SHAFT SINKING
MACMAHON UNDERGROUND MINING
Macmahon’s dedicated shaft sinking and engineering teams have world class experience in designing and constructing major shaft hoisting systems and can tailor a complete package from feasibility, through to design, supply and construction to suit the client’s needs.

Macmahon offers specialist shaft construction and development services for both surface and underground operations, including:

- shaft sinking (blind sink, strip and line and horidiam)
- concrete/fibrecrete lining (including remote lining)
- shaft equipping
- shaft maintenance and inspections
- ore pass construction
- egress systems (ladderways and winder systems)
- ground support, repairs and water control
- feasibility studies and engineering services

Macmahon maintains a fleet of shaft sinking assets, including headframes complete with winders, stages and all associated equipment, enabling Macmahon to respond to most requirements quickly and effectively.

Winding systems are designed to comply with MDG33, MDG2005, MSIR95, AS3785 and AS3637.

Past and present contracts include:

- **ARGYLE DIAMOND MINE (WA)** Rio Tinto
  Strip and line several 6m diameter passes and dams UG

- **BLAKEFIELD COAL MINE (NSW)** Xstrata
  Lining 200m x 6m diameter raisebore

- **CADIA (NSW)** Newcrest
  Horidiam strip 280m x 6.0m diameter

- **CHALLENGER GOLD MINE (SA)** Dominion
  Sink & Line 50m deep x 5m diameter presink

- **CLIFFS NICKEL MINE (WA)** BHP
  Blind sink 2 shafts & supply/install 200m canned ladder system

- **COSMOS NICKEL MINE (WA)** Xstrata
  Sinking & Lining of 2 shafts, 250m x 6m diameter and 405m x 3m diameter

- **CSA MINE (NSW)** CMPL
  Shaft equipping, sinking and lining the 500m deep extension of the existing No 1 shaft

- **ENDEAVOUR MINE (NSW)** CBH
  Strip and line UG vent shaft

- **FOSTERVILLE (NSW)** Kirkland Lake Gold
  Strip and support vent shaft underground and support a surface raisebored vent shaft

- **GEORGE FISHER MINE (QLD)** Xstrata
  Sinking & Lining of 3 shafts, two 6.5m in diameter and one 7.5m in diameter

- **WAROONGA GOLD MINE (WA)** Gold Fields
  Strip and line vent shaft

- **HATS PROJECT CIVIL (HONG KONG)** Leighton
  Engineering and Supply of winding equipment

- **LEINSTER NICKEL MINE (WA)** BHP
  Horidiam 804m x 7.5m diameter; Sink 250m x 4.5m diameter, refurbish main hoisting shaft

- **LONG-VICTOR MINE (WA)** Independence Group
  Support & Water Control 400m x 4m diameter raisebore

- **NSTP CIVIL (NSW)** Sydney Water
  Support raisebored tunnel conveyor shaft & lift shaft

- **PEAK GOLD MINE (NSW)**
  Support two 900m deep raisebores and Instll egress winders

- **PILLARA MINE (WA)** Western Metals
  Concrete line several raisebored shafts

- **RIDGEWAY GOLD MINE (WA)**
  Strip and line two ventilation shafts

- **SAVANNAH MINE (WA)** Panoramic Resources
  Design/construct deep raisebore collar

- **SHELL MORANBAH NORTH COAL MINE (QLD)**
  Sink and line 150m x 5.5m diameter

- **ULAN COAL MINE (NSW)** Xstrata
  Sinking a 250m x 5m diameter