

**Training Title**

**ADVANCED OPERATIONS AND SHUTDOWN MANAGEMENT**

**Training Duration**

5 days

**Training Venue and Dates**

|  |   |                         |         |            |
|--|---|-------------------------|---------|------------|
| <i>Advanced Operations and Shutdown Management</i> | 5 | 29 July – 2 August 2024 | \$5,500 | Dubai, UAE |
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*Trainings will be conducted in any of the 5 star hotels.*

**Training Fees**

- *5,500 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch.*

**Training Certificate**

*Prolific Consultants FZE Certificate of Course Completion will be issued to all attendees.*

**COURSE OVERVIEW**

*This comprehensive training program covers advanced pigging operations, advanced flaring system operation, and emergency shutdown systems in the oil and gas sector. Participants will be equipped with the knowledge and skills needed to effectively plan, conduct, and monitor pigging activities while ensuring control over protection systems.*

*The oil and gas industry are surrounded with examples of poor Turnarounds, which have injured people and damaged businesses. If Turnarounds are not properly planned, managed and controlled, companies run the risks of serious safety and budget penalties, costly schedule delays and negative impacts on customers. As a consequence, operators are starting to explore Turnaround best practices and establish a more robust methodology.*

*Turnarounds are the highest risk activity that we routinely perform in the industry, but they are also an area of massive variability in approach and outcome. Central to the variability is a lack of written methodologies and training – there are around 1,000 times as many books on maintenance as there are on turnaround management. All too often companies see Turnarounds as something to be survived and therefore it is no surprise that most Turnarounds fail.*

*The purpose of this course is to equip the participants on the use of the Model of Excellence for Operations and Turnarounds and the principles of Challenge Planning to equip attendees with an advanced approach to Turnaround Management. The course is backed by real situations, high levels of interaction, group exercises and multiple case studies. It will explore the*

*underlying mechanisms and levers that shape a Turnaround to demonstrate why we sometimes succeed or fail and introduce new conceptual approaches that can increase our chances of succeeding.*

**COURSE OBJECTIVES:**

*Upon completion of this course, the participants will be able to:*

- *Understanding the concept in details of oil & gas processes operations and shutdown management*
- *Position Turnarounds as part of an overall strategy of improving business performance.*
- *Build the best Turnaround team possible from available resources.*
- *Help senior management build effective steering teams.*
- *Reduce the downtime associated with turnarounds while simultaneously improving safety performance.*
- *Use the Model of Excellence to analyse their own performance, explain key principles to others and build a detailed methodology of their own.*
- *Maximize the benefits of planning and preparation through a proactive challenge planning process where the participants will build a Turnaround from the ground up from concept to execution and review.*

**What you will learn**

- *Understanding oil & gas processes operations*
- *Shutdown management*
- *Position Turnarounds*
- *Build the best Turnaround team*
- *Build effective steering teams.*
- *Simultaneously improving safety performance.*
- *Model of Excellence to analyse of own performance.*
- *Planning and preparation through a proactive challenge planning process where the participants will build a Turnaround from the ground up from concept to execution and review.*

**SUITABLE FOR:**

*This course has been researched and developed for Experienced Managers, Superintendents, Supervisors, Engineers, Planners, Team Leaders and Coordinators of:*

- *Section Head (Gas), Snr Gas Engineer, Controller Gas in the oil and gas sector*
- *Skills in Gas Operations and Operations Common*
- *Shutdowns/Turnarounds*
- *Maintenance*
- *Engineering*
- *Reliability*
- *Plant*

- *Outage*
- *Asset Management*

**TRAINING METHODOLOGY:**

*A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions, and motivate everybody find the right answers. 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. Very useful Course Materials will be given.*

**COURSE OUTLINE :-**

**Day (1):**

**Day One: Operations Shutdown Types & Asset Pairing**

- *Definitions of Shutdown, Turnaround*
- *Material failure and degradation in Operations using API 579*
- *Operations structure and unit's sensitivity to failure*
- *Failure rate mathematics the basis of Reliability center maintenance*
- *Shutdown and the life cycle of oil & Gas processes facilities*
- *Illustrative related video*
- *Workshop – learned lessons*
- *Day (1) quiz*

**Day (2):**

**Day Two: Shutdown & Turnaround Planning**

- *Oil & Gas process Work Order system (WO) input for Planning*
- *Size of work using API 579 and create Work Breakdown Structure (WBs)*
- *Creating the most appropriate organization structure to run the shutdown*
- *Spare parts and materials required for the shutdown*
- *Personnel internal or subcontractors required for shutdown*
- *Illustrative related video*
- *Workshop – learned lessons*
- *Day (2) quiz*

**Day (3):**

**Day Three: Organizing the Shutdown Time Sequencing**

- *Work sequencing optimization*
- *Material –personnel- contractors’ constraints*
- *Fitting the optimum number of shutdowns in the life cycle of Plants*
- *Utilization of timing techniques (CPM-PERT)*
- *Illustrative related video*
- *Workshop – learned lessons*
- *Day (3) quiz*

**Day (4):**

**Day Four: Control of Shutdown Time, Costs & Work Quality**

- *Gantt charts for keeping in time*
- *S- curve usage for budget monitoring*
- *Financial reserves for uncertainties*
- *ISO/API standards for work handover*
- *Illustrative related video*
- *Workshop – learned lessons*
- *Day (4) quiz*

**Day (5):**

**Day Five: Shutdown Performance Analysis & Turnaround Efficiency Measurement**

- *Asset Turnaround Performance Indicators*
- *Shutdown Workload Performance Indicators*
- *Shutdown Planning Performance Indicators*
- *Turnaround Effectiveness and cost Performance Indicators*
- *Shutdown and Turnaround data archiving and future recommendations*
  - *Illustrative related video*
- *Workshop – learned lessons*
- *Competency exam*

**Studies, Last Day Review, Discussions & Pre & Post Assessments will be carried out.**