

NC-100

Fanuc CNC Basic Machine Troubleshooting

Course Description

This course is designed for technicians who will be troubleshooting Fanuc controlled machinery. It will concentrate on the use of ladder logic and various diagnostic screens to troubleshoot machine problems. During the course the student will examine the ladder logic in detail for one machine. During this process we will also cover various programming techniques used by other machine builders. Multiple circuits, including M-codes, spindle commands, interlocks and alarms, will be covered.

Customer Supplied Training Equipment

This class is available on site or at our location. If done on site, the customer will provide a classroom suitable for training purposes. A 220VAC supply will be needed for the simulator.

Topical Outline

- Terminology used to describe the machine.
- Discuss metal cutting and how it affects the machine.
- Discuss basic commands such as G, F, M, S and T codes.
- Identifying control types, software versions, machine models.
- Identify the major components in the control.
- Show how the machine control handles movement and I/O.
- Observe control screens used to diagnose errors.
- Learn to safely test the major components on the machine.
- Learn to distinguish between Fanuc and machine alarms.
- Use of the diagnostic and ladder logic screens to trace errors.

If you wish to add, remove or concentrate on any of the topics please let us know. We will accommodate any special requests.

Prerequisites

Participants should have a good basic knowledge of electronics and the ability to use test instruments such as multi-meters.

Course Length

36 hours

CEU's

3.3