Shutdown, Turnaround & **Outage Services**



Process Improvement Results

Reduced outage duration by 2-8% and improved labor productivity by 6-8%

Schedule adherence increased 8-12% with increased labor efficiencies of 2-4%

Disciplined execution results in reduced outage times of 4-8% and improved labor

Our Profile

Since 1986, RMG's proven methodology has enabled its customers to drive predictable shutdown, turnaround and outage (STO) results by focusing on scope completion, schedule compliance and budget adherence. Our team has deep experience in all aspects of STO management and will help ensure that STO planning and implementation supports your strategic objectives. Our services include:

Operational Assessments

STO Process Improvement

Projects

Process Analysis/Documentation

- Training Courses
- Technology Solutions

Driving Predictable Results

RMG uses the Critical Path Methodology (CPM) to develop STO project schedules that include all work to the activity level. This needs to be progressively built to support:

- Accurate budget development
- Critical path management during the shutdown
- Schedule "walk through" and mitigation prior to and during shutdown
- Resource loading to 100% including contractors
- Daily schedule updates
- Accurate cost tracking and mitigation

Delivering Process Excellence

Project and CAPEX Management Scope Development & Control

Planning and Scheduling

Cost Estimation, Monitoring

✓ Job Planning

and Controlling

- EHS Requirements
 - Contractor Management Communication/Facilitation
 - **Skills Development**



- Operating/ Maintenance/
- Engineering Strategy
- 3yr Outage plans and budgets Project plans & budget

CULTURE

Outage Work Accomplishment

- Contractor Changes-Order Control
- Outage Scope Change
- Control (Add-On Control)
- Daily Cost Tracking & Mitigation
- Start-Up Management



Some of our Customers











Outage Work Scheduling

Assurance Plan

Schedules

Through

Outage Sub-Schedules (Scaffolding, Specialty

Equipment, etc.) Master Parts & Materials Requirements and

Externalized Work (Pre- & Post-Outage)

Master Outage Schedule Review & Walk

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Change Management

RMG's Shutdown, Turnaround and Outage Process Fundamentals

RMG works to collaboratively design processes that meet your business objectives and we spend the necessary time implementing in the field to assure the behaviors match the desired

by RMG to help project the potential value in improving shutdown, turnaround and outage

productivity of 5-10%

Based on over 30 years of experience, the following improvement ranges have been developed

Implementation Drives Results

future state.

Planning

Execution

CPM Scheduling

Outage

and Critique

KPI Review

Order Log

Safety Reporting

Continuing

Links to the 3-Year Outage Plan

Consolidated "As Worked" Report

Contractor/Vendor Reporting

Scope Change and Change

Reporting Cost Roll-up Reporting

Outage Schedule Attainment

Outage Work

Documentation

work management processes.

Process Improvement Area