thermal and mechanical variations and guarantees open and fleece-free bottom holes.

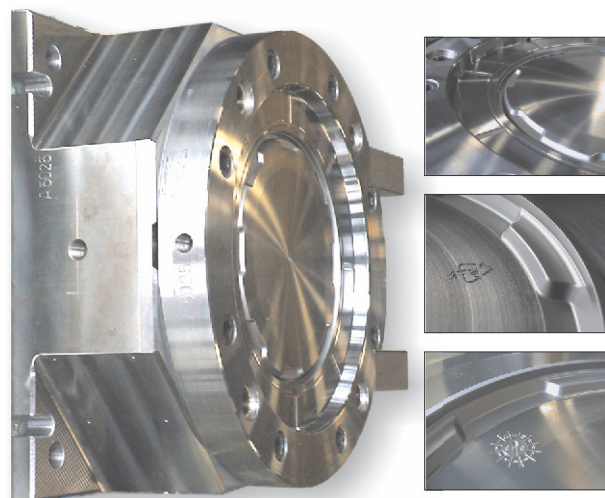


Thin-walled products.

We specialize in the manufacture of moulds for thin-walled products in all forms and sizes, from round to beautifully arched 3D contours. Thin-walled products impose very stringent requirements on both the injection moulding machine and the mould construction. That is why we already participate in the initial phases of the product design in order to obtain an optimum product/mould combination. Developments in the field of injection moulding machines are also part of our design parameters, more specifically high-dynamic opening and closing movements, mould control systems and advanced injection and dosing techniques. Our moulds are fully compatible with the latest types of injection moulding machines, resulting in a team that guarantees high-speed and reliable production.



An octuple mould for cover-cups. Cycle time 2.8sec. Hot-runner system with needle

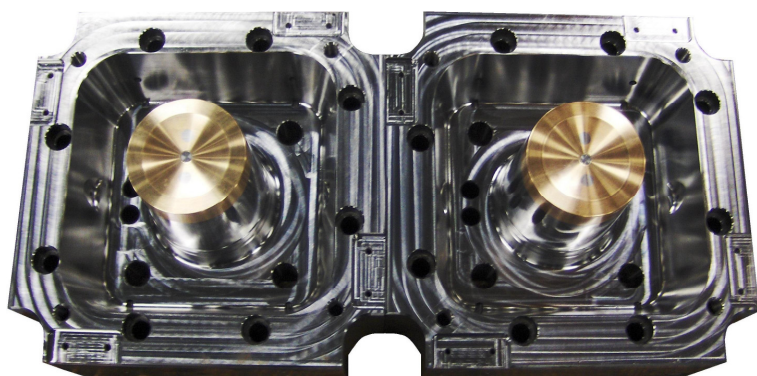


A mould for a profiled cover. Right: detail views.

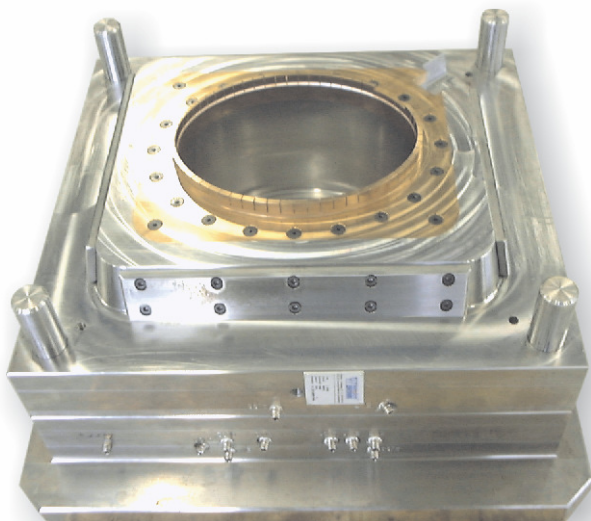
*Van den Brink moulds come with a full guarantee.**

Supply after testing & proofing and after approval against product specifications. Already in the design phase you can call on us for e.g. Product weight, Wall thicknesses, Leak tightness, Cycle time, Closing force etc.

** Ask for our guarantee provisions.*



A dual matrix for 1ltr. pails



Mould for 8 Liter oval pail.

Design data:

Choice of material:

All our moulds are made of high-quality material with high pressure and wear resistance, either surface- or full-hardened or not. Where necessary we apply exclusive materials with a higher heat conduction.

Surface structures:

Available options include: compacted, high-gloss polished, direction polished, spark structure, radial structure, etching structure, engraving work and all possible combinations.

Injection technique:

We incorporate all makes and types of injection systems in accordance with the customer's requirements.

For particularly smooth production in case of single moulds we propose our own injection system based on the tab principle.

Mould construction:

In the construction of our moulds we try to keep the number of moving parts to a strict minimum as this can significantly increase the life cycle and operational reliability as well as shorten the cycle time.

That is also why we preferably carry out the product and mould design simultaneously.

Ejection systems:

Mechanical Hydraulic - Pneumatic - Two-stage core pullers Blowing off - Air valves - etc.
In both stationary and movable mould half.

Heat control & cycle time:

Cooling, shrinking behaviour, melting index, flow path, post-pressure etc. are balanced against other for best results.

Plastics:

All customary plastics can be used. Consulting is part of our service.

Automation:

Pre-adapted to the mould for optimum combination with e.g. removal system or IML system.

Machinery.

Our machinery is specially geared to the manufacture of superior moulds. The high-precision machining of hardened steel imposes rigorous requirements on machines. We have had to specially select, set up and calibrate our machines in order to meet the tolerances that apply to our moulds.

Specifications:

General indication of mould dimensions (mm.):

200 x 200 x 300 till 1000 x 800 x 1000

and \varnothing 200 x 300 till \varnothing 1200 x 1000

Weight: 50 kg till 5000 kg.

<u>Milling work:</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
CNC:	1000	850	800
Conventional:	2000	1000	1400

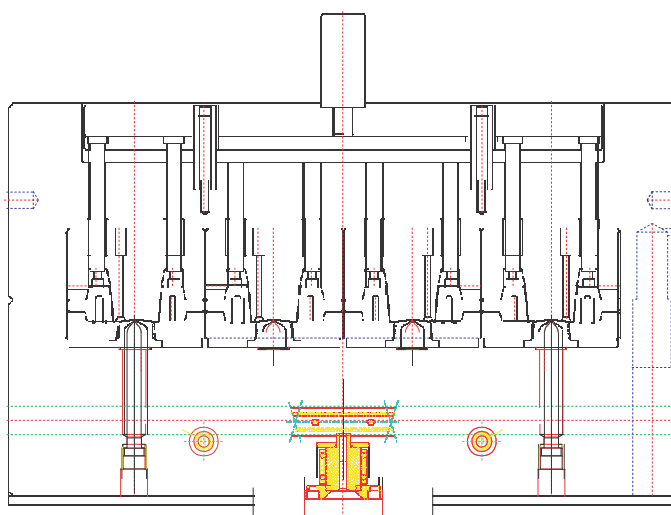
<u>Grinding work:</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Surface grinding:	1600	810	700

<u>Spark erosion:</u>	<u>Length</u>	<u>Width</u>	<u>Height</u>
Zinc sparks:	500	350	350

<u>Turning work</u>	<u>Length</u>	<u>Diameter</u>
CNC:	3000	1100
Conventional	5000	1200

<u>Proof injection:</u>	<u>Closing force</u>	<u>Space between spars</u>
150-tons	1500 KN	$\bigcirc < 450 > \bigcirc$
330-tons	3300 KN	$\bigcirc < 630 > \bigcirc$
550-tons	5500 KN	$\bigcirc < 830 > \bigcirc$

Mould parts that fall outside these specifications can be subcontracted in a justified manner.



8 Cavity mould for pots, hot-runner system.

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