

# S4C Plus and IRC5 Upgrade

## Course Outline

Duration 2 days

Beneficial to programmers, operators and maintenance staff

For more in-depth knowledge and practice, choose the IRC5 Programming and Operation and IRC5 Electrical maintenance courses

Students must have attended the S4 Programming and operation course and have Knowledge of S4C+RobInstall software and Booting procedure

## Subject areas

### Safety Instructions

Emergency stops  
Enabling device  
Cell interlocking and modes of operation  
Brake release and Pinch points  
Program reset and Collision awareness

### Introduction to the key benefits of IRC5

New products and features  
Cabinet Architecture and Performance  
FlexPendant Overview  
MultiMove concepts  
IRC5 Software packages

### Using the FlexPendant

ABB Menu  
Overview of all the listed Windows  
Cleaning and calibrating the FP screen  
Rotating the FP screen for LH user  
Event messages  
Restart menu and advanced restart options  
User messages window and icon  
Setting up the 'Most Common' Inputs and Outputs  
Simulating Inputs and Forcing Outputs

### Program operation

'Production Window' and 'Program Editor'  
Motion pointer and Program pointer  
Debug menu

### Jogging the Robot

Jogging window and Quickset menu  
MultiMove Jogging

### Programming and Program Editing

Adding and Modifying Instructions  
Program Structure  
Robot Tasks  
Program Modules, Routines and Program files  
Backup and Restore  
Loading old S4 programs (.prg)

### TCP and Workobject definition windows

Coordinate Frames theory and methods of definition

### RobotStudio5 Online

Connecting PC through the service port  
Grant / Revoke Access  
Program Editing  
Build system and download  
User Authorisation System 'UAS'  
Parameter editing theory  
Switching Inputs and Outputs

### Objectives:

On completion, participants will be able to perform:

- Understand Key benefits of IRC5 over S4C+
- Operate the FlexPendant menus
- Operate a program
- Event messages and Error recovery
- Jog the Robot
- Edit Program
- Backup and Restore
- Understand the Online functions of RobotStudio