

**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







- 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

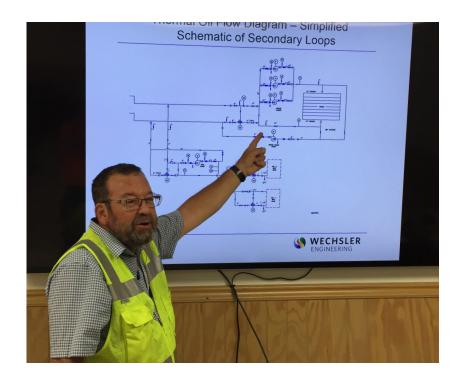
• Provide a custom Plant specific training manual

#### 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

