MINSET
YOUR PERFORMANCE ADVANTAGE

Case study

Project-wide maintenance assessment

Client: Mineral sands miner **Location:** West Africa **Duration:** January-February 2018

Context

Our client – already recognised as a world leader in their mining sector – was seeking an independent assessment of maintenance services at one of their early-stage operations. Set in West Africa, substantial mineral reserves mean the operation has a long life and significant potential to drive value from improvements. Minset was engaged by the executive team to formally assess the maintenance function as part of a proactive evaluation. This focused on four areas: the wet concentrator and mineral separation plants, power station and mobile equipment maintenance workshops. A key benefit in using Minset was the ability to achieve a broad-based assessment across the entire operation via one provider. In addition, while the core intent was to deliver a health check, the Minset team also offered strong operations experience that meant recommendations were assured to support better equipment uptime and reduced costs while managing safety, environment and community obligations.

Approach

The assessment was founded on Minset's proprietary maintenance maturity audit tool, covering more than 200 evaluation points. This looked at people capability and culture, work management systems, equipment maintenance systems, and performance productivity and quality. Data was gained using desktop research and personnel interviews. Audit results were then verified via in-field time-use and day-in-the-life-of observations of maintainers and supervisors – also evaluated against Minset's industry benchmark data. This hands-on approach provided a major point of differentiation compared to traditional desk-top audits as it validated data with high levels of in-field engagement. The assessment identified service strengths, asset reliability risks and improvement opportunities. The holistic and robust nature of the approach also meant Minset could develop a proposed implementation roadmap, supported by prioritised work packages, to fast-track change. These spanned reporting structures; systems, planning and procedures; physical work spaces; and team training. Some recommendations were implemented within weeks of the report being presented.

Results

Physical

- All major work areas covered, ensuring the assessment considered the full lifecycle of the operation's maintenance requirements
- Warehouse reorganisation actions identified, focusing on critical spares and kitting and staging techniques, positioning maintenance for greater efficiency

People

- Multiple levels engaged team-wide, creating greater ownership of findings
- Extensive highlights identified, supporting workgroup morale
- New reporting structures and rosters developed, supporting faster response times with greater accountability

Process

- Comprehensive data gained, covering 225 assessment points
- Industry benchmarking provided
- Seven major work packages developed, providing practical implementation guidance
- Planning and process tools introduced, like equipment criticality assessments, service level agreements and spares management methods