



## Case study

### Workshop reorganisation for productivity

**Client:** Gold producer

**Location:** Victoria

**Duration:** June-September 2017

#### Context

An upcoming mine expansion at our client's site had created a renewed drive to find greater efficiencies across the operation. The site had evolved from a contractor-run mine to an owner-operator context and its new owners were looking to ramp up production. Mine maintenance services are performed in a surface workshop located adjacent to an underground mine portal. Those workshops – standard industrial sheds – were constructed approximately a decade prior, with various extensions since. Improving their set-up and organisation was known to underpin safe, highly-productive maintenance performance.

#### Approach

Minset was contracted to provide operational leadership and maintenance improvement services to help the site's team deliver a sustained increase in asset performance. For the workshops, Lean Manufacturing (5S) techniques were identified as the ideal avenue to support the uplift in workgroup productivity. Use of 5S workplace reorganisation techniques was completely new to the maintenance workgroups, and the industry in general is known for its entrenched behaviours. With that in mind, the Minset team knew a high level of credibility had to be established to successfully influence the approach and behaviours of personnel. With physical work area changes often being relatively simple, Minset focused its role on educating people, supporting process improvements and creating mechanisms to maintain momentum.

Initial Time Use (productivity) observations confirmed the value in applying 5S work area organisation principles. Fleet service improvement sessions then identified numerous work area improvement opportunities that were placed on an improvement register and, where appropriate, a new workplace 5S improvement plan. Initiatives included simple cleaning and waste removal tasks, reorganisation of work areas, fabrication/installation of new infrastructure and equipment, and introduction of visual management techniques (eg workshop clearway and exclusion zone markings, signage and shadow boards). Work area 'housekeeping schedules' were developed and implemented. A 'layered' 5S standards audit was also established, involving various levels of the leadership team, and quality reviews were used throughout to engage workgroups and confirm that the required safe, high-quality standards were being achieved.

#### Results

##### Physical

- ▶ Average service duration reduced by 31%, supported by 5S work area reorganisation
- ▶ Work areas improved significantly including seven service bays, parts storage and distribution areas, the shift prestart meeting area, and the supervisors' office

##### Process

- ▶ Efficiencies and productivity improved during maintenance activities
- ▶ Work teams empowered to apply 5S techniques to a newly constructed underground workshop

##### People

- ▶ Motivation and morale of team members increased significantly
- ▶ Continuous improvement focus developed within the team who are now identifying new work area organisation improvements

