

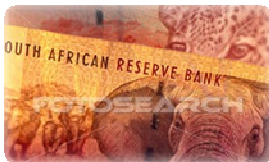
# Shutdown Maintenance

## 2-Day Workshop



### Introduction

Effective maintenance shutdown management is critical to any operation, for without well-planned and executed maintenance shutdowns, equipment reliability suffers. The company then pays the price in poor quality and lost production. Becoming proficient at managing shutdowns is a way to reduce overall downtime costs. This ensures that shutdowns themselves do not consume the savings they are capable of generating.



Due to current economic conditions, cost-cutting has become a high priority and effective shutdown management is an exercise in such waste reduction. Maintenance shutdowns are a major part of the annual budget at most plants and factories, and are usually a target for cost reduction. By using simple and effective shutdown management techniques, savings equal to several weeks of additional production each year can be achieved. These improvements can occur without sacrificing any work or canceling any scheduled maintenance.

### Course Objectives

- Clearly define, develop and control the scope of a shutdown;
- Learn how to effectively manage your exposure to risk in your shutdown project;
- Provide you with sound project management processes and techniques to enable you to manage the shutdown process more efficiently;
- Manage your suppliers and contractors successfully;
- Learn performance measurement and how to track your shutdown success;
- Provide you with a methodology to effectively report back on your shutdown;
- Maintain a safe working environment during your shutdown project;
- Expose you to various budgeting and costing techniques.



If the principles of successful shutdown management are clearly understood, the actions needed to make shutdowns more cost-effective can be taken immediately. Three important concepts of a well-managed, low-cost shutdown are:

- The type of work that is executed during the shutdown;
- A finalized schedule for the shutdown work lists;
- The quality of the shutdown work planning.

This workshop will ensure that you know how to take control and not let equipment problems risk your production schedule. Shutdowns will be scheduled with confidence.

### For Bookings

Contact:  
[support@optilog.co.za](mailto:support@optilog.co.za)

Tel: +27 12 664 8407 / 8  
 Fax: +27 12 664 8411

P.O. Box 10319  
 Centurion, 0046  
 South Africa  
[www.optilog.co.za](http://www.optilog.co.za)

# Shutdown Maintenance

## Course Outline

### Inputs to the Shutdown

#### Basics and Setting the Stage

- Understanding the need to manage a shutdown
- Size and complexity of the shutdown
- Measuring success
- Discussion on the difference between projects and shutdowns
- How to institute a long-term shutdown strategy
- Differences between a reactive vs proactive shutdown

#### Shutdown Phases

- Phases of the shutdown
- Timing and different control styles
- Discussion on the shutdown cycle

#### Justification and Timelines

- Policy team
- Shutdown needs and constraints
- Shutdown days vs maintenance days
- Preparing the shutdown justification package
- Marketing and promoting the shutdown internally
- Typical cover-up work in shutdowns
- Keeping stakeholders informed
- Prepare the timeline and conducting scheduled audits
- Development of shutdown KPI's

#### Planning Team and Organisation

##### Organisation and Required Skills

- Shutdown organisation responsibilities
- Using technology to ease communication and control
- Responsibilities and skills of the shutdown manager
- Delegation and managing change

##### Communication and Documentation

- Communication and effective listening
- Meetings, presentations and reports
- Project documentation and controlling changes

##### Master Schedule: Phase 1 (Initiation)

- Master Schedule – Phase 1—Initiation details

##### Shutdown Planning Challenges

##### Scope Of Work

- Sources of shutdown work
- Formalise the walk-down tour
- Prioritising other work for the shutdown

### Work Validation, Preparation and Planning

- Validation process and adding work to the 'work list'
- Packaging of work and master tasks
- How to determine the planning lead time
- Planned job packages and steps of job planning
- Job assessment and scoping checklist
- Ways of estimating maintenance jobs and work orders
- Compiling the planned job package

### Risk Management, Health and Safety Factors

- Risk analysis, identification and choices in managing them
- SHE, Hazards and a safe work checklist

### Planning Process and Techniques

#### Project Management Techniques & Critical Path

- Why we should use project management techniques for scheduling
- Managing milestones and the critical path
- Balancing and managing resources
- Project management and shutdown software tools available

##### Master Schedule: Phase 2 (Planning)

- Master Schedule - Phase 2 - Planning details

### Shutdown Essentials

#### Integrating External Organisations and Contractors

- Different types of contractors and recognizing their strengths
- Contract types and legal aspects
- Steps of contracting and involving contractors
- How to be a smart customer
- Accounting and budgets

#### Logistics

- Organisation for parts, materials and supplies
- Master material list and functions of the logistics team
- Receiving, managing logistics and accountability
- Managing spares on-site and trade-off between make vs purchase

##### Master Schedule: Phase 3 (Execution)

- Master Schedule - Phase 3 - Shutdown execution details

##### Master Schedule: Phase 4 & 5

- Master Schedule – Phase 4 - Completion
- Master Schedule – Phase 5 - Closure