

TERRATEC SECURES TWO NEW TWB ORDERS

TERRATEC is proud to announce two recent Tunnel Boring Machine sales for Istanbul Metro in Turkey, and for Xe Namnoy Hydroelectric Power Project in Laos.

Istanbul, Turkey: Mecidiyekoy Mahmutbey Line

The buyer of the TBM is a Joint Venture amongst the parties of Gülermak, Kolin and Kalyon. The JV aims to construct a state of the art rapid transit line on top of the existing Istanbul Metro system. The new line consists of 15 stations and will be 18 km long. This line is expected to enter in service by 2017.

To facilitate the construction of the tunnels, the JV procured from TERRATEC a Ø6.56m EPB Tunnel Boring Machine. The TBM will equip a versatile CutterHead design to excavate Istanbul's mixed geology which includes rock formations.

The TBM is currently under production and it will complete the Factory Tests by end of August 2014. From there, it will be transported to Turkey and commence boring at site before end of the year.

Xe Namnoy, Laos: Hydroelectric Power Project

The project is being developed by the main contractor SK Engineering & Construction Co., Ltd., The principal components of the hydroelectric power

project consists of one diversion weir, two combined concrete and embankment dams, power tunnels and shafts, a penstock, open-air powerhouse, switchyard, tailrace channel, and a 230/500 kV transmission system.

SK has subcontracted the TBM tunnelling works for the construction of the Low Pressure Head Race Tunnel to Seli Overseas S.p.A. of Italy. Seli Overseas selected TERRATEC to design and manufacture the Ø5.74m Hard



TERRATEC's EPB Mixed CutterHead

Rock Double Shield TBM, with which to complete the 11.5km of tunnel.

preference by the buyers for the Company's reliable and efficient solutions.

The TBM will install hexagonal concrete segments and its CutterHead has been designed to bore through the two main formations along the 11.5km tunnel, the "Tholam Formation" consisting of mudstones and siltstones and the "Champa Formation" including siltstones, sandstones and conglomerates.

These two new orders expand TERRATEC sales coverage to Middle East region and European contractors and demonstrate the



TERRATEC's Double Shield Hard Rock TBM



TERRATEC MTBM COMPLETES PROJECT IN THAILAND

TERRATEC is proud to announce the timely completion of the microtunnelling project at the Bang Pakong River in Thailand. On 18th June 2014, the TERRATEC Slurry MTBM completed the 380 metres long drive of 1800mm inner diameter tunnel of this Project.

The project is being developed by a Joint Venture by the companies Ch.Karnchang PCL and Krung Thon Engineers Co., Ltd. (KTE) for the Royal Irrigation Department of Thailand (RID).

This is RID's first Pipe Jacking project which is accomplished by a MTBM. The successful performance of TERRATEC's s/n M41 tunnelling machine sets a milestone for RID's future projects. This pilot project enables RID to support the rapid development of the industrial estate in the Eastern Seaboard area. This is also a cornerstone for KTE, as this is the longest and quickest drive ever done with MTBM by the Company.

KTE ordered a TERRATEC DN1800 Micro Tunneling System to execute the tunnelling works of the project. The proprietary TERRATEC system includes several components: Slurry Shield MTBM, Guidance System, Slurry Transport System, Main Jacking Station, Intermediate Jacking Stations and Lubrication System. The Microtunnelling Boring Machine was fully assembled and tested at TERRATEC's plant in

Thailand. Shortly after the factory acceptance test, the system was deployed and operational at the project site.

On top of the complete Equipment, TERRATEC also provided KTE a

comprehensive service package on site which included the dispatch of key engineers and MTBM operators. These TERRATEC specialists were involved from the initial ground to the final completion of the tunnel.



The geology consisted of a combination of very stiff clay with high underground water level and sand spots. The project was completed smoothly maintaining a very low jacking force at less than half the installed (5,000kN out of 11,000kN). This was achieved thanks to the high performance of the Lubrication System and the two Intermediate Jacking Stations, strategically placed

among the pipes. This minimized the pipe friction, which is key to a successful pipe jacking long drive.

The site worked around-the-clock with the system in two 12-hour shifts to achieve a timely completion of the project. In total, 150 pipes of 2.5 metre each were installed in 23 calendar days only.

WATCH US ON YouTube

Watch our latest Micro Tunnelling System video. Watch now!



WHEREABOUTS

See you at these exhibitions!



Yeşilköy, TURKEY
Aug. 28 - 31st



Lima, PERU
July 9 - 12th



Lima, PERU
Sept. 10 - 12th

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