



INSTITUTE OF MATERIAL, MALAYSIA

IMM Welding Training Course

Steel Technology for Non-Technical Personnel Course

Code: STNT

HRDF claimable

Steel finds application in many diverse industries such as automotive, shipbuilding, fabrication, pipelines, structural buildings and even surgical instruments. The types of steel used have properties that meet the specific functions and purposes of a product. A good understanding and appreciation of steel will provide learners with higher confidence, preparedness and the ability to more accurately resolve matters that relate to the end product. Participants in this 2-day program will benefit much from the fundamental concepts of steels and the selection process including the adequate protection of materials of construction and the fundamental concepts of corrosion control.

Reference standards (reference used shall refer to the latest published document):

- TBA

Who should attend

This appreciation course is most beneficial to technical management personnel of all levels including junior and senior engineers, inspectors, designers, manufacturers, fabricators, technical managers and practicing engineers who are involved in the management and planning of welding and inspection-related activities as well as maintenance activities in upstream oil & gas facilities, refineries, process plants and petrochemical facilities.

Objectives

1. Identify & select correct steel materials for building components for specific tasks based on the requirements, constraints and material properties
2. Interpret materials data (specification sheets) to determine their suitability
3. Identify the properties of materials for specific tasks within given parameters

Course topics

1. Introduction of engineering materials
2. Designations and specification of metals
3. Heat treatment of steels
4. High-strength steels
5. Impact of welding parameters
6. Weld defects
7. Weldability and welding cracks
8. Ferritic, super ferritic, martensitic, austenitic, super austenitic, duplex, super duplex, precipitation hardenable stainless steels
9. Welding of stainless steels
10. Corrosion resistance of stainless steels

Course duration

2 days

Pre-requisite(s)

No previous working experience is required.

Certificate awarded

Certificate of attendance