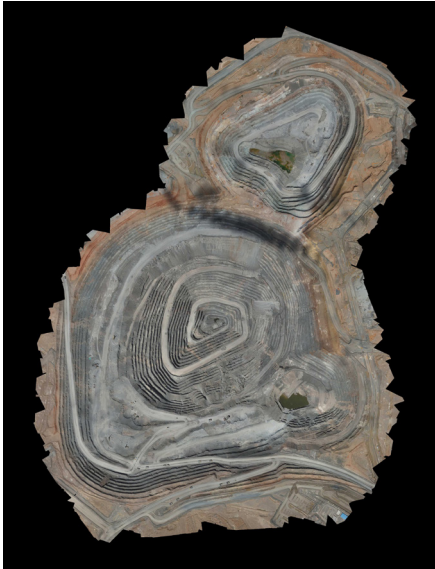




Measurement experience in the desert

Maptek™ solutions are embedded at Oyu Tolgoi in Mongolia, supporting daily, monthly and annual survey data for a wide range of mining applications.



Oyu Tolgoi in the South Gobi region of Mongolia is recognised as one of the largest gold and copper deposits in the world. A series of orebodies that contain gold, copper and silver stretches over 12 km from north to south.

Oyu Tolgoi LLC is a Mongolian company, jointly owned by Erdenes Oyu Tolgoi LLC and Turquoise Hill Resources. Turquoise Hill Resources is listed on the Toronto and New York Stock exchanges, where Rio Tinto has 50.8% interest in Turquoise Hill Resources and manages Oyu Tolgoi on behalf of the partnership.

Open pit mining started in 2011 and the first concentrate was produced in 2013.

With the majority of Oyu Tolgoi's value lying deep underground, the Oyu Tolgoi Board approved the commencement of underground development in January 2022. Underground production is expected in the first half of 2023.

In 2013 Oyu Tolgoi purchased a Maptek™ I-Site™ 8400 laser scanner and the accompanying Maptek™ PointStudio™ data processing software (known then as I-Site Studio) for open pit survey applications.

In 2022, Oyu Tolgoi updated to the most recent Maptek XR3 M20 scanner model, suitable for cold climate operation.

More than 10 survey personnel use the hardware and software every day. The laser scanner is deployed for daily and annual survey tasks in the open pit operation and for monthly reconciliation of the stockpile near the concentrator.

The Oyu Tolgoi open pit survey team has relied on Maptek laser scanners and point cloud modelling software for 10 years.

Daily survey and stockpile volume measurements were previously a time-consuming manual task for the open pit team.

Recognising that using total stations took too long and caused mistakes in the surveying process, Oyu Tolgoi sought a reliable and faster way.

Implementing the integrated Maptek hardware–software system has resulted in an accurate survey solution that supports daily production through efficient data capture and processing.

Another benefit is the seamless operation between scan acquisition and data processing, with thousands of points captured accurately, imported easily and processed efficiently for reporting.

Processed and modelled scans are widely used among mine technical, engineering, geology, geotechnical and tailings dam teams. Values estimated from scan data are also used by the finance department.

Overall, Maptek technology systems are easy to use, save time and deliver accurate measurements that can be applied to many operational requirements.

Oyu Tolgoi surveyors receive timely and accessible technical support from Maptek and IT Experts LLC, which has been the official distributor of Maptek products in Mongolia since 2012.

*Thanks to
Oyu Tolgoi LLC
IT Experts LLC*

