



# The South African Institution of Mechanical Engineering

## Shutdown and Turnaround Management and Planning Workshop

**Duration - 3 Days : Time - 08h30 – 16h30** (Registration at 08h00)

Manual, teas and lunch provided

**CPD Validation Number : SAIMEchE-0779-06/17**

**This workshop will earn delegates 3 credits in Category 1**

**This workshop is suitable for SAIMEchE Groups 0, 1, 2, 3a and 3b**

If booked as an In-house event, this workshop may be tailored to run from 2 to 5 days. It should be borne in mind that the focus can be “Management” or “Planning” but that it would be judicious to choose one, especially for a shorter course.

### SAIMEchE Group Classification

0 = Non-technical,  
e.g., HR, Finance

1 = Candidate (including  
GCC) with < 5 years  
experience

2 = Professional  
(including GCC) with <  
15 years experience

3a = Professional and  
Appointment with > 15  
years experience with  
specialist interest

3b = Senior  
Management with >  
15 years experience

### CONTENT OF WORKSHOP

#### DAY 1

- ✦ Introduction to Shutdowns and Turnarounds
- ✦ 5 Key phases of an STO
- ✦ Defining the areas for improvement
- ✦ Establishing Metrics/KPI's for the shutdown
- ✦ Overall Craft Effectiveness (OCE) & productivity of STO people resources
- ✦ The Scoreboard for Maintenance Excellence
- ✦ The CMMS Benchmarking System
- ✦ Pre-Shutdowns planning & scheduling
- ✦ Compilation and validation of worklists. Individual job planning. Cost estimating techniques.
- ✦ Risk management and risk-based maintenance
- ✦ HSSE (Health, Safety, Security and Environmental) issues
- ✦ Shutdown management checklist and other STO tools
- ✦ Management Structure. Establishing an effective management team
- ✦ Areas of responsibility for establishing a good STO Team
- ✦ Competencies needed for a successful STO Team
- ✦ STO Manager
- ✦ Project Planner/Schedulers
- ✦ Project Engineer/Task Manager
- ✦ Contractor Team Managers
- ✦ Coordinators & Supervisors
- ✦ Safety Manager
- ✦ Quality Assurance Manager
- ✦ Logistics Manager

#### DAY 2

- ✦ Contractor strategy vs In-house staff
- ✦ Guidelines for selection of contractors
- ✦ Guidelines for establishing performance-based contracts
- ✦ Management of contractors: ensuring competency of their staff
- ✦ Maintenance & contractor audits
- ✦ Meetings
- ✦ Procurement and materials planning. Lead times. Stores management
- ✦ Work list issues
- ✦ Checklist of major & minor task requirements, logistics, safety, quality, start-up

- ✦ Execution and feedback
- ✦ Control
- ✦ Quality assurance during execution
- ✦ Cost management & execution performance reporting methods

#### DAY 3

- ✦ Handling scope increase & requests for additional work
- ✦ Work control: Accounting for manpower, materials and equipment
- ✦ Shutdown communication. Before, during and after.
- ✦ Hazards to reliability
- ✦ Start-up and handover
- ✦ Evaluation & closing out
- ✦ Post shutdown. Defining future improvements
- ✦ Deferred maintenance
- ✦ Planning the next shutdown

### WORKSHOP OBJECTIVES AND LEARNING OUTCOMES

- Apply systematic techniques in planning and scheduling shutdowns and turnarounds.
- Master world class plant shutdown strategies and industry best practices.
- Optimize all phases of plant STO from long-range planning, pre-development, detailed development, final development, pre-execution, execution to post-execution.
- Measure Overall Craft Effectiveness and carry out CMMS and Shutdown benchmarking, use of the Scoreboard for Maintenance Excellence.
- Maintain safety, quality, efficiency and cost effectiveness of the turnaround procedure with improved manpower planning.
- Increase profitability and productivity of both in-house and contractor staff. Use of KPI's.
- Ensure safe and quality work execution.
- Achieve plant STO excellence through checklists, procedures, strategies, e-books and other workshop takeaways.

### WHO SHOULD ATTEND

- Engineers
- Foremen and supervisors
- Technicians
- Planners
- Human Resources and Finance personnel

[Click here](#) for a registration form