



Maintenance training for robot systems of the CS8C generation



Participants

Electricians, electronics engineers, mechatronics engineers, technicians and engineers

Benefits for the participant

- More efficient cooperation between trained plant personnel and Stäubli service engineers during maintenance and service calls on site. This significantly reduces downtime and saves cost.
- The ability to identify potential opportunities to optimize the performance of the line. This not only reduces cycle times but also enhances the productivity level of the system.
- Participants learn how to independently carry out prompt and competent troubleshooting on the robot system.
- Unscheduled downtime can be reduced or even eliminated through preventive maintenance procedures or a competent assessment of the urgency of a repair.
- Reaction times, should a malfunction occur, are reduced by the prompt deployment of trained maintenance personnel.
- Trained personnel are better able to successfully implement advice and recommendations from the free Stäubli hotline.

Goal

This training course covers the different stages from operation of the system, start-up, and program execution to the administration of inputs and outputs. In addition, participants gain valuable knowledge relating to the electrical and mechanical components of the robot, essential maintenance work, up to level 2 as identified within the robot manual, and repairs that can be carried out by the trainees themselves.

Prerequisites

The professional suitability with regard to electrical safety.

Recommendation

Experience with the operation and maintenance of computer-controlled industrial machinery.

TX / RX CS8C

Content

- Content of the basic training course
- Commissioning of the robot
- Overview of the robot system
- General safety instructions
- Using the pendant
- Application control
- Editing data and teaching points

Diagnosis

- Booting the CS8C controller
- Configuration of the customer PC
- Optical displays (LEDs, displays on the control unit and on the arm)
- Error logger
- Pop-up window
- COM1 serial connection
- System messages
- Practical examples

CS8C controller

- Structure of the control system
- Power supply
- Electronic components - presentation, synoptics and troubleshooting
- Absolute calibration and testing of the reference points
- Inputs and outputs

Mechanics

- Description of the components
- Presentation of the JCM
- TX wrist - structure
- Axis 5 motor
- Gear motor axis 6
- Toothed belt check TX40/TX60
- JT 3/4 motor exchange TX40/TX60
- DSI board - function
- Wiring harness - protection and testing
- Phase alignment of displacement encoder
- Preventive maintenance up to level 2

Duration: 4.5 days

Course number: 8.2.1

Location: Bayreuth



TS / RS / TP80 CS8C

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CS8C controller

- Structure of the control system
- Power supply
- Electronic components - presentation, Synoptics and troubleshooting
- Calibration and testing of reference points
- Inputs and outputs

Mechanics

- Description of the components
- Mechanical components
- Replace gearbox JT 1/2 (RS only)
- Replace stroke turning spindle JT 3/4 and remeasure
- Re-adjust robot
- Load, save and change machine parameters
- DSI boards
- Systematic troubleshooting and – elimination
- Preventive maintenance up to level 2

Location: Bayreuth



Duration: 4.5 days

Course number: 8.2.2