

Separation, testing and feeding

Powered by pi4



# **Customer benefits**

- + Independent provision of parts for several hours
- + Separation of parts by oscillating movement
- + Inspection of user-defined features with camera systems
- + Feeding of good parts, individually or as an assortment

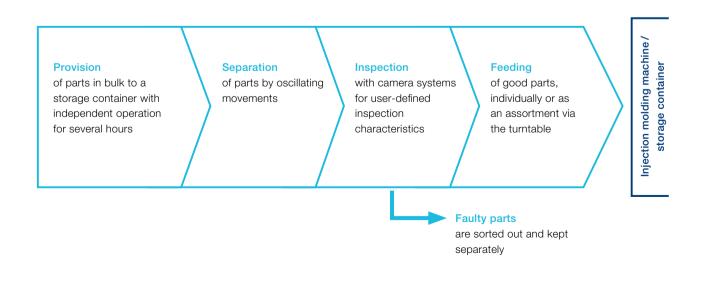
"Highest possible performance – seven days a week and 24 hours a day".

The Robofeeder RF MC combines capabilities of separation, sorting and quality inspection of parts in one compact machine. Your production parts are moved into the correct position by a powerful vibratory feeder and placed precisely on the delivery table by a robot.

Quality inspection of the parts according to your individual specifications can be carried out "on the fly" within the work process. Parts that do not meet your quality requirements are immediately sorted out.

In maintenance mode, the Robofeeder is able to independently monitor its own gripping work. The user can visually check at freely selectable intervals with the integrated calibration camera whether deviations in gripping precision have crept in.

#### Robofeeder RF MC mode of operation



This means that even the smallest parts can always be placed with maximum precision. The Robofeeder RF MC therefore offers the highest possible performance for your handling and inspection process, seven days a week, 24 hours a day – and all this with a control and correction effort reduced to an absolute minimum.

Even training for new production parts is possible for your employees, without needing extensive familiarization with the machine software. The pi4\_control control software can be operated intuitively.

#### Robofeeder RF MC - the universal machine



Customized product shelf



Robot camera



Calibration camera



Gripper



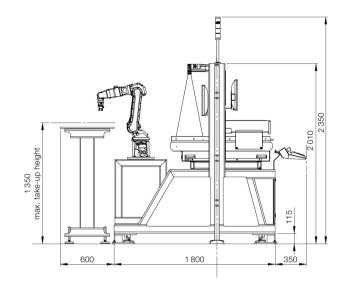
Vibrating conveyor



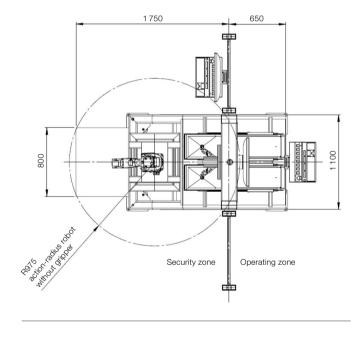




#### **Dimensions**



## **Footprint**



### **Technical specifications**

Machine dimensions L x B x H	1800 x 1 150 x 2 530 mm
Machine weight	1 300 kg
Number of robots	1
Robot type	6-axis articulated arm
Feeder type	multi-action feeder
Number of feeders	1-2
Gripper	2-jaw gripper/vacuum sucker
Optional grippers	electric gripper (2 or 3 jaws)
Number of cameras for product recognition	1-2
Resolution of the standard camera	5 megapixel (2 588 x 1 940 pixels)
Illumination	LED backlighting
Illuminated area	240 x 320 mm <sup>2</sup>
Cycle time	as from 3 sec
Max. testing precision (without calib. cam)	S = +/-0.13  mm
Part material	any (wood, metal, plastic, glass,)
Part dimensions	max. 100 mm edge length
Part weight	max. 50 g per part
Part transfer	by rotary table, slide-over unit or direct placement
Storage bin (standard version)	10I/10kg
Integration in external emergency stop circuit	integration is possible, emergency stop switchgear available
Enclosure	standard without enclosure – optionally with enclosure
Power supply	CEE plug 400 V / 16 A, compressed air 6 bar
Max. power rating	3.5 KW

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