Robotics

This three-day course is designed to provide an overview of robotics used in plants today. The course provides the student with an overview of robot operations. As an introduction to robotics, the components of a robot are covered, as well as their function within the system. The course also covers areas of motion control including topics such as axis of motion, controls, servo controls, operator interfaces, and how robots communicate with other control systems, such as PLC's. This course is designed for technicians and engineers who work with and maintain plant robots.

I. Introduction

· Robots
· Applications
· Controllers
· Typical Software Application
· Operator Interfaces

II. Servo Controls

· Motion Controller Fundamentals
· Servos
· Resolvers
· Encoders
· Feedback
· Positioning
· Braking

III. GMF Robots *(can be made to reflect the specific robot used at your facility)*

· Types and Series
· Components
· Power Distribution
· Print Reading
· Limit Switches and Hardstops
· RH Controller
· CRT Displays
· Teach Pendant
· Communications with external PLC's
· Input/Outputs
· Karel Software
· Jogging Robot
· Operations

This outline can be revised and course modified to match the robots used at your facility