Vacuum Robot

RR481 SERIES

The RR481 boomerang arm vacuum robot (double arms) realizes high positioning repeatability and highly reliable vacuum partition performance by adopting DDM (vacuum direct drive motor) for the drive section. The arm mechanism driven by the steel belt enables the use of long end effector despite of the small rotation area.

Features

- Small rotation area (small footprint)
- Transferring of the long finger and long distance
- Corresponding to the narrow gate opening size (15 mm)
- High accuracy
- Corresponding to ultrahigh vacuum
- High throughput
- Corresponding to the AWC option (wafer position compensation)

Main specifications

- Work size to be handled
  300 mm works, 200 mm works, 150 mm works and square substrates

- Repeatability

<table>
<thead>
<tr>
<th>Axis</th>
<th>Direction</th>
<th>± 0.1 mm</th>
<th>± 0.03°</th>
<th>± 0.05 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 direction</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 direction</td>
<td>2</td>
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</tbody>
</table>

Operating range

- Arm length
  - Minimum rotation range: 730 mm, 590 mm, 530 mm
  - Distance of reached work center: 1110 mm, 830 mm, 710 mm
- Axes: 70 mm or 140 mm

Outside dimensions (common to each arm length)