

"Plenty of time can be saved during production!"

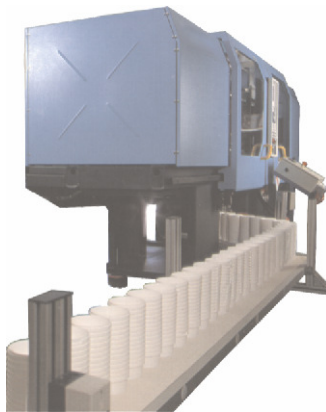
Van den Brink Take-out Systems are optimally suitable for removing pails and lids, boxes, pots, cups and other products, from very small to very large dimensions. For single, multiple and multi component moulds and in combination with In Mould Labelling.



Dual take-out system for butter dishes.

General characteristics applicable for most combinations.

- ✓ **Fast.** Full-speed opening
Waiting time 0-200 millisecc.
Full-speed closing.
- ✓ **Reliable.** Forced removal movement with machine closing monitoring.
- ✓ **Compact.** Fits entirely within the injection moulding machine.
- ✓ **Simple.** Simple operation and straightforward technique.



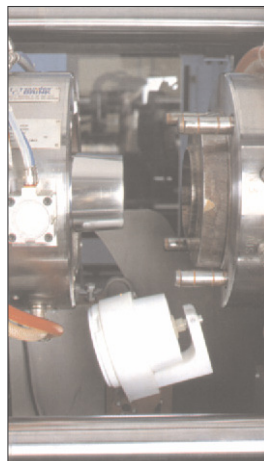
*Take-out system type 3.
Pots are coming out stacked underneath the injection machine.*

Our take-out systems are customized for your mould/injection moulding machine combination. For range products, exchange parts are supplied as well, so that the take-out system requires no further settings or adjustments.

The take-out systems are mould-dependent, i.e. not universal, which means that they are particularly attractive for continuous production. Valuable time is saved with each cycle. The investment is less indicated for small production batches.

Fast, smooth and accurate curve movements.

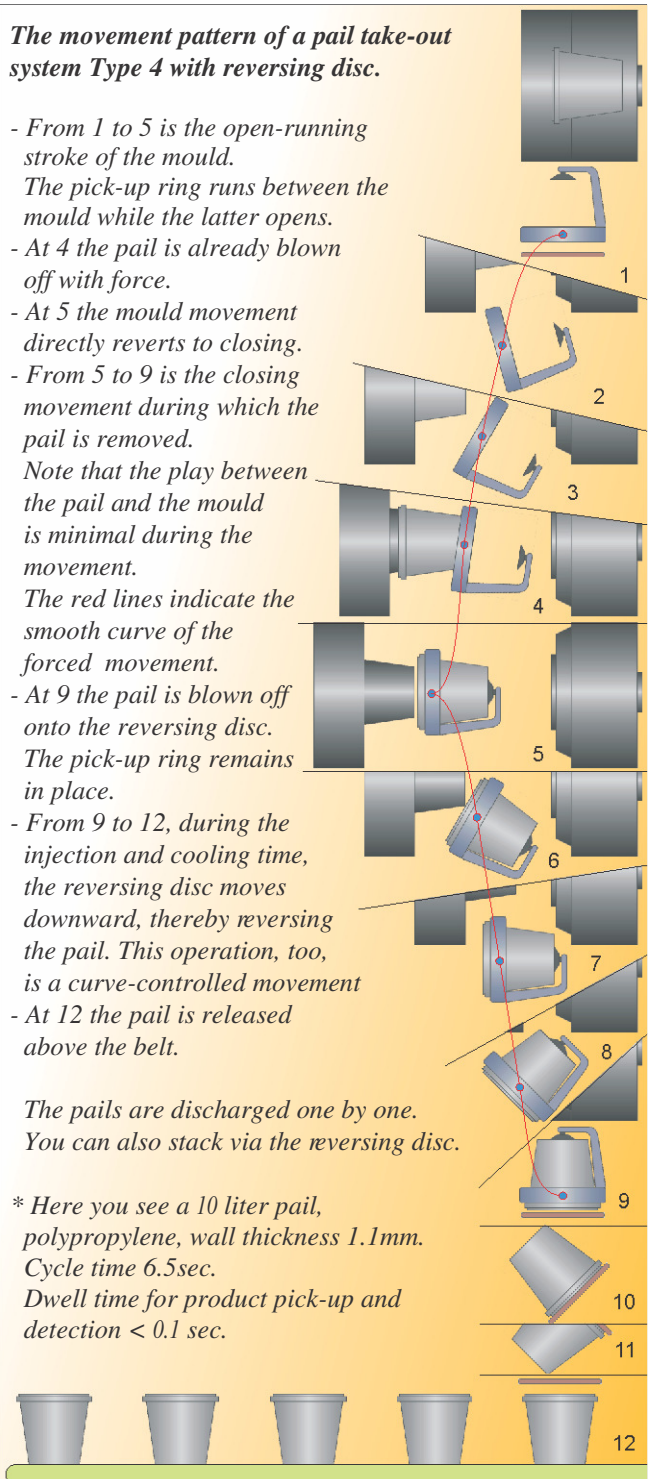
Our take-out systems are driven by the movement of the injection moulding machine, by means of curve systems. The take-out arm, usually a suction pad, is already manoeuvring between the mould when the latter is still opening. It has already caught the product before the machine stops the opening movement. The machine can then immediately close again as the product moves out of the mould halves over a fixed path.



Take-out movement during closing of the mould.

The movement pattern of a pail take-out system Type 4 with reversing disc.

- From 1 to 5 is the open-running stroke of the mould.
The pick-up ring runs between the mould while the latter opens.
- At 4 the pail is already blown off with force.
- At 5 the mould movement directly reverts to closing.
- From 5 to 9 is the closing movement during which the pail is removed.
Note that the play between the pail and the mould is minimal during the movement.
- At 9 the pail is blown off onto the reversing disc.
The pick-up ring remains in place.
- From 9 to 12, during the injection and cooling time, the reversing disc moves downward, thereby reversing the pail. This operation, too, is a curve-controlled movement
- At 12 the pail is released above the belt.



*The pails are discharged one by one.
You can also stack via the reversing disc.*

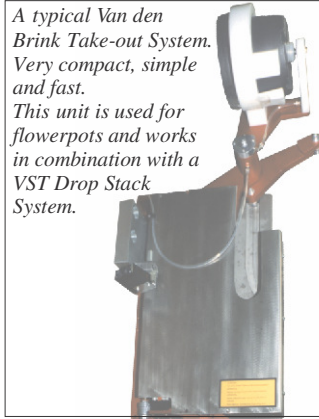
** Here you see a 10 liter pail,
polypropylene, wall thickness 1.1mm.
Cycle time 6.5sec.
Dwell time for product pick-up and
detection < 0.1 sec.*



Product handling:

During the time the mould is closed our take-out systems can do all sorts of things with the products, such as:

- * Placing one by one on a flat belt.
- * Turning over and placing on a flat belt.
- * Stacking directly under the mould.
- * Releasing in a chute above a flat belt.
- * Sucking upwards to stack elsewhere.
- * Providing a label.
- * Closing a hinged box upon removal.
- * Automatic quality inspection.

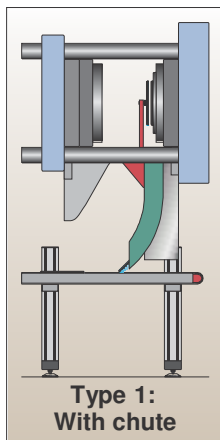


A typical Van den Brink Take-out System. Very compact, simple and fast. This unit is used for flowerpots and works in combination with a VST Drop Stack System.

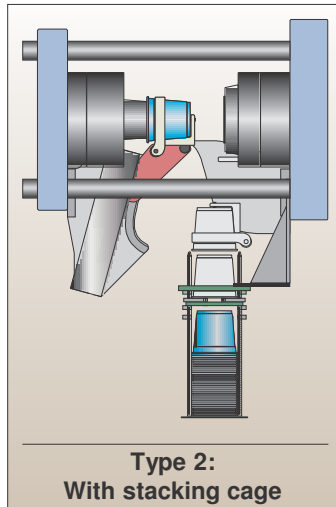
VAN DEN BRINK take-out systems are among the fastest systems available.

Example:
A 4-part mould for pots, 90cc, wall thickness 0.45mm, provided with a take-out system, running on a Stork SXS1500 with a cycle time of 2.2 sec. Including take-out.

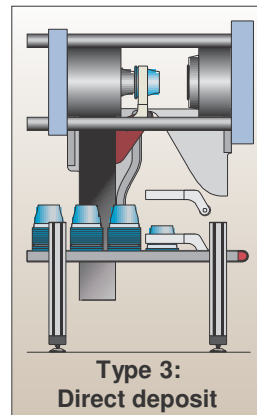
The difference.
In contrast to conventional (servo) take-out systems which still require some time to take the product out of the mould in a reliable fashion, our mechanical take-out systems do so immediately.



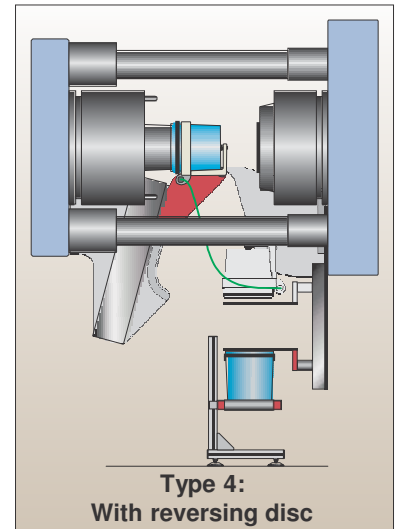
Type 1:
With chute



Type 2:
With stacking cage



Type 3:
Direct deposit



Type 4:
With reversing disc

Choosing the right system. A general overview. Contact us for customized advice.

System	Method	Dis-charge	Discharge	Product form	Options	Special features
Type 1	Chute	Solo	Belt	Low boxes/ Lids	DST / RST	For single and multiple moulds Combination with IML possible
Type 2	Stackingcage	Stacks	Belt / tilting lift	Pots H>ø	VST	Single, (flower)pots
Type 3	Direct deposit	Solo / Stacks	Belt	Boxes / Pots / Lids	DST	Single and dual, direct stacking possible
Type 4	Reversing disc	Solo / Stacks	Belt	Pails / Crates / Pots	EST / BM	Single, direct stacking possible
Type 5	No suction cup	Solo	Belt	Large pails / Barrels	---	Large products on machine with short opening path
Type 6	Discharge upward	Solo	Suction tube Traverse	Round pots Low boxes	BST TST	Upward product discharge, specially suited for foodstuffs
Special	----	----	----	----	----	Various features: closing, labelling, processing, inspection, multiple

Van den Brink take-out systems* are driven by the movement of the machine platen of the injection moulding machine; they work passively pneumatically, as an air coil. No motors are used.

The ancillary equipment works pneumatically.

Each system is standard equipped with a PLC control with display in a separate console.

Direct control by the injection moulding machine is in most cases possible. (Optional)

All take-out systems interact with the safety provisions of the injection moulding machine and are supplied with a 2B certificate.



Chute and conveyor for a dual mould take-out system.

* Van den Brink take-outsystems are patented.

Van den Brink b.v.
Molenweg 10b
6732BL Harskamp Holland
Tel: 0031-318 - 452500
Fax: 0031-318 - 456378
E-mail: info@vandenbrinkbv.com
Internet: www.vandenbrinkbv.com