AR300
ROBOT TOOL LOADER

ANCA’s NEW Auto Tool Loading Solution for FX Linear!

The AR300 Robot Tool Loader is ANCA’s new affordable auto-tool loading solution for the FX5 Linear and FX7 Linear machines. It can load a range of tool types within the diameter range of Ø2–20mm (1/8”–3/4”) and is ideal for both manufacturing and regrinding applications.

The AR300 loader allows the machines’ productivity levels to be maximised. Significant boosts to machine output result in a quick payback period and increased business profits.

The AR300 loader has been fully developed and built by ANCA, utilising the latest control technology from ANCA Motion. Customers benefit from comprehensive loader support, with no reliance on third party suppliers. The loader control is via the machine user interface which seamlessly integrates the loader and machine together.

The machine’s small footprint is retained as the AR300 loader is integrated inside the FX Linear machine.

Flexible Software

The AR300 loader uses RoboMate software, which provides flexible software that eliminates complex robot programming. Loading parameters such as collet insertion depth are controlled by the RoboMate software.

The software also provides the flexibility to load multiple tool types within a pallet. Separate iGrind files can be associated with every tool type allowing different tool types and operations within loader setup. RoboMate software allows the operator to adjust the robot’s sequence and functionality directly from the ANCA machine’s user panel.
Pallets

The AR300 loader uses a single pallet, split into two sections – one side is for the pick-up of unground tools, the other side is used to store finished ground tools.

First tool is picked up from pallet pocket 1A of the ‘pick-up’ section

Finished ground tool is returned to pallet pocket 1A of the ‘store’ section

Key Features

- Loader operation controlled by the machine user interface
- Flexible software to load a wide range of tool types
- Tools accessed via loader door and sliding pallet table at the front of machine
- Contained within standard machine footprint
- Loader is retrofittable to existing machines
- ANCA Motion CNC and drive technology

Benefits

- Affordable auto-tool loading solution with quick ROI
- Increased machine productivity and unmanned operation
- Mixed tool types in the one pallet and loader setup
- Quick and easy operator setup
- No increase in machine footprint
- ANCA’s comprehensive customer support
- Simple setup and operation, does not require specialised robot programming skills

Technical Specifications

<table>
<thead>
<tr>
<th>Tool details:</th>
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<tbody>
<tr>
<td><strong>Length</strong></td>
<td>30mm - 150mm (1¼” - 6”)</td>
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<tr>
<td><strong>Diameter</strong></td>
<td>Ø2mm - 20mm (Ø1/8” - 3/4”)</td>
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<tr>
<td><strong>Pallet capacity</strong></td>
<td>380 - 33 tools</td>
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<tr>
<td><strong>Tool load cycle times</strong></td>
<td>&lt;15 seconds</td>
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<tr>
<td><strong>Max tool weight</strong></td>
<td>0.75kg (1.7lbs)</td>
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<tr>
<td><strong>Grippers</strong></td>
<td>Double gripper set</td>
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