The solution for economic premachining

KUKA cell4_premachining modular with 3-axes positioner **KP3-V2V-3**

With versatile, modular standard packages and automation options, KUKA standard cells can be configured for customized solutions in the range of premachining systems for customers.

The KUKA cell4_premachining combines performance and quality with high flexibility to comply with your requirements in every respect. This flexibility allows the use in the most different areas. Typical applications are sawing, milling, cleaning and grinding work at different materials

The strength of this robot is its compact design.

The applied KR QUANTEC nano is optimized and designed for this application task. Due to the compact design of all movable axis lengths, only little torques are induced in the bearings.

Besides this, the components to be processed are optimally aligned towards the processing tool by means of the rotary module. The component will always be machined in a rigid and reproducible position. So the robot-typical features for processing tasks are combined with rigid kinematics.

The system is equipped with a powerful and compact motor spindle.

To permit a flexible processing, the tools can be changed fully automatically using a changer. Each place is sensor controlled. The tools are protected by a pneumatically closing cover.

Software package

In addition, the robot cells are equipped with a perfectly matched technology and software package form the KUKA product portfolio. Thus, an optimal coordination of robot, positioner, and spindle can be guaranteed.

The loading area is monitored with a light curtain. Cycle-time neutral loading and unloading allows full use of the processing capacity of the robot.

Alternatively, loading by means of robot is possible.

Ideally matched for your function requirements
KUKA processing cells

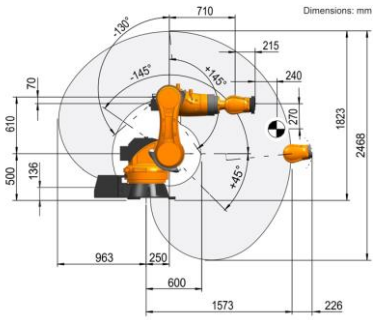
Scope of supply

- 1 pcs. KUKA robot KR 160 1570,
  - incl. robot control KR C4
  - KUKA Milling application software
- 3-axes positioner KP3-V2V-3
- Sound insulating cabin with 2 windows and two Maintenance doors
- Loading area, secured by light barrier + laser scanner
- Powerful motor spindle
- 13-fold tool changer
- Robot protective cover axis 1-2/3

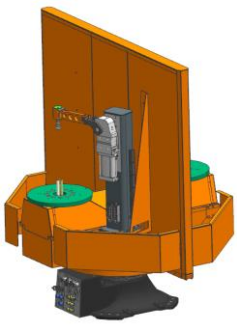
Basic Configuration - Technical Data:

Cell standard	KUKA Cell4_premachining modular KP3-V2V single KR
Robot	1x KR 160 R1570
Control	KR C4
Positioner	KP3-V2V-3
Payload	2 x 1,000 kg
Turning time	3,9 s / 180°
Face plate diameter	500 mm
Face plate distance D	1.000 mm
Media supply (air, mass, field bus, hydraulics)	
Loading area	light barrier + laser scanner
Milling spindle	18.0 kW S1 und 20 kW S2 HSK 63 E up to 24.000 U/min Converter 37.0 kW
Tool changer	13-fold
Clamping arm 2-fold (option)	
5-fold height adjusting possibilities / step	75 mm
Retention force	5950 N
Opening angle	90 °

Work envelope , KR 160 R1570

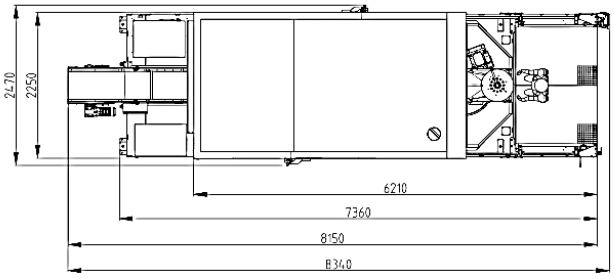


3-axes positioner KP3-V2V-3



Options

- Scrap conveyor instead of chip box
- Clamping arm



For further information please contact us under casting.industries.c