



Course Info

Title	: Introduction to Horizontal Directional Drilling (HDD)		
Duration	: 1 day		
Location	: 69A, Jalan Teratai 7, Taman Johor Jaya, 81100 Johor Bahru, Johor, Malaysia		
Category	: Fundamental		
Trainer Name	:		
Target Audience	a) Business Owner	d) Government & Safety Personnel	
	b) Management Staff	e) Anyone interested in the HDD industry	
	c) Entry-Level		

Course Objective

Upon completion of this module, participants shall be able to:

- 1) Understand the basic principles of Horizontal Directional Drilling (HDD), including its advantages and limitations.
- 2) Identify the key components of a HDD system and their respective functions.
- 3) Outline and explain the standards procedures involved in a typical HDD operation.
- 4) Recognize and assess potential hazards associated with HDD activities and apply appropriate safety measures and precautions.

Learning Outcome

Upon completion of this module, participants shall be able to:

- 1) Explain the principles, applications, advantages, and limitations of Horizontal Directional Drilling (HDD).
- 2) Describe HDD equipment, tools, and system components in accordance with approved specifications.
- 3) Follow the standard HDD work sequence, including pilot drilling, reaming, and product pipe installation, in accordance with approved method statements.
- 4) Apply appropriate control measures for hazards associated with HDD activities.

Training Approach/Methods

The training will be conducted using the following methods:

- 1) Brief facilitator-led discussion.
- 2) Group reflection based on real-life examples.
- 3) Role-play exercises.
- 4) A summary with key takeaway tips.

Course Outline

The training will be cover using the following outline:

Chapter 1 - Introduction of HDD

- 1) Introduction of HDD
- 2) Basic component of an HDD System
- 3) HDD Process
- 4) Drilling Fluid

Chapter 2 - HDD Rigs and Equipment

- 1) HDD Rigs
- 2) Rigs Component
- 3) Operation Control
- 4) Service & Maintenance
- 5) Pipe Loading System

Chapter 3 - HDD Locating System

- 1) HDD Locating System
- 2) Pre-Locating Procedure

Chapter 4 - HDD Jobsite Preparation

- 1) Safety Guideline
- 2) Jobsite Setup
- 3) HDPE Pipe Jointing Method

Chapter 5 - HDD Preliminary Procedure

- 1) Technical Feasibility Consideration
- 2) Emergency Response Plan (ERP) Utility Mapping



Time Table

Day 1

Time	Topics	Hours/Mins	Trainer
08:30 - 09:00	Registration and Ice-Breaking Session	0.30	
09:00 - 10:30	CP1: Introduction to HDD	1.30	
10:30 - 10:45	Morning Break	0.15	
10:45 - 12:15	CP2: HDD Rigs and Equipment	1.30	
12:15 - 13:15	Lunch Break	1.00	
13:15 - 14:15	CP3: HDD Locating System	1.00	
14:15 - 15:45	CP4: HDD Jobsite Preparation	1.30	
15:45 - 16:00	Tea-Break	0.15	
16:00 - 17:00	CP5: HDD Preliminary Procedure	1.00	
17:00	End of Day		