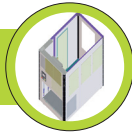


Bulk material is provided in an orderly manner and in proper position.

Cell



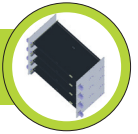
Compact, modular RoboCube automation cell with a footprint of approx. 1,3m². The control cabinet is integrated into the cell base frame. This provides very good accessibility to all sides of the cell.

Robot + BV



The image processing system located above the pick area detects the part variant, position and alignment. The logic of the image processing transfers the pick position to the robot. Parts supply, image processing and robotics are integrated into a higher-level control system.

Parts Supply



The flexible placer rotates and jogs the parts to separate and position them. The feeder is gentle on parts, quiet and suitable for shock-sensitive parts. Workpiece restrictions due to conventional mechanical feeding solutions are eliminated.



Material Flow



Standardized material flow: empty workpiece carriers are transported to the cell by a conveyor belt, full workpiece carriers leave the cell. Part, robot gripper and pallet heights are aligned accordingly. This saves travel distances and optimizes cycle times.

HMI



All functions can be accessed on the generously designed 7" touch panel. The sophisticated machine control system supports the setup of new variants with a wizard. Teaching the contour, defining the positions: that's it. The rest is accomplished by the control system itself. Operating mode and variant selection, error messages and system information are all included as standard.

Application Area



The FlexSorter is at the latest employed whenever conventional solutions cannot be considered.

The sorting cell is suitable for shock-sensitive parts that are to be fed, separated and sorted gently.

The integrated 2D camera makes the cell universally applicable and frequent product changes are not a problem.

Technical Data



Control.

Siemens S7-1500 PLC

Interface.

ProfiNet, ProfiNet/ProfiSafe, Profibus, I/O, I/O-Link, Ethernet

Operation (HMI).

Siemens 7" Touch

Robots.

Omron/Yamaha

Gripper Systems.

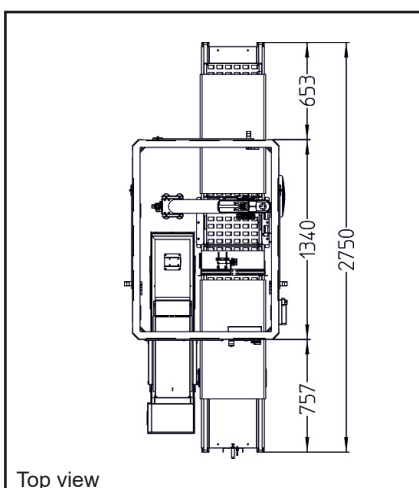
Parallel double gripper, three-finger double gripper, vacuum gripper

Flex Sorter - Variants

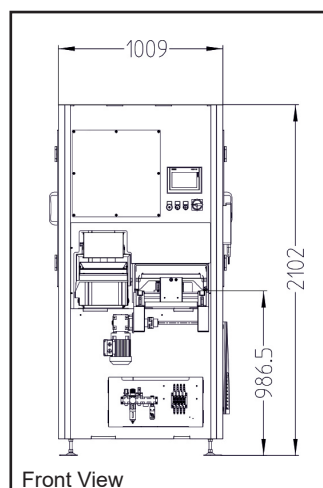
Description	Payload Robot max.	Range Robot max.	Dimensions Cell (L x W x H)	Weight Cell
FlexSorter 43	5 kg	600 mm	2.750 mm x 1.000 mm x 2.100 mm	ca. 1.000 kg
FlexSorter 64	5 kg	600 mm	2.750 mm x 1.000 mm x 2.100 mm	ca. 1.000 kg

Tray - Variants

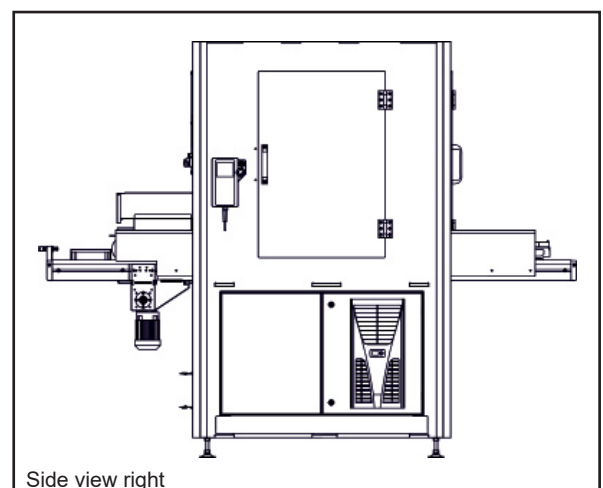
Description	Dimensions Tray (L x W)	Handling Loading- and Unloading Side	Handling Machinery Side
Flex Sorter 43	400 mm x 300 mm	manual in Bunker	Robot
Flex Sorter 64	600 mm x 400 mm	manual in Bunker	Robot



Top view



Front View



Side view right