Vocational Training Council

Pro-Act Training and Development Centre (Welding)

Course Curriculum

Course Title:	TIG Welding Training (2nd stage)
Course code:	WE5106144
Offered By:	Pro-Act Training and Development Centre (Welding)
Location:	Level 7, Block B, 13-19 San Kwai Street, VTC Kwai Chung Complex, Kwai Chung, NT.
Skill Level:	Operative
Class Size:	10
Duration:	22.5 hours (9 evenings)
Course Mode:	Part-time evening
Medium of Instruction:	English

Course Objective

The course has been designed for graduates of the WE5106143 or the workers who possess basic TIG welding experiences and intend to obtain more in-depth on applying TIG in mild steel plates (6 mm or above) welding in order to cope with the demand of the construction and ship repairing industry. The course provides comprehensive coverage of both the theory and practice at a ratio 20/80 approximately.

After completion the course, trainees will be able to:

(1) Set-up and operate safely in tungsten inert gas arc welding.

(2) State the definitions, advantages and limitations of tungsten inert gas arc welding in joint the mild steel plates.

(3) List out the factors governing the quality in jointing the mild steel plates.

(4) Select and distinguish different types of tungsten electrodes and protective gases commonly used in tungsten inert gas arc welding of mild steel plates.

(5) State the general defects and the prevention in welding of mild steel plates.

(6) Make use of the process to perform a simple welded joint on mild steel plates in 2F and 2G position.

(7) Identify welding defects and discontinuities by visual inspection and state the remedial actions.

Course Outline

(1) Appreciate and recognize the use and the safety precautions of all equipment, tools and accessories used in TIG welding.

(2) Advantages and limitations of TIG welding.

(3) Effects of TIG welding parameters, such as welding current, protective gases, shape of tungsten electrode tip, welding position etc.

(4) Types of general defects, formation and prevention of the defects.

(5) Make use of TIG welding techniques to joint metal parts as follows:

  (1) Square edge butt weld, mild steel, flat position

  (2) Single V groove weld, mild steel, flat position

  (3) Single V groove weld, mild steel, horizontal position

  (4) T-joint fillet weld, mild steel, horizontal position

  (5) Pipe welding 1G rolled position

Entry Requirements

Employed in the relevant trade and sponsored by their employers; or supported by Nepalese Construction Workers Union, Hong Kong (NCWUHK).

Attendance Requirement

Trainee with attendance less than 70% is considered to be failed the practical portion.

Award
Completion Certificate

Evaluation

Survey will be taken from trainees in form of questionnaire at the end of the course.