LUCAS-NÜLLE

Training Systems for Robotics

Using training robots to make complex robotics topics easy to understand and master

Robotics Training Systems

Starting in the World of Robotics

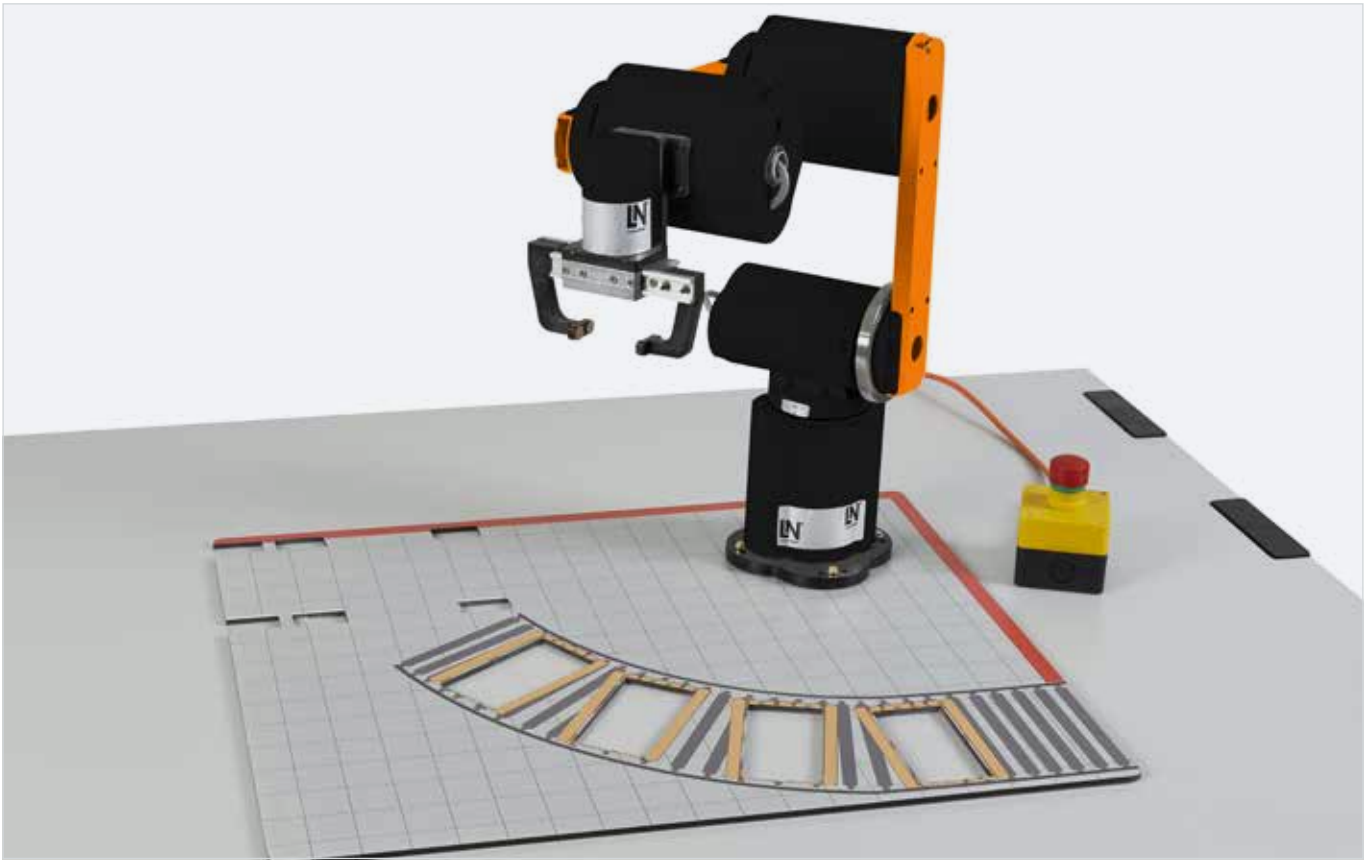
Robots now play a key role in modern, highly automated and efficient production processes. This training package "Fundamentals of robotics" guides the automation or mechatronics engineers of the future step by step through the basics of robotics, how to handle and program robots and shows how they can work in optimum fashion with automated systems.

Your benefits

- Multimedia courses with theory, animation, experiment instructions and evaluation capability
- Comprehensive background theory in order to understand multiple-axis robots and the safety systems they require
- The apparatus is intrinsically safe (no safety measures need to be taken)
- Many interesting experiments with a 4-axis robot, conveyor belt and a PLC system
- Robot can be programmed via supplied 3D simulation software
- The material learned can easily be applied to actual industrial robots

Training System

The **Mover4** is a four-axis robot arm designed for use in schools and colleges. The Mover4 HD allows realistic automation scenarios to be simulated. It can be set up as a movement platform and combines physics, mathematics and information technology in such a way that they are made tangibly real. The robot arm has four serial axes and can therefore move through three dimensions and tilt its gripper hand to specific angles.

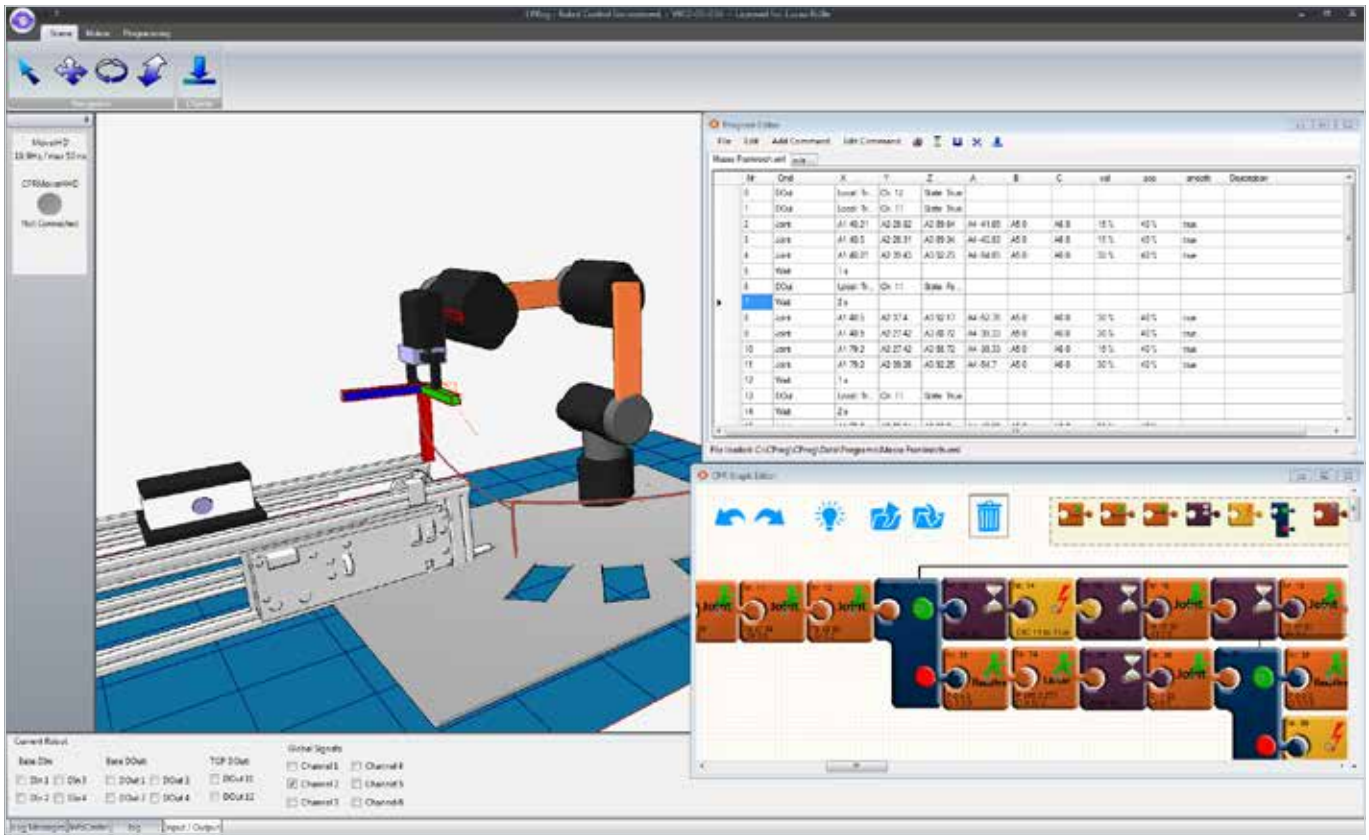


Your benefits

- 3D programming software
- Payload: 500 g
- Max. range: 550 mm including gripper hand
- Electrically operated parallel grippers
- Ports: 9-pin I/O, CAN programming interface
- Positioning accuracy: 1 mm
- Weight: 3.5 kg
- Power: 12 V via 230 V plug-in power supply, < 60W
- A PC is required to control operations

3D Programming Software

The **CPRog control software** provides a modern user interface and interactive 3D graphics for a direct introduction to the movement of a robot arm. The robot can be operated via keyboard or joypad. Programs can be created and modified using a graphic editor or a text editor. Licensing allows a set for a whole classroom to be installed.

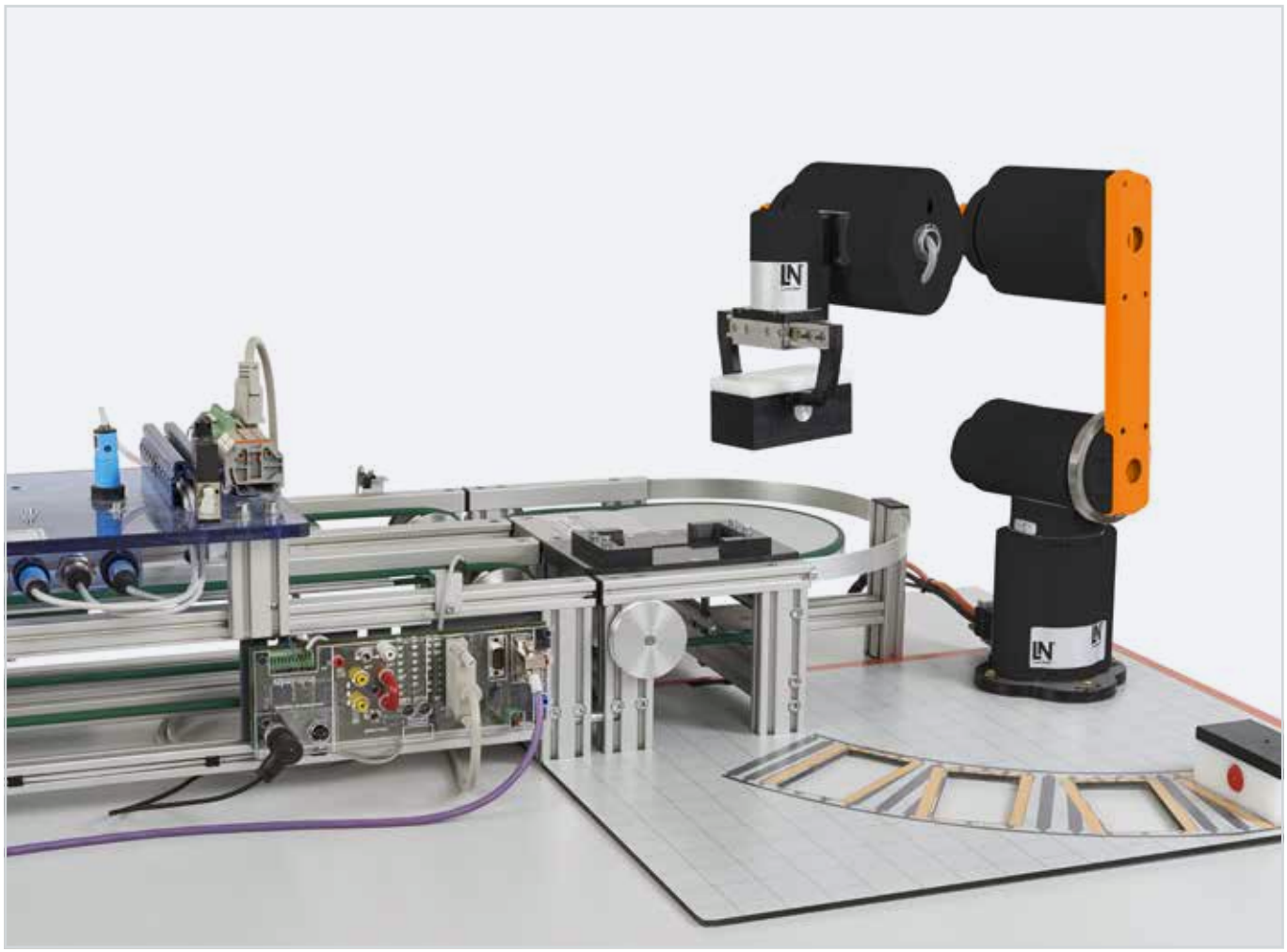


Your benefits

- Parallel operation and programming (3D model and actual robot arm)
- Stand-alone programming (3D model only)
- Integration of static and dynamic objects into the 3D environment
- Professional programming with loops and sub-routines

Combine our basic robotics equipment set with our mechatronics system

Our mechatronics system (IMS®) provides numerous different ways of setting up a production line. Whatever IMS® stations you use, the robot can be a useful enhancement to any of them. Its base plate is designed for universal use meaning it can easily be connected to a conveyor belt or production line.



Fundamentals of Robotics with UniTrain

The UniTrain course "Fundamentals of robotics" lets you learn the basic terminology and the techniques for controlling robots quickly and easily. You can apply what you have learned to any industrial robot. This means that equipment set CRT 11 eliminates any obstacles to a start in robotics.

Training contents

- Gripping methods for a robot
- Programming of movements
- Coordinate systems for a robot
- Speed and acceleration
- Singularities and symmetries
- Digital inputs and outputs
- Typical programming patterns
- Program structures
- Final experiment

Robots in Mechatronics Applications

You can extend equipment set CRT 11 by adding a mechatronics station. Use the four pallet storage positions on the base plate and program the complete function sequence for a mechatronics application.

Ref.-Nr.: K-C1-1161GB
Training systems for robotics – 09/17-1GB
(Printed in Germany)
Subject to technical amendments.

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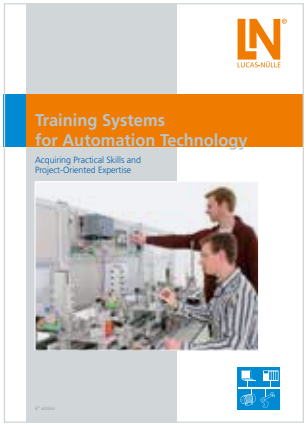

Additional information can be found in our catalogue on Automation Technology

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