

TERRATEC DELIVERS THE FIRST LARGE RAISE BORER FOR CHINA



TERRATEC has successfully completed the Factory Testing and delivery of a new TR3000 Raise Boring Machine on Friday 19th June 2015. The event was held in the Company's workshop in Tasmania, Australia.

The destination of the machine is a new one: China. Despite the Mining Companies and Raise Boring Contractors in China have been using Raise Boring Machines for years, almost all of them have been locally produced with a limited size up to 1.8 metre diameter. The mines where the Raise Borer will work are located in the Chinese Province of

Yunnan, where the main mineral extraction is Copper. As the mines develop deeper levels, the access requirements for services such ventilation, mineral pass, etc. increases, so the mines are now looking into bigger shafts and for this require of larger machines like this one.

TERRATEC's TR3000 model has a nominal boring size of 3.0 metre in diameter and 500 meters in depth. The machine uses a standard pilot hole of 311mm in diameter and it has a maximum pilot Drilling Torque of 78,000Nm, Reaming Torque to 237,000Nm and Breakout to

266,000Nm. The Down Thrust maximum force is 1,600kN with Up Thrust being 4,500kN. The total Installed Power on the machine is 352kW. The Raise Borer is a robust piece of equipment, designed for easy operation and high reliability.

After extensive research and analysis, the mining contractor has selected TERRATEC to supply this first large Raise Borer, based on its highest quality standards, the Company's well tested technology over the last 25 years, and the short delivery time.



TERRATEC has similar Raise Borers working around the world, especially in Australia and North and South America mines. With this one, TERRATEC achieves an important milestone expanding its sales into Chinese Market, where there will be many opportunities for the supply of large Raise Borers like this one in the coming years.

TERRATEC EPBM BREAKS THROUGH IN BANGKOK METRO TUNNELLING IN LAOS

On 16th May 2015, TERRATEC's dia. 6.44m Earth Pressure Balance Machine broke through at Sanam Chai Station in Bangkok. With this, the machine completed the excavation of the West Bound of the MRTA Blue Line Extension Contract 1.

Contractor, Italian-Thai Development PLC, used the machine to bore this 2,800 meter long alignment in one go, crossing two unexcavated stations and one ventilation shaft on its way. Next drive along the East Bound of the line, will have the stations completed as the TBM arrives, so it will be dragged through those.

The excavation was done through

a complex geology and in presence of large underground water pressure. The soil consisted of stiff clay and Bangkok's aquifer sand, with large size of gravel and sand stone at deepest part of the alignment.

The TBM drove under many historical old buildings in the old Bangkok City area. Due to this, very accurate settlement control was of essence. TERRATEC TBM equipped with a 2-Liquid type backfilling system and a special Clay Shock injection system through the shield. The combination of both was proven to be very effective and restricted the settlement to less than 1 centimetre on those critical areas.

The EPBM had to bore through as many as eight (8) diaphragm walls, as well as several obstacles such building foundations. This was expected at the beginning of the project and for this purpose, TERRATEC selected a unique CutterHead design with conical shape to overcome those smoothly without disrupting the soil around.

Although the different challenges encountered, the TBM achieved the planned average rates of 18 meter per day or 82 meter per week during the boring cycles. Now the TBM is being dismantled and moved to initiate the East Bound by beginning of August.





WHEREABOUTS

See you at this exhibition!



Yeşilköy, TURKEY
August 27th-29th

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