EcoRP E043i
7-Axis Painting Robot without Rail

The EcoRP E043i, from the 3rd generation of Dürr robots, impresses with numerous innovative functions. With a 7th axis incorporated directly into the kinematics of the painting robot, it gains more mobility and a larger work zone. This allows the robot to easily reach even difficult-to-access areas of the bodywork.

Due to its high mobility, this 7-axis robot can be used in many applications without a traversing rail. This means that the spray booth can be designed smaller and the investment and maintenance costs of the rail eliminated.

The 3rd generation of Dürr robots has a modular design. The concept has been consistently implemented in the 6- and 7-axis kinematics. The only difference is the additional rotary axis in the main arm. The otherwise identical components simplify spare parts management, save storage costs and facilitate maintenance work.

**HIGHLIGHTS**

New painting concepts without traversing rail for:
- Stop and go
- Line tracking

- Large working range
- Better accessibility, greater flexibility through new 7-axis kinematics
- Integrated application technology
- Integrated hose guide
- Maintenance-friendliness and easy accessibility to the integrated components
- Less maintenance required
- Maximum availability and life span
## Technical Data

### EcoRP E043i

<table>
<thead>
<tr>
<th>Work zone</th>
<th>Max. speed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Axis 1 – Rotation of the robot</strong></td>
<td>EcoRP E + / - 90°</td>
</tr>
<tr>
<td><strong>Axis 2 – Swiveling of the vertical arm</strong></td>
<td>EcoRP E - 45° / + 110°</td>
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<tr>
<td><strong>Axis 21 – (the 7th axis) Turning of the vertical arm</strong></td>
<td>+ / - 95°</td>
</tr>
<tr>
<td><strong>Axis 3 – Swiveling of the horizontal arm</strong></td>
<td>- 66° / + 80°</td>
</tr>
<tr>
<td><strong>Axis 4 – hand axis</strong></td>
<td>Individual + / - 720° but max. in total + / - 540°</td>
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<tr>
<td><strong>Axis 5 – hand axis</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Axis 6 – hand axis</strong></td>
<td></td>
</tr>
</tbody>
</table>

- **Max. TCP speed**: 2 m / s
- **Max. TCP acceleration**: 8 m / s²
- **Positioning repeat accuracy**: + / - 0,15 mm
- **Empty weight (with application components)**: Approx. 980 kg
- **Arm lengths**: Arm 1: 1,250 mm · Arm 2: 1,726 mm
- **Work zone (hand axis flange)**: Height: 5,580 mm · Width: 6,540 mm
- **Loading at arm 1 and 2**: 30 kg each
- **Explosion protection**: ATEX category 2, 3
  - FM approval for Class 1, Div 1

Subject to change. The information in this brochure solely contains general descriptions and performance features, which may vary in specific cases of application. The desired performance features are only binding if they have been agreed upon explicitly at the conclusion of the contract. © Dürr 2019