



# Underground Production

Macmahon Underground Mining



**Macmahon's 23 year underground operating history spans a comprehensive range of mining methodologies, operating conditions, contractual frameworks and project sizes.**

The combination of a flexible, reliable mining fleet and extensive in-house operational experience ensure Macmahon has the capacity to deliver quality operational outcomes for all drill, blast, load (including teleremote), haul and backfill processes. Ownership of a mechanised cablebolting fleet and in-house shotcreting capabilities further augments our ability to cater to ground support management plans associated with any production scenario.

Macmahon has experience with most stoping methods, including caving and open hole techniques, as well as in combination with many types of fill methodologies and placement techniques (sand fill, CAF, rock fill, paste fill, including the construction of paste fill plants). Specifically, the Company has worked with sublevel caving, front caving, block caving, sub level open stoping, flatbacking, avoca, shrinking and room and pillar methods. With teleremote loading systems also available, Macmahon provides capability for remote loading from stope voids and remote fill placement.

Macmahon is committed to achieving the highest safety standards by creating and then continuously improving on a safe working environment at all operating sites, as evidenced by the Company's industry leading safety performance and supported by the Macmahon Safety Management System.

Macmahon conducts all maintenance and maintenance planning works on site, supported by our state of the art workshop facility located in Perth, Western Australia.

**Key current and past production contracts**

**Mt Wright (QLD) - Carpentaria Gold**

Production drilling records are being re-written at the Mt Wright Operation with the Macmahon team achieving outstanding results since the introduction of the new E7C Simba.

**Argyle Diamond Mine (WA) - Argyle Diamonds Pty Ltd (subsidiary of Rio Tinto)**

Argyle block cave production, including drawbell development and the establishment of the undercut. Production activities at Argyle include drilling and charging production holes, and the development of longhole slot rises. Ground support including cablebolting and shotcrete.

**Ballarat (VIC) - Castlemaine Gold**

Production drilling and ground support.

**Nifty (WA) - Metals X**

Production drilling and ground support.

**Renison Tin Mine (TAS) - Metals X**

Production using a combination of cut and fill, uphole benching and flat back stoping techniques.

**Leonora (WA) - Sons of Gwalia**

Sub-level stoping with teleremote bogging.

**Selwyn (QLD) - Selwyn Operations Pty Ltd**

Sub-level open stoping with remote bogging.

**Leinster (WA) - BHP-Billiton**

Sub-Level caving.

**Mt Lyell (TAS) - Copper Mines of Tasmania**

Sub-Level caving.

**Swan Decline (VIC) - Bendigo Mining**

Sublevel open stoping, ramp stoping, avoca cut and fill retreat.

**Yilgarn Star Mine (WA) - Yilgarn Star JV**

Sublevel open stoping with rock fill, crown pillar extraction.