Course description

IN-RB07
Spot Welding Process and System

Course goal
The goal of the course is to improve the ability of run the Robot cell, Program Modification and responsible for engineering, commissioning, operation and Maintenance of Robotics for Automation. Able to run the Robot cell, Program Modification, New Programming, improvement in Welding Quality, General Troubleshooting

Learning objectives
Upon completion of this course, students will be able to:
- understand the use Spot Welding Process
- Safety and Handling
- Understand the critical elements Programming
- Welding system
- Process Control and setup

Participant profile
Personnel from Plant Engineering
Robot Operator

Prerequisites
Degree or diploma in engineering, basic knowledge of Automation Product, Programming Concept

Topics
- Safety Overview & Introduction
- Overview of RAPID, RAPID Program structure, Routines, Modules, Program Data
- Program Data, new Data, Declaration, Data Arrays
- Introduction of ABB Spot Welding System
- Description of ABB Spot Welding system and its Components
- Robot Work object and Defining the Work object Use of Work object
- hand-on exercise
  Spot Welding Instructions
  Spot L
- hand-on exercise & Practices

Topics
- Arc Welding Program Data
- Weld Data
- Schedule
- Interfacing of Spot Welding equipment
- Hardwiring or Bus communication
- WeldTimer
- Welding Signals (Input/Output)
- Numatic Gun
- Servoe Gun
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- Gun Tuning and Force Callibration
- Tip Dressure station & equipment
- Programing of Tip Dresser Auto Call
- Spot Welding Robotware
  Overview of Spotware Menu.
- ModPos or Teaching of Program
- Spot Welding PROCESS Control
- Question & Answer, Summarizing

Course type and methods

This is an instructor led seminar with practical exercises. The language of the course is English

Course Duration
The duration of the course is Two days.
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