

ADVANCED CASING DESIGN



DRPT113

COURSE TITLE

Advanced Casing Design

COURSE DATE/VENUE

1st – 5th Jun 26'

London, U.K.

COURSE REFERENCE

DRPT113

COURSE DURATION

05 Days

DISCIPLINE

Drilling, Reservoir & Petroleum Training

COURSE INTRODUCTION

This 'Advanced Casing Design' course covers the subject related to structural mechanics of down hole tubular. Various topics like material aspects, connection selection, performance properties, load cases, design factors etc. will be covered under the same.

COURSE OBJECTIVE

Upon successful completion of the course, the participants will have ability to:

- Conduct casing design calculations for different load cases via different methods
- Appreciate the effects of temperature and wear on casing design
- Understand how corrosion can reduce casing life/performance, recognize signs of corrosion

COURSE AUDIENCE

- Operation Engineers
- Project Engineers
- Site Drilling Engineers
- Drilling Supervisor

COURSE CONTENT

DAY1

- Introduction to Casing
- Casing Profiles and Drilling Scenarios
- Tubular Range Lengths & Colour Coding
- Mechanical Properties of Steel

DAY2

- Connections, API, Proprietary
- Tension, Compression, Internal Yield Pressure
- Collapse, Yield Strength and threshold
- Fundamental Design Principles

DAY3

- Tubular Selection - Costs, Service Load Cases
- Standard Load Cases
- Service Life Design Load Equations
- Load Capacity Diagrams
- Introduction to TDAS / EXP

DAY4

- Casing Wear, Landing Considerations for Long Strings to Prevent Buckling
- Liner Buckling Due to Set Down (Compression)
- Compression and Burst, String to String Load Transfers, Multi String Affairs, Shock Rebound Loads, Trapped annulus pressure build up, and other trapped fluid concepts
- Well head growth
- Kick Tolerance
- Torque and Drag, Casing floatation, ERD applications
- API Standards Overview

DAY5

- CASE STUDY

COURSE CERTIFICATE

TRAINIT ACADEMY will award an internationally recognized certificate(s) for each delegate on completion of training.

COURSE FEES

£5,750 per Delegate. This rate includes participant's manual, Hand-Outs, lunch, coffee/tea on arrival, morning & afternoon of each day.

COURSE METHODOLOGY

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions