



## Empowering survey excellence

Thiess Contractors Indonesia deploys Maptek™ laser scanning hardware and software solutions for safe, best practice for mine survey.



Thiess Contractors Indonesia, part of the global Thiess Group, is a leading mining services provider operating across multiple sites in Indonesia. They manage four open pit coal projects across Kalimantan.

Thiess is committed to delivering safe, efficient and sustainable mining services by embedding ESG (Environmental, Social and Governance) principles into all aspects of operations. The values are instilled in every employee as part of Thiess day-to-day work culture.

Efficiency and effectiveness are cornerstones for all departments, including how data such as mining surface area provided by the survey division, is delivered to clients.

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The right technology and reliable software are essential for delivering accurate and timely survey information.

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For more than eight years Maptek™ laser scanners and Maptek™ PointStudio™ software have been trusted as essential tools in daily survey. The solutions are valued for ease of use and accuracy.

As a surveyor experienced in construction and mining roles, Thiess Mine Surveyor Adhi Permana has personally relied on Maptek technology for a wide range of tasks.

'From pit scanning and highwall monitoring using the LR3 scanner to efficient and intuitive data processing with PointStudio, compatibility with various software platforms has proven to be an added advantage,' Permana said.

Thiess extends the use of Maptek scanners beyond routine pit progress surveys, deploying them for various project-based and production support analysis, such as determining the capacity volumes of haulage trucks, excavator buckets and scanning tunnels.

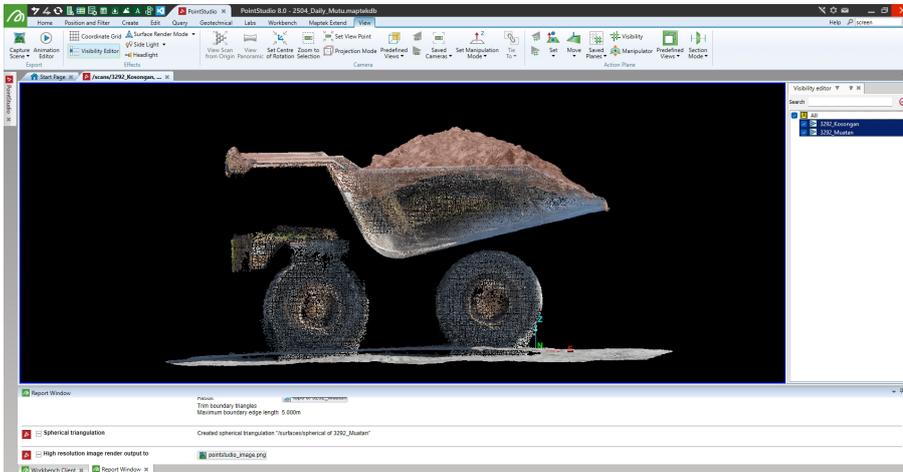
'The accuracy and clarity provided offers what we refer to as a *third eye*, allowing us to see beyond human limitations with consistent reliability,' Permana added.

One of the challenges frequently faced in open pit mining is capturing monthly progress data over vast production areas.

Traditional tools such as total stations or GNSS devices are often impractical, especially when they require halting operations, an interruption that can significantly affect the mining sequence.

'Maptek scanners enable us to efficiently capture expansive and active mining areas from just a few scan positions, minimising disruptions,' Permana said.

'The rugged in-field scanner controller performs reliably in all conditions, allowing our team to work through heat and rain.'



PointStudio filtering and processing tools streamline the generation of capacity volumes after haulage trucks are scanned by the long range LR3 laser scanner (right)

'The real-time preview feature helps us selectively scan only the areas of interest, optimising both survey time and data quality,' he added.

Thiess appreciates that point cloud processing with PointStudio is straightforward and seamlessly integrated with the hardware.

'Automatic registration and filtering features allow us to combine multiple datasets and remove unnecessary objects easily.'

'Additional tools like road conformance analysis and design conformance reporting help deliver accurate design-to-actual comparisons to other departments and clients,' Permana said.

Beyond surface mapping, Maptek technology is also used for material load capacity analysis.

Scanning haulage vessels and buckets in both loaded and empty states and processing data in PointStudio allows Thiess to accurately calculate the volume of materials being moved—a routine task that supports operational transparency and efficiency.

'Three key attributes—efficiency, safety and accuracy—make Maptek survey solutions the go-to choice for our team.'

'With this technology, we can reliably deliver surface data, conformance assessments and volume reports—whether for internal use or client reporting. The long-range scanning capability keeps our team safe, and the exceptional data quality ensures precise outcomes,' Permana concluded.

Thiess is dedicated to maintaining high standards in service delivery and operational excellence. They appreciate the Maptek continuous improvement approach to solutions development and support for the success of every project undertaken.

Thanks to  
Adhi Permana  
Mine Surveyor  
Thiess Contractors Indonesia



Maptek laser scanning technology helps the Thiess survey division to safely collect data without interrupting operations and to generate accurate mapping and survey deliverables