

The Robot Training Centre, Milton Keynes

Course Outline



S4C Plus Operator/Electrical Maintenance

Duration: 5 day

Will benefit: Supervisors, Team Leaders and Service Personnel who have not attended any of the ABB basic courses.

Pre-requisites: Students attending should be employed by their companies as maintenance technicians with electrical bias or hold relevant electrical qualifications. PC Knowledge and file handling would be useful. The course objectives are unlikely to be met if students do not fulfil these requirements.

Subject Areas:

Safety Instructions

- Safe working practices
- Common sense & pinch points
- Emergency stops & the enabling device
- Teach velocity
- Static precautions

System Overview

- The manipulator
- Control Cabinets Operator's panel
- Teach pendant operation
- Robot mechanical unit & control system overview
- Circuit diagrams

Starting and stopping the program

- The program test / Instruction window
- Manual reduced velocity
- Operate program stepwise through Instructions
- Continuous & Cycle running modes
- Program pointer and Cursor
- Override speeds
- Automatic Mode
- Production window

Jogging the robot using the joystick

- Axes motion
- Linear / Reorientation
- Co-ordinate systems
- Increments

S4C Plus Operator/Electrical Maintenance (Cont)

Please contact the Training department

Tel No: 0044 (0)1908 350499

Fax No. 0044 (0)1908 350301

<http://www.abb.co.uk/product/seitp327/980d1e9bcdbb9aa1c125719c002e705d.aspx>



The Robot Training Centre, Milton Keynes

Course Outline



Positional Instructions

Move Joint and Linear

Instruction data, Position, Speed, Zone and Tool.

System block diagram

Mains connections

Power supply

Customer connections

Motors on chain

Power unit

Computer system description

Main computer

I/O computer

Axis computer

System Parameters

Setting system time & date

Error logs

Using the trouble shooting guides

Input / Output connections

The 'Cold Boot' procedure

System Calibration

Motor offsets

Revolution counter updating

The servo system

Rectifier, servo drive boards & resolver feedback

Motor removal and set up

Serial measurement system

Cable connections

Please contact the Training department

Tel No: 0044 (0)1908 350499

Fax No. 0044 (0)1908 350301

<http://www.abb.co.uk/product/seitp327/980d1e9bcdbb9aa1c125719c002e705d.aspx>



The Robot Training Centre, Milton Keynes

Course Outline



S4C Plus Operator/Electrical Maintenance (Cont)

Preventative maintenance procedures

Oil quantities
Battery replacement
Greasing

Objectives

On completion of this course the participants will be able to perform:

- Safety awareness
- Operate teach pendant
- Execute program
- Jogging the robot
- Identify positional instructions
- Modify program positions
- Saving program changes to floppy disk
- Electrical repair and preventative maintenance
- System parameter set-up and editing
- Trouble shooting and component replacement
- Installation of robot operating system software
- Calibration of the robot system

Please contact the Training department

Tel No: 0044 (0)1908 350499

Fax No. 0044 (0)1908 350301

<http://www.abb.co.uk/product/seitp327/980d1e9bcdbb9aa1c125719c002e705d.aspx>

