The Solution for Spot Welding

KUKA cell4_spot large KP3-V2H single KR
KUKA cell4_spot large KP3-V2H dual KR

KUKA standard cells can be configured to provide tailor-made solutions for customers in spot welding through versatile, modular standard packages and automation options.

The basic configuration of this automated welding cell consists of one KUKA robot, a 3-axis KUKA positioner (KP3 V2H) and a cell housing, which ensures protection against unauthorized access. Various welding equipment options are available. A modern cell controller provides all essential functions for an efficient and high-quality operation.

In addition, the robot cells are equipped with a perfectly coordinated technology and software package from the KUKA product portfolio. This ensures the ideal coordination of the robot, the positioner and the cell controller. The 3-axis positioner ensures the robot move in fast and precise synchronization.

The distance between face plates of the positioner is 2,600 mm. The maximum tool radius is 800 mm. The maximum payload is 1,000 kg for each side.

A light safety curtain and laser scanner secures the loading area against unauthorized access. Thanks to simultaneous loading/unloading during the welding process, this cell type is particularly suitable for higher production volumes. Furthermore, the welding of more complex parts, which need to be turned in various positions during the welding process can be guaranteed.

The cell can be equipped with one or two welding robots. For additional handling and stationary processes an extension module on the right or left side is available.

Scope of delivery:
Spot welding cell, with:
- 1x KUKA robot KR QUANTEC KR210 R2.700-2 (with energy supply for welding), incl.:
  - Robot control KR C4
  - KUKA.ServoGun Basic
  - KUKA.SafeOperation
  - KUKA.EqualizingTech
- KUKA spot welding box incl. Bosch timer
- Tip dresser (without milling tool)
- 3-axis positioner KP3-V2H1000 L2600 R800 (with media supply)
- Lateral fences (polycarbonate) with one maintenance door
- Loading area secured by light curtain and laser scanner
- KUKA operating panel (Buttons + smartPAD visualization)
- Central power supply (removal as an option)
- Main Air and water treatment with safety
Ideally matched to your functional requirements
KUKA Spot Welding Cells

Basic-Cell Configuration - Technical Data:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell type</td>
<td>KUKA Welding Cell with one maintenance door (on left or right side)</td>
</tr>
<tr>
<td>Robot</td>
<td>KR QUANTEC KR210 R2700-2 (with energy supply for spot welding)</td>
</tr>
<tr>
<td>Robot control</td>
<td>KR C4</td>
</tr>
<tr>
<td>Positioner</td>
<td>KP3-V2H1000 L2600 R800</td>
</tr>
<tr>
<td>Payload</td>
<td>1,000 kg</td>
</tr>
<tr>
<td>Tool radius C</td>
<td>800 mm</td>
</tr>
<tr>
<td>Distance between face plates D</td>
<td>2,600 mm</td>
</tr>
<tr>
<td>Loading area</td>
<td>Light curtain and laser scanner</td>
</tr>
<tr>
<td>Welding equipment</td>
<td>KUKA spot welding box</td>
</tr>
<tr>
<td>Application package</td>
<td>KUKA.ServoGun Basic</td>
</tr>
<tr>
<td></td>
<td>KUKA.EqualizingTech</td>
</tr>
<tr>
<td></td>
<td>No welding guns! (only on request)</td>
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</tbody>
</table>

Options

- Tip dresser + Tip changer Combi Device (without milling head)
- Roll-Up door (W=2,800 x H=2,200)
- Central Power Supply
- Operation and visualization with KUKA Advanced HMI
- Extension module on left or right side of basic cell, with:
  - 1x KR QUANTEC KR210 R2700-2 (with ES for handling)
  - 1x belt conveyor in 1,200 x 4,000 mm
  - Option: spot welding package, with
    - KUKA spot welding box incl. Bosch timer PSI
    - KUKA.ServoGun Basic
    - KUKA.EqualizingTech

Specifications regarding the characteristics and usability of the products do not constitute a warranty of properties. They are intended to serve informative purposes only. Solely the respective contract of sale shall be binding in respect of the extent of our services and supplies. Some items of equipment depicted in the illustrations are optional and are not included in the standard scope of supply. Technical Data and Illustrations are not binding for the delivery. Subject to change without prior notice.
KUKA Spot Welding Cells (Possible configurations):

✓ Spot welding cell with one robot (with one maintenance door Lh or Rh side).

✓ Spot welding cell with two robot (with one maintenance door Lh or Rh side).

✓ Spot welding cell with one robot + Extension module on left or right side.

✓ Spot welding cell with two robot + Extension module on left or right side.

For further information, please contact us at info@kuka.com