

## Overview

The Olympic Dam Mine is a large poly-metallic underground mine located in Roxby Downs, South Australia, 550km from Adelaide. It is the largest underground combined uranium and copper mine in the world. BHP has owned and operated the mine since 2005.

In 2019, Olympic Dam Mine publicly notified plans to increase underground tunnel capacity by a further 25% over the existing 470km. This required major additional capital investment in cap lamp infrastructure.

## The Roobuck-BHP Relationship

Roobuck enjoys a strong and long-standing relationship as a manufacturer and supplier of choice to BHP. BHP Illawarra Coal Mines were our first customer for coal mine cap lamps. Today, Roobuck supplies BHP's Olympic Dam Mine via Blackwoods, as well as other BHP Mine sites throughout Australia.

## The Challenge

Over the years, Olympic Dam Mine used a mix of different cap lamps, including corded models. However, they now wanted to update all cap lamps to a single standardised cordless cap lamp model as corded cap lamps were too heavy. Miners were weighed down with self-rescuer breathing apparatus, so they required a light weight, slim lined, cordless cap lamp. On average a corded cap lamp is 600g, whereas the lightest Roobuck cordless cap lamp is only 95g. For absolute safety and peace of mind, the mine required IECEx certification for cap lamps. Due to the large number of cap lamps, it was necessary to have a safe central charging system where all cap lamps could be charged in one place.

A cordless cap lamp trial was conducted over a 2-month period involving the testing of the top five cap lamp brands on the market, sourced from Australia, USA, Canada and China.

## The Solution and the Outcome

The Roobuck proposal offered 1,500 units of the KH3E-Ex cap lamps and more than 30 units of the CB53E charging banks to meet the upgrade plan. After two months and two rounds of trials, Roobuck was awarded the supply contract. The key reasons to choose the Roobuck KH3E-Ex cap lamp were:

- More functionality.
- Adjustable hinge.
- No budget constraint.
- Good battery life.
- Most popular final choice by miners during the trials.
- Superior illumination, weight, balance, comfort and ergonomics versus competitor products.

Other factors in Roobuck's favour were:

- Best fit charging solution for centralized PPE kiosk with the option to upgrade to Wi-Fi cap lamps using the same charging infrastructure.
- Proven track record of reliability and ruggedness in underground mine operations.
- Best offer "Value Proposition" with easy purchase exclusive access via Blackwoods.
- On-demand technical and warranty support, including logistics support to remote location.

