

Partner Program



Overview



The STAR Partner Program was designed by engineers to offer a comprehensive and ongoing option to plant partners who require continued training and resources for optimization and risk management. The 3-level approach allows clients to customize the program based on individual needs ranging from basic to advanced training, assessment and management.

Program Objectives

Actively Managing Risks

- Third party risk identification
- Test protection systems periodically
- Report inadequate test results or occurrences
- Test your thermal oil on a regular basis to allow "real time" intervention
- Implement findings to Optimize and Protect your system
- Continuous training of your staff in emergency response and system knowledge

Achieve Clarity of Thermal Oil Risk Management;

- Increase Personnel Safety
- Reduce Business Risk Exposure
- Manage Insurance Premiums

Compliance with Regulations, Standards and Best Practices (FM, NFPA, others)

Achieve Consistency Amongst Mills for Company Wide Implementation

Maintain an Effective Continuous Improvement Plan

Maximize Staff Competence

Establish ownership (Mill Champion)

- Previous Inspection Reports
- O&M Manuals

Program Levels



Silver Partner



Gold Partner



Platinum Partner



Silver Partner



Silver Partner Benefits

Risk Identification (The "Audit") Design Review

- P&ID's
- Previous Inspection Reports

System Inspection

- Control Room
- Thermal oil heater(s)
- Safety valves
- Thermal Oil pumps
- Expansion tank, thermal buffer, drain tank
- Piping systems and Instrumentation
- Any other observed potential hazards

Operational Review

- Interview operators
- Review operator logs
- Review SOP's and emergency procedures

Thermal Oil Safety Interlock Review

- Interlock design reviewed for compliance
- Interlock function reviewed for safety
- Setpoints reviewed for correctness

Fire Protection System Review

- Design review and visual inspection
- Review of written fire response procedures

Recommended GAP Action Matrix

- Executive Summary of findings
- Detailed Review of findings
- Action plan

Thermal Oil Fundamentals Training

- Thermal oil heating system design
- Safe Operation Parameters

Risk Awareness Training

- What can go wrong
- How to mitigate the risk

Thermal Oil Management

- 4 Oil Tests per year
- Oil test reports
- Oil condition trend analysis
- Guidance on how to improve thermal oil condition

Mill visit followed by video conference review

Silver Partner Schedule of Activities

Site Visit #1 Activities





- DAY 3
- Systems Fundamentals Operator Training
- GAP Action Matrix Development
- Close-out Review Meeting



Gold Partner



Gold Partner Benefits

On-site Progress Review

• Second Mill visit with follow up via video conference

GAP Action Matrix

- Review progress on GAP Action Matrix
- Revise priorities

SOP GAP Analysis

- Review of Standard Operating Procedures
- Identify operational improvements

Hazard Mitigation Plan and Training

- Identify hazards that could cause potential discharges
- Training on the safety risk of a discharge for fire and explosion
- Identify environmental risks
- •Propose solutions to reduce the risk of oil leaks

Operational Improvement Plan (OIP)

Formalized OIP based on GAP Action Matrix and SOP

Advanced Fundamentals Training

Combustion fundamentals



Gold Partner Schedule of Activities

Site Visit #1 Activities



- On-site "Kickoff" Meeting with Core Team
- Risk Identification Audit Part I
- Risk Identification Audit Part II
- Safety Interlock Testing



• Close-out Review Meeting



Site Visit #2 Activities



- Core Team Review Meeting
- Review of Current BMS and Logic Control
- Review of GAP Action Matrix





- Advanced Operator Training
- Close-out Review Meeting



Platinum Partner



Platinum Partner Benefits

Formal Continuous Improvement Plan

- GAP Action Matrix
- Hazard Mitigation Plan
- Operational Improvement Plan

Plant Specific Training Manual

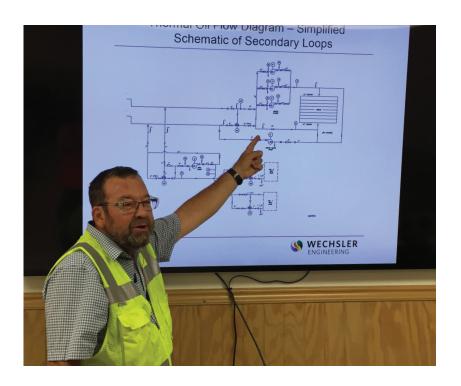
• Provide a custom Plant specific training manual

Operator Assessment and Certification

- Provide Plant Specific training
- Improve Operator knowledge
- Quantify and assess training needs
- Certify the operator knowledge

Annual Reporting

• Annual report detailing mill progress, process improvement, and operator training



Platinum Partner Schedule of Activities

Site Visit #1 Activities

• On-site "Kickoff" Meeting with DAY 1 Core Team

Risk Identification Audit Part I

- Risk Identification Audit Part II Safety Interlock Testing
- Systems Fundamentals Operator Training
- GAP Action Matrix Development
- · Close-out Review Meeting

Site Visit #2 Activities

DAY 1



- Review of Current BMS and Logic Control
- Review of GAP Action Matrix
- Detailed Review of Plant SOPs
- Potential Leak Point Identification
- Advanced Operator Training
- · Close-out Review Meeting

- Continuous Process Improvement Plan
- Site-Specific Training Plan and Manual
- Operator Assessment and Certification
- Annual Reporting

