

NITEC IN WELDING

MODULE OBJECTIVES

Core Modules

Shielded Metal Arc Welding I

On completion of the module, trainees should be able to perform cutting and bevelling on steel plates and pipes in flat, horizontal and vertical positions, weld fillet and groove joints on steel plates and pipes-to-plates in flat and horizontal welding positions using shielded metal arc welding process.

Shielded Metal Arc Welding II

On completion of the module, trainees should be able to weld fillet and groove joints on steel plates and pipes, and stainless steel plates in horizontal and vertical welding positions using shielded metal arc welding process, perform air carbon-arc gouging on steel plates and pipes in flat, horizontal and vertical gouging positions as well as rectifying weld defects.

Flux-cored Arc Welding I

On completion of the module, trainees should be able to weld fillet and groove joints on steel plates, sheets and pipes-to-plates in flat, horizontal and vertical welding positions using gas metal arc welding and flux-cored arc welding processes, weld groove joints on ferrous and non-ferrous metal plates and pipes in flat, horizontal and vertical welding positions using gas tungsten arc welding process.

Gas Metal Arc Welding

On completion of the module, trainees should be able to weld fillet and groove joints on steel plates and pipes-to-plates, stainless steel plates, sheets and pipes-to-plates in flat, horizontal and vertical welding positions using gas metal arc welding, weld fillet joints on aluminium plates in flat, horizontal and vertical welding positions using gas tungsten arc welding process.

Shielded Metal Arc Welding III

On completion of the module, trainees should be able to perform cutting and bevelling on steel plates and pipes in overhead positions, weld fillet and groove joints on steel plates and pipes-to-plates, stainless steel plates, sheets and pipes-to-plates in flat, horizontal and vertical welding positions using gas metal arc welding, perform air carbon-arc gouging on steel plates and pipes in overhead gouging position as well as rectifying weld defects.

Shielded Metal Arc Welding IV

On completion of the module, trainees should be able to weld groove joints on steel and stainless steel pipes in 5G, 6G and 6GR welding positions and perform reclamation and hardfacing operations using shielded metal arc welding process, perform groove joints on steel plates in 1G using submerged arc welding.

Flux-cored Arc Welding II

On completion of the module, trainees should be able to weld fillet joints on steel and stainless steel plates and pipes-to-plates in overhead (4F) and 5F welding positions using gas metal arc welding and flux-cored arc welding processes, and weld groove joints on ferrous and non-ferrous metal plates and sheets in overhead welding position using gas tungsten arc welding process.

Flux-cored Arc Welding III

On completion of the module, trainees should be able to weld groove joints on steel plates and pipes, and stainless steel plates in overhead (4G), 5G and 6G welding positions, using gas metal arc welding, flux-cored arc welding and gas tungsten arc welding processes, and perform reclamation and hardfacing operations using gas metal arc welding and flux-cored

arc welding processes.

On-The-Job Training I

On completion of the module, trainees should be able to apply and integrate Year 1 skills and knowledge acquired at ITE Approved Training Centres, and further develop competencies at the workplace.

On-The-Job Training II

On completion of the module, trainees should be able to apply and integrate Year 2 skills and knowledge acquired at ITE Approved Training Centres, and further develop competencies at the workplace.