

CASE STUDY

COCKBURN CEMENT MUNSTER K6 T5 SHUTDOWN

PROJECT PROFILE

Cockburn Cement Munster are one of the largest Cement providers in Western Australia, operating since 1955. They are the only Lime producer in WA and the largest in Australia.

Cockburn Cement conduct routine annual maintenance to existing long serving plant and equipment to help minimise downtime / maximise output, extend the run time and reliability of the established infrastructure.

SERVICES PROVIDED

Project Management, Supervision and resourcing of a 11 personnel Shutdown Team which included:

- 2 Supervisors
- 1 Mechanical Fitter L/Hand
- 2 Mechanical Fitters
- 1 Boilermaker L/Hand
- 3 Boilermakers
- 2 Riggers

HIGHLIGHTS

ZERO Incidents/Injuries for the duration of shutdown.

Extensive repairs to Tower 5 across all 7 levels including parent metal and door repairs to allow for prompt start-up of this major asset.

Removal and replacement of 150 Vortex finder plates and bolt assemblies for Stage 4 and 5 cyclones.

Parts procured, installed and commissioned for Stage 4 air blaster and air lines.

Refractory lined feed spools and expansion joints replaced across 6 locations.



OUR INVOLVEMENT

A total of 14 work packs were completed ahead of schedule for Cockburn Cement Munster's Kiln 6, Tower 5 shutdown over a 12-day shut window of approx. 1330 manhours.

Major tasks completed included modification and welding repairs to existing infrastructure, multiple 1000m diameter feed spool sections and expansion joint replacements with quality control and intricate rigging required to execute the work. A large-scale replacement of heavy-duty wear plates inside cyclones 4 and 5 was also carried out.

Access throughout the tower was limited meaning teams needed to be resourceful problem solvers to achieve outcomes within the scheduled timeframes, whilst remaining incident and injury free.

Scope of works performed included:

- Replacement of expansion joints 1A & 1B
- Repair of the leaking flange on the L5.0 mat pipe
- Repair of cracking around the 9642 R09A base plate
- 90° rotation of the rodding port
- Repair of the STF 4 vortex crack plate
- Replacement of the STG 4 feed pipe - Sections A & B
- Replacement of the KN06 expansion joint STG 4 - Lower 2Y
- Repair of the crack plate on the STG 5 vortex
- Replacement of the KN05 expansion joint STG 5 - Lower 2Y
- Installation of the permanent STG 4 blaster
- Door repairs to Tower 5 (100 doors)
- False air leaks (40 locations)