

IoT Ready **Educational Package**

Hands-on learning for the future of production with FANUC ROBODRILL



ROBODRILL meets CRX-10;A Automated CNC milling machine



CNC MILLING AND ROBOTICS FOR SCHOOLS AND UNIVERSITIES

At FANUC, we are passionate about automation. Contributing massively to manufacturing efficiencies, FANUC's automated solutions drive productivity, enhance quality and minimise costs.

Given the exciting future facing the industry, we are also passionate about education. That's why we have put together the FANUC Educational Package combining our vertical machining centre ROBODRILL with our latest collaborative robot CRX-10iA. Designed with students in mind, it enables young people to gain not only first-hand experience of programming and operating cutting-edge robots but as well CNC machines. Package content is highly relevant for modern factory applications and contains everything instructors require for teaching purposes.



ROBODRILL SPECIFICATIONS

- 5-axis simultaneous milling
- Travel X/Y/Z: 500x400x330 mm
- Lehmann 507510 5-axis table
- 10.000 rpm, 21 tools, BBT30
- Automatic pneumatic front door
- 60 months warranty
- Tilted Working Plane (TWP)
- High Speed Smooth TCP
- AICC2 200 Blocks Look Ahead
- Renishaw 0MP40-2 + 0TS measuring device
- Renishaw Axis Check up Kit



ROBOT SPECIFICATIONS

- FANUC CRX-10iA
- 6-axis Collaborative Robot
- Payload: 10 kg
- Reach: 1249 mm
- R-30iB Mini Plus Controller
- Tablet Teach Pendant
- Connectors on J6 for camera and configurable I/O



INDUSTRY 4.0/ IoT READY

- 2 x 10 Base-T or 100 Base-TX interfaces
- Ethernet software support as standard:
 - Robot Status, Program/ Variables / Diagnostics available over Web interface
 - *i*RVision and *i*Pendant remote interface
- Optional additional interfaces, e.g. Profinet available



EDUCATION SOFTWARE BUNDLE

- Ready to run solitaire application including iRVision and Dual Check Safety, with all source code (depending on included options)
- Full operating setup and calibration instructions for robot, iRVision and DCS



INSTRUCTOR TRAINING

- Everything instructors need to know in order to teach students how to:
 - run a CNC machine
 - operate a robot
- measure workpiece and worktool
- calibrate a 5-axis table
- connect a robot cell with a CNC machine
- Customised training materials for trainer and student



PC SIMULATION SOFTWARE FOR STUDENTS

- NC Guide academic version for milling and turning
 - Classroom version for 32 users
- ROBOGUIDE academic version simulation software
 - 20 licenses or 5 licenses plus 1 server license





Package content

- NC program for a defined workpiece
- Aluminium raw material
- 5 tools for this workpiece
- 5 tool holders
- 1 vise, suitable to this work piece
- GoPro Hero 9 to view the inside of the machine

Strong partners by our side

Worldwide the demand for automation has increased dramatically during the last 10 years. At FANUC we are very eager to promote the training of the young generation to prepare them for their new professions. We understand that supporting this training is also part of our contribution towards worldwide production development. To realise this educational package with high quality equipment FANUC is closely collaborating with selected partners who also recognise the need to contribute to preparing young people from all over the world for the automation industry.











