



rbc robotics bin-picking module

FX PICK 800

RBC ROBOTICS GMBH | Frank Götz
frank.goetz@rbc-robotics.de

RBC-ROBOTICS.DE
DVS-TECHNOLOGY.COM

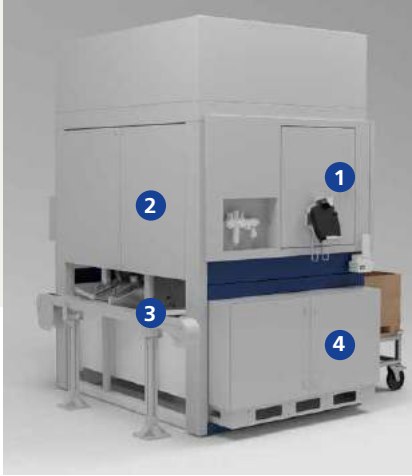
rbc robotics bin-picking module

FX PICK 800

The FX PICK 800 module series is designed for feeding in randomly arranged components (bulk goods) into a processing line or directly into a machining process. The components weigh approx. 4 kg depending on the geometry. The possible feed cycle averages around 8 seconds for simple geometries (e.g., rings), with possible container sizes of 600 mm x 800 mm or 800 mm x 800 mm. In the basic version, the containers are fed in manually on floor rollers. The system can be expanded to include automatic loading and unloading using forklifts or AGVs. A graphical user interface is available for teaching in new components.

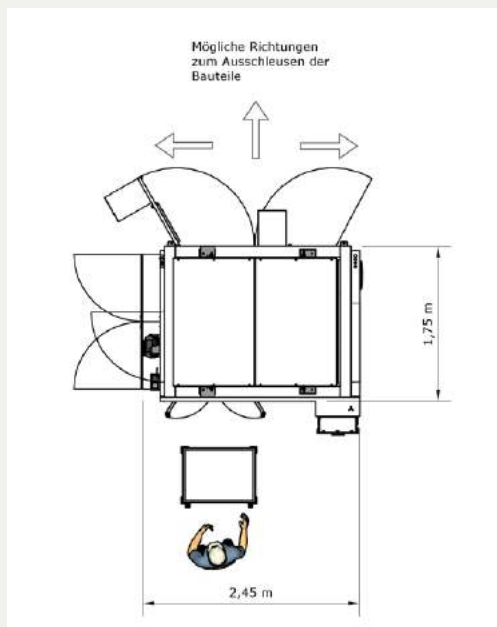
Technical data

Width x length x height	1750 x 2450 x 2150 mm
Model	Modular cabin, powder-coated according to RAL specification
Cell weight	1700 kg
Container weight	max. 650 kg (loaded)
Component weight	max. 4 kg
Container storage	for two identical containers
Container dimensions	600 x 800 x 600 mm or 800 x 800 x 500 mm
Loading	Floor roller, manual, or forklift/AGV
Model	Pallets with stacking frame or smooth container wall
Safety	Front sliding doors and internal sliding protection
Robotics	ABB, KUKA, FANUC
Infeed cycle	from 8 seconds
Component quality	The components should not entangle
Component surfaces	Advance identification test required
Gripping technology	Component-specific, tried and tested standard gripper available
Control	S7 1500
HMI	15-touch
Operation/teaching in	Shopfloor wizard
Component recognition	3D point cloud/matching or alternative methods
Turning station	Integrated in the module
Additional processes	Laser marking, deburring, brushing, etc. according to requirements and testing

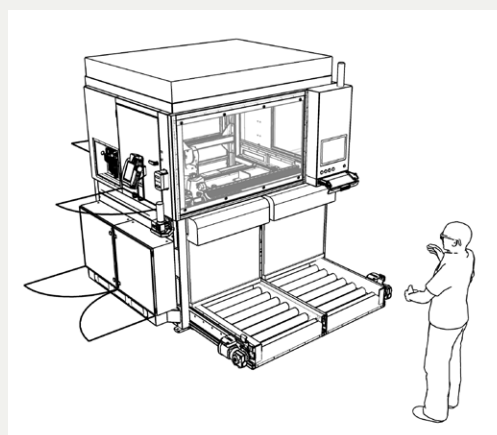


- 1 Side inspection hatch to the robot
- 2 Rear inspection hatch via double wing doors
- 3 Ejection of the workpieces, e.g., on a conveyor system
- 4 Control cabinet and robot control integrated in the modular cabin

- 1 Modern glass front made of tinted glass
- 2 Operating terminal including 15" HMI panel integrated in the modular cabin
- 3 Secured sliding doors for changing the workpiece containers



Cell expansion for loading and unloading using a forklift or AGV.



The bin-picking solutions from rbc robotics boast an intelligent combination of robotics, gripping technology, and component recognition. The modular cabin is circumferentially enclosed, which significantly reduces background noise in your production area and protects against external light for reliable detection.

The cell is extremely compact yet easy to use. All data interfaces to the field or to higher-level systems are available. The modular cabin can be transported by forklift or crane as a functional unit.

The cell is highly standardized for rings and has been in continuous industrial operation (ring picker) for years. A turning station with fine detection of the smallest geometry features (identification grooves, punctures, chamfers, etc.) is available.

A user-friendly, shop floor-based interface is available for teaching in new components. This means the operator is not required to have prior knowledge of the bin-picking application.

Various gripping modules are available: Starting with the pneumatic finger gripper to the magnetic gripper. FX PICK provides automatic TCP dimensioning and correction for maximum reliability in continuous operation. Our bin-picking solutions combine intelligent workpiece feeding for flexible manufacturing processes for many types of workpieces, ensuring a reliable production process. They are the centerpiece of smart manufacturing. This increases efficiency and safety and makes your company more competitive.