

Course Title: GRINDING TECHNOLOGY

Course Code: MMF 128

Course Background / Summary:

Grinding plays a pivotal role in the world of manufacturing. It is impossible for modern manufacturing to not have grinding. Grinding performs many functions, including sharpening tools, finishing surfaces, producing close tolerances, and machining complex material. The course includes major grinding machine components, types of grinding machines, common grinding operations, and variables that affect the grinding process. At the end of the course, trainees should understand and practice the SOP of handling machines such as lathe, grinding, drilling, and welding. Trainees will also be exposed to the basic techniques of preparing the machines and equipment layout in the workshop.

Course Objectives:

- Demonstrate the knowledge and skill to safely use the surface grinder and cylindrical grinder.
- Demonstrate the knowledge and skill to perform grinding operations on flat surfaces and cylindrical surfaces.
- Demonstrate the knowledge and skill to operate the surface grinder and cylindrical grinder in terms of mounting and removing grinding wheels, truing and dressing grinding wheels, also grinding a flat and cylindrical surface.

Target Audience:

- Machines Operators and Suppliers
- Teaching Staff (Including vocational and technical teachers)
- Industrial Workers

Course Duration: 3 Days

Course Contents

1.0 Basic Safety & Procedures

4.0 Surface Grinder Operations

2.0 Functions of Grinding

5.0 Cylindrical Grinder Operations

3.0 Surface Grinder and Cylindrical Grinder Setup

6.0 Project