

STACKING CELL – CELLMASTER

www.promot-automation.com



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The Promot Cellmaster is a workpiece magazine handling stacks of workpiece carriers (baskets, plastic boxes or metal pallets).

The stacks are loaded/unloaded and moved from one manufacturing process to the next either manually or automatically.



Workpiece carriers (special dimensions upon request)	600x400mm, 800x600mm, 1200x800mm
Cellmaster dimensions	Depending on the carrier size
Max. stack height	1,300mm (special variants upon request)
Required stacking accuracy	Max. 25mm (deviation from the central axis)
Workpiece carrier	Baskets in wire design, sheet plate pallets, blisters,...
Shift lock	For changing of the stack during the machining time
Drive	2 NC axes
Software-controlled sequences	Standard sequence First-in / first-out True-to-basket loading Unloading
Control cabinet	Integrated (left or right-hand installation possible)

FUNCTION PRINCIPLE

The Cellmaster standard variant possesses three stacking locations.

- Ⓐ Stack of unfinished parts being worked with
- Ⓑ Stack of finished parts being worked with
- Ⓒ Buffer stack with sliding guard allowing stack changes during the machining time

The Cellmaster offers the individual workpiece carriers to the robot such that the workpieces can be picked up. The uppermost carrier each is picked up from the unfinished parts stack and moved under the gantry axis such that the workpieces in the carrier and in the gantry arm/gripper stand above each other.

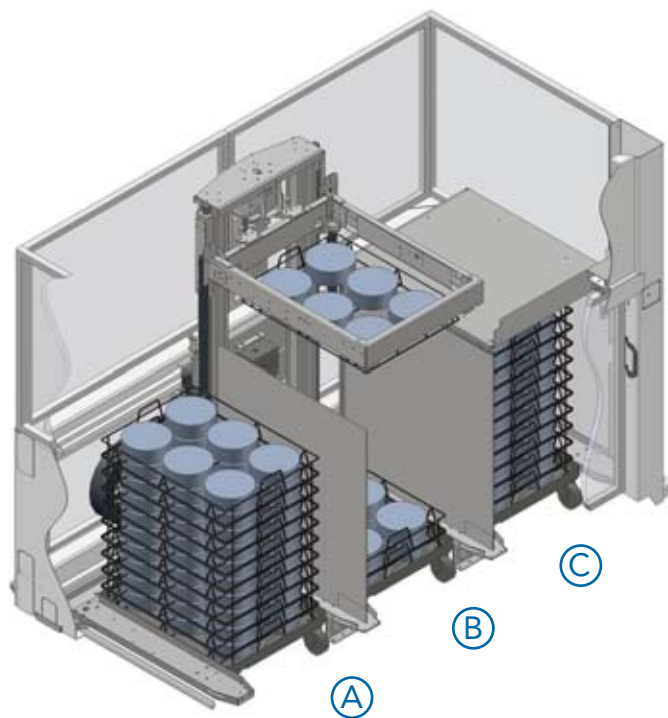
The dual gripper of the robot picks up an unfinished part and deposits a finished part. Once there are only finished parts in the carrier, the carrier is deposited on the finished part stack.

The stacking sequence is "A to B, then C to A, B to C", and so on.

In the appropriate buffer position, a finished part stack can be picked up and an unfinished part stack loaded.

YOUR BENEFIT:

- High independence thanks to workpiece stacking
- Access to all three stack positions via three sliding doors
- Thanks to the sliding guard, the stack can be changed without interrupting production



WORKPIECE CARRIERS:

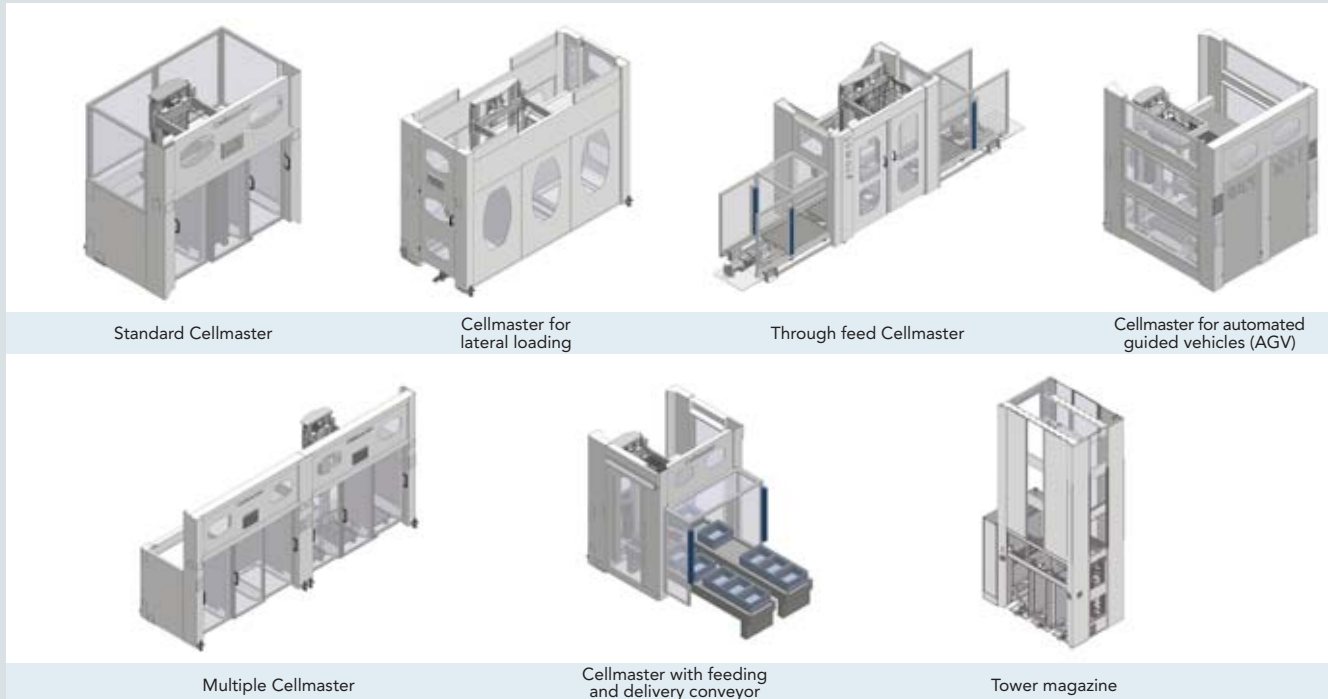
Baskets in wire design, sheet metal baskets, frame pallets, blisters, etc. can all be used as workpiece carriers.

The basket inserts can be either fixed or – to increase the flexibility – designed as interchangeable or plug-in type inserts.

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CELLMASTER VARIANTS

In addition to the standard variant, there are numerous further Cellmaster variants which can be chosen to suit the particular part flows, cycle times, buffer requirements, space requirements, etc.



CELL LINKAGE

The use of stacking cells is based on the principle of cell manufacturing. The main idea is the creation of individual machining cells – with the objective of uncoupling the process sequences. In this way, flexibility, the availability of the machines and the output of finished parts can be increased significantly.

YOUR BENEFIT:

- Fully independent operations
- Separate loading for the individual operations
- Separate optimisation for the individual operations
- One-time manual loading and unloading of the workpiece carriers
- Manual transport of the stacks from operation to operation
- Possibility of creating sorted buffers
- Relatively simple increasing of quantities possible through duplication of individual cells

