



Case study

Maintenance parts and materials management

Client: Gold producer

Location: Victoria

Duration: April-October 2017

Context

Our client launched a proactive program to improve mine site productivity to create greater capacity for an upcoming expansion program. Parts and materials management was identified as a key influencer of productivity and maintenance efficiency, with 5-13% of service durations linked to parts or materials issues. Workgroup feedback indicated jobs were frequently rescheduled due to a lack of parts – including ‘on occurrence’ reactive ordering and gathering, which further impacted spares availability for unplanned and/or breakdown work. A shortage of appropriately-skilled personnel also compromised continuity. With the site’s maintenance workshop located approximately 1.5km from the site’s store, and only one shared role to support parts management, supervisors were often pulled into lower-value work.

Approach

Minset reviewed the team’s parts and materials management processes and resourcing – standard to all Minset maintenance improvement projects – to identify waste and improvement opportunities. The core goal was to ensure all planned work had parts ready and collected before tasks commenced. Observations and interviews with key personnel, and industry best practice, informed the improved approach including:

- ▶ Reorganising parts storage and delivery areas using Lean Manufacturing (5S) methods to improve storage, provide faster access to parts and make it easier to identify stock levels and problems
- ▶ Developing leading indicators for parts availability and incorporating them into the shift start information centre to give technicians a clear understanding of the required parts for maintenance activities
- ▶ Developing and implementing a problems/countermeasures database to better solve problems
- ▶ Developing and implementing clear roles and responsibilities to reduce errors
- ▶ Resetting how parts and materials management was resourced to reverse poor productivity
- ▶ Upgrading the dedicated parts vehicle to a suitable tray back truck
- ▶ Introducing ‘kitting and staging’ methods to streamline parts and materials provision prior to tasks
- ▶ Improving the parts return process

Results

Physical

- ▶ Planned maintenance activities streamlined via more timely access to required parts and materials
- ▶ Storage and location of spares and tools improved, reducing wasted supervisor and workgroup time in looking for parts or initiating works without available parts

Process

- ▶ Overall management approach improved
- ▶ Organisation and distribution of parts and materials positioned for continual improvement due to improved processes
- ▶ Rescheduling of tasks reduced due to improved parts and materials availability

People

- ▶ Proactive and reactive crew support improved with optimised resourcing
- ▶ Team workflow improved including introducing detailed shift handover of parts and materials issues
- ▶ 5S knowledge transfer program delivered

