

OTC628

Production Safety Systems Training (T2) (Includes API Fee)

Duration	3 days
Target group	Workers, on offshore production platforms, that operate, repair and maintain facilities and safety devices needing to meet the API RP 14C 8th Edition requirements.
Prerequisites	None
Objective	Upon completion of the course, the delegate will possess the knowledge and ability to operate an oil and gas production facility both onshore and offshore.
Contents	<p>The following modules will be covered during the course:</p> <ul style="list-style-type: none"> 4. Safety Device Symbols and Identification <ul style="list-style-type: none"> 4.1 Introduction 4.2 Functional Device Identification 4.3 Symbols 4.4 Component Identification 4.5 Example Identification 5. Safety Analysis and System Design <ul style="list-style-type: none"> 5.1 Purpose and Objectives 5.2 Safety Flow Chart 5.3 Safety System Operation 5.4 Premises for Basic Analysis and Design 6. Protection Concepts and Safety Analysis <ul style="list-style-type: none"> 6.1 Introduction 6.2 Protection Concepts 6.3 Safety Analysis 6.4 Analysis and Design Procedure Summary Process Component Analysis: <ul style="list-style-type: none"> A.1 Wellheads and Flowlines A.2 Wellhead Injection Lines A.3 Headers A.4 Pressure Vessels A.5 Atmospheric Vessels A.6 Fired and Exhaust-heated Components A.7 Pumps A.8 Compressor Units A.9 Pipelines A.10 Heat Exchangers Examples of Safety Analysis Flow Diagram and SAFE Chart: <ul style="list-style-type: none"> B.1 General B.2 Natural Draft Burner on a Heater Treater Pressure Vessel B.3 Blank Safe Chart Remote Operations: <ul style="list-style-type: none"> C.1 Definitions Specific to Remote Operation

C.2 General
C.3 Remote Operations during Storm Conditions

Safety System Bypassing:

D.1 General
D.2 Manual Bypass
D.3 Automatic Bypass
D.4 Final Element

High-Integrity Pressure Protection Systems

E.1 General
E.2 HIPPS Implementation Methods
E.3 General Requirements
E.4 Input Sensors
E.5 Input Sensor Maintenance and Testing
E.6 Logic Solver
E.7 HIPPS Logic Solver Modifications
E.8 Relays
E.9 Final Field Elements
E.10 Design of HIPPS Valves
E.11 Reset of System
E.12 Installation and Commissioning

Logic Solver (F.1.1-F.1.12)

Emergency Support Systems

G.1 General
G.2 ESSs
G.3 Other Support Systems

Toxic Gases:

H.1 General
H.2 Installation, Operation, and Testing of Fixed Detection Systems
H.3 Systems for Discharging Sulfide and Sulfur Dioxide to Atmosphere

Testing and Reporting Procedures

I.1 General
I.2 Design and Installation Verification
I.3 Safety System Testing
I.4 Test Tolerances
I.5 Reporting Methods

Exam

Successful completion of the course will require a minimum score of 75% on a written test and 100% on practical assessment