

# 50MVA Power Transformer

## Project

To take their current production from 6.4Mta to 7.5Mta, a central New South Wales mine engaged Ampcontrol to design, manufacture and install high voltage infrastructure. The 132/11kV project included a 40/50MVA transformer, c/w 11kV substation, 3000A 11kV switchboard and associated protection system.

As part of the project Ampcontrol designed, manufactured and tested a 40/50MVA 132/11kV transformer, with a final fully assembled weight of 85 Tonnes.

The transformer was fully tested in house in Ampcontrol's transformer facility, before being filled with oil above the core and coil assembly for transport, to the mine, where site erection work was undertaken by Ampcontrol's High Voltage Service team.

The transformer will be energised at a later date during major site shutdown works.

## Specifications

- Rating: 40/50MVA
- Voltage ratio: 132/11kV
- Vector group: Dyn11
- Cooling: ONAN/ONAF
- Tap changer: on load tap changer – Vacuum type on load tap changer supplied by Mischinenfabrik Reinhausen GmbH (MR), Regensburg, Germany.
- Oil: filled with inhibited transformer oil as per IEC60296
- Transformer tested as per AS/NZS 60076

