

FMG – HOPPER 5 JAW CRUSHER REPLACEMENT

| | |
|--------------------------|---|
| Client | Fortescue Metals Group Ltd |
| Project | Hopper 5 Jaw Crusher Replacement |
| Location | Cloudbreak, WA |
| SIMPEC Contract | Replacement of two C160 jaw crushers and associated structural, mechanical and electrical works |
| Value of Contract | \$2 million |
| Duration | 4 weeks (Shutdown) |
| Commencement date | March 2021 |
| Completion | April 2021 |



Project Overview

The Hopper 5 building is the primary crushing facility at Cloudbreak that feeds the plant with sub 200mm material. The two C160 Metso jaw crushers in this building were installed second-hand during construction of the Cloudbreak mine and were nearing their end of life.

This project involved removing the old crushers and replacing them with two new C160 jaw crushers. To remove the crushers located near the bottom of the Hopper 5 building, the building had to be dismantled and then reassembled. This involved removal and reinstatement of a number of bins, chutes, grizzly screens, guarding and structural steel.

There were also a number of hydraulic and electrical services that needed to be disconnected and reinstated during this

scope. This project also included extensive liner replacements and refurbishment of one of the grizzly screens.

All works described above were completed during a three-week shutdown of the area. Minimal works could be achieved prior to the shutdown period prior to the nature of the works and the area.

Client Overview

Fortescue is a global leader in the iron ore industry, recognised for its culture, innovation and industry-leading development of world class infrastructure and mining assets in the Pilbara, Western Australia.

Fortescue's wholly owned and fully integrated operations in the Pilbara include the Chichester and Solomon mining hubs and they are currently developing the Western Hub, home to the new Eliwana mine

Fortescue is undertaking exploration activities in New South Wales and South Australia, as well as in Ecuador and Argentina, and preliminary exploration activities on tenements that are in application in Colombia, Peru, Portugal and Kazakhstan.

The Scope of Work

Mechanical/Structural/Piping works include:

- Removal of the head chute and fabrication of two new access hatches to the sides of the chute.
- Removal and replacement of one grizzly screen
- Removal and refurbishment of one grizzly screen
- Removal of structural steelwork including access platforms, guarding, fly rock covers
- Removal of crusher head chutes
- Disconnection and reinstatement of all services
- Removal of 2 x C160 (60t) jaw crushers
- Replacement and alignment of new C160 jaw crushers
- Reinstatement of all structural and mechanical items above
- Replacement of liners
- Testing and commissioning of building

Key Facts

- Removal and replacement of 2 x 60t C160 Metso Jaw Crushers
- Project included over 8,000 manhours
- Project completed 10% under budget and 3 shifts early