



Course Name : *MILLING-Numerical Control Programming*

Course Duration : 24 Hrs.

Course Overview

- **Course Description**
 - This course teaches the use of the CNC Milling 808D & 840Dsl Control Programming using Sinumerik Controllers.
- **Intended audience**
 - This course is intended for Manufacturing Engineers, Process planners.
- **Prerequisites**
 - Education: Diploma 3 year Students or Degree 2nd year completed in any one of following Streams.
 - Aeronautical, Automobile, Industrial, Marine, Mechanical, Mechatronics, Metallurgy, Production and Manufacturing Engineering.
 - Software: None

Course Objectives

- Elements of CNC machine
- Introduction To CNC Programming
- Introduction to SIEMENS 808D & 840Dsl controller.
- Cutting Tools and Parameter selection Milling
- Milling Work holding & Tool Holding Devices
- Basics Milling Programming
- Programming using Siemens standard cycles for Milling
- Hands on practical – All standard Cycles of 808D & 840Dsl Milling

Course Contents

- Up milling
- Down Milling
- Cutting Tools in Milling
- Facing Operation
- Chamfer & Radius Operations
- Contour Cycle
- Facing Cycle
- Drilling Cycle
- Reaming Cycle
- Boring Cycle
- Rectangular Pocket Milling



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- Circular Pocket Milling
 - Spigot Milling Cycle
 - Groove Milling Cycle
 - Threading Cycle
 - High Speed Milling
 - Step by Step Programming Procedure & Safety