Fanuc Custom Macro B

Dates: Dec 13th - Dec 14th

Location: IMR training facilities, Mullingar

Duration: 2-Day Course

Delivery: Face to Face Classroom using individual simulators

Contact: marketing@imr.ie

Register Interest

IRISH MANUFACTURING RESEARCH

MILLS CNC TRAINING ACADEMY

Course Aim

The course is designed for operators in engineering already experienced in using the machine at an advanced level and want to leverage CNC machines full capabilities through Macro programming.

CNC Programming with the use of Fanuc Custom Macro B enables you to design and implement powerful, advanced CNC macro programming techniques that result in unparalleled accuracy, repeatability and enhanced productivity (ideal for a family of parts). The course begins with step-by-step instructions and then gradually proceeds in complexity.

The course is suitable for customers with Fanuc controlled machines or with a similar configuration.

Day 1: Module 1

1. Introduction.
2. Usage of Macro Function & Data Requirements.
3. M98-M99 Sub Program Call & Use.
4. Macro call statements.
5. G65, G66 & G67 including G, T, & M Code.
6. Program Protection & Display and Parameter adjustments.
7. Variables.
8. Local Variables (1-33).
9. Common Variables (100-530).
10. System Variables (1000-20000), i.e.: Tool Offsets, Work Offsets and Alarm Generation.
11. Clock Timers, Function Suppression. Function Inhibit. Modal & Positional information.
12. Arithmetic and Trigonometric Functions.
13. Definition, Addition, Subtraction, Multiplication, Division.
14. Sine, Co-Sine, Tangent, Arctangent, Square-root, Absolute Values.
15. Examples of Use.

Day 2: Module 2

1. Conversion BCN to BIN, & BIN to BCN.
2. Discard Fractions, Raising Up Fractions (Rounding Off).
3. Combination of Arithmetic calculations, Modification of Arithmetic sequences.
4. Control Commands & Branching.
5. Conditional expressions, Conditional & Unconditional Diversions, Iteration.
6. Custom Macro Body.
7. Creation & Examples.
8. Making your own canned cycles using Custom Macro B.
9. System Alarms.
10. Parameters related to the Use of Custom Macro Alarms.
11. Output of Data through RS232.
12. Using Dprint, Bprint statements.
13. Program Input & Output through RS232C. Baud Rate Setting, Stop Bits etc.
14. Data Backup for Control Settings
15. Examples

Learning Outcomes

At the end of the course the participants will have acquired basic knowledge for CNC programming and operation of CNC Precision machines through Macro programming. By the end of the course, you will be able to develop highly efficient programs that exploit the full potential of CNC machines.

Participants Profile

This course is designed for operators currently operating CNC machines at a very high level i.e., programming at controller. Applicants must already be well versed in Fanuc or Similar Programming and a good understanding of Mathematics would be advisable.

Certification / Awarding Body

CPD Engineers Ireland

**Limited to 8 participants*

Register Interest