

Client Reference

Mining and Minerals | Smelter Plant Asset Reliability Optimisation



Client Background

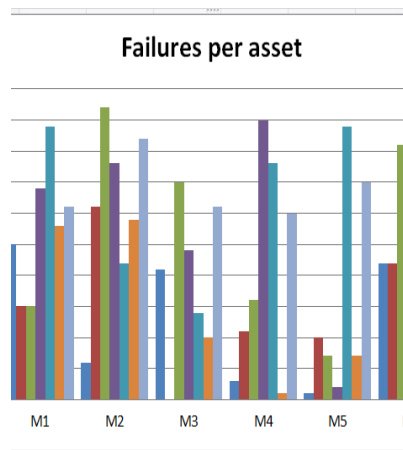
Our client is in the smelting business of heavy metals and Ilmenite forms a big compliment of the product with various by-products adding value to the total process. This plant has switched between holding companies and EAM's in past years. The various switching between Enterprise Asset Management software has caused a lot of loose data sets and a lesser than desired cohesion of Asset Data.

"It is a proven fact that the majority of failures or problems that plague the industries are chronic i.e. events that happen more than once for the same reason. The problem with chronic failures is that it keeps your workforce busy with firefighting instead of proactive maintenance, which ends up costing the business unit significantly in opportunity costs, direct costs and safety."

- Failures per asset
- Mean time between failures
- Mean time to repair
- Mean time between repairs
- If an ACP is effective or not
- If a specific repair type is effective or not

Key Challenges

- Implementing a Reliability Asset Management process using a highly specialised software package developed to model Asset Availability in modelling asset Availability.
- The biggest challenge was to convince the EAMS operational staff that a change is necessary, because it involves a major review of all assets to ensure:
 - Realistic Criticality ranking
 - Actual reliability evaluation evaluated with specialist workforce
 - Supporting documentation feedback into SAP system implemented as we proceed to prove value adding.
 - Model more than one maintenance variable to select most economic reliable model per plant section/div.



Action Plan

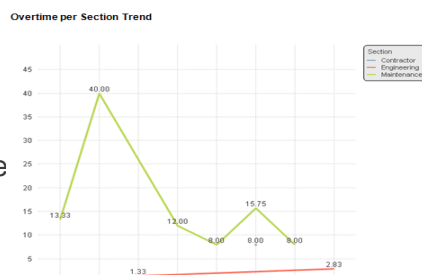
- Functional Locations were re-evaluated to support the process envisaged for Reliability Asset Management specialist team to use.
- Planning and IT in SAP user interface had to approve and sort out differences to accommodate future application of FLOC in SAP.
- Initially it was anticipated to have 800 maintainable asset types, eventually the Asset library resulted in more than 3000 plus. Immediately the scope required adjustment.
- Implement the new proposed maintenance plan as soon as the new maintenance plan has been imported into SAP.

Value add

- The thoroughness of the new Maintenance plan eliminated all guessing.
- Downtime and production throughput is instantly measurable to test value add of maintenance plan
- Immediately opportunities open up for Continuous Improvement

Pragma Intervention

- Appoint a RAMS team to drive the process. (Reliability Asset Mngt)
- Evaluation of each implementation phase after implementation.
- Full functional involvement of all trade specialists and maintenance staff, involvement of management, thus a vertical skills set support the system.



Tools and Technology

- Isograph Asset Modelling.
- Pragma derived Criticality Analysis
- Facilitation of processes with plant specific specialists