Subsea Connections and Jumpers

Presented by

Oseghale Lucas Okohue  BEng. Msc. CIPMP

www.chesssubseaengineering.com
Course Instructor

Name: Oseghale Lucas Okohue

Position: Subsea Engineer – Production Systems | Drilling Systems Specialist

Website: www.chesssubseaengineering.com

Email: oseghaleokohue@chesssubseaengineering.com

oseghaleokohue@gmail.com
Outline

Lecture 1: Introduction
  - Tie-In Systems

Lecture 2: Jumper Components and Functions
  - Flexible Jumper Components
  - Rigid Jumper Components
  - Connector Assembly
  - Jumper Pipe Spool
  - Hub End Closure
  - Fabrication/Testing Stands
Outline

Lecture 3: Subsea Connections
  - Bolted Flange
  - Clamp Hub
  - Collet Connector
  - Dog and Window Connector
  - Connector Design

Lecture 4: Design and Analysis of Rigid Jumpers
  - Design Loads
  - Analysis Requirements
  - Materials and Corrosion Protection
Outline

Lecture 5: Design and Analysis of a Flexible Jumper

- Flexible Jumper In-Place Analysis
- Flexible Jumper Installation
Lecture 1: Subsea Connections and Jumpers

Presented by

Oseghale Lucas Okohue  BEng. Msc. CIPMP

www.chesssubseaengineering.com
Introduction

- In subsea oil / gas production system, a **subsea jumper** is a short pipe connector used to transport **production fluid** between two **subsea components** i.e.
  - ✓ tree and manifold,
  - ✓ manifold and manifold, or
  - ✓ manifold and export sled.

- It may also connect other **subsea structures** such as PLEM / PLETs and **riser bases**.
Introduction

- In addition to production fluid, it can also be a pipe by which water / chemicals are injected into a well.
Introduction

In this module; an in-depth approach of how Subsea Connections and Jumpers operate, the engineering principles involved and identifying the key areas that are often overlooked, such as managing availability and the reliability of Subsea Connections and Jumpers.
www.chesssubseaengineering.com

Email: info@chesssubseaengineering.com