

# RM360m tunnel borers deal

**KLANG VALLEY MASS RAPID TRANSIT PROJECT:** MMC Gamuda KVMRT buys equipment from German company

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**M**MC Gamuda KVMRT (T) Sdn Bhd is buying six tunnel boring machines from Herrenknecht AG for RM360 million for the Mass Rapid Transit project in Klang Valley.

"It takes 12 to 15 months to design and build the tunnel boring machines. So, we should be getting the machines somewhere mid-2013," said Gamuda managing director Datuk Lin Yun Ling.

"We'll need 10 machines to tunnel through 9.5km at a depth of 25m. We require that many machines because of the need to complete the project on time.

"We're buying six from Herrenknecht. The remaining four will be decided in a few weeks," he said.

Asked how the purchase of the six machines will be funded, Lin replied that 5 per cent of the project cost or RM400 million will be accorded by the government as soon as the group provides bank guarantee.

Lin was speaking to reporters yesterday after MMC Gamuda KVMRT sealed the deal to buy the tunnel boring machines from Herrenknecht. The world's largest maker of tunnelling machines was represented by its pres-

**Gamuda managing director Datuk Lin Yun Ling (left) sealing the deal with Herrenknecht AG president and chief executive officer Dr Martin Herrenknecht**



ident and chief executive officer Dr Martin Herrenknecht.

Martin said Kuala Lumpur city centre's karstic limestone geological profile is a big challenge for tunnelling activities.

The city centre underground cross-section looks a bit like a Swiss cheese with cavities,

cliffs, overhand and loose alluvium.

Tunnel boring machines are built to dig away at hard rock or soft soil, not a mixture of both. So, when faced with Kuala Lumpur's underground Swiss cheese profile, any digging or excavating activities can trigger ground settlement and sinkholes on

the surface.

With more than 30 years experience, Herrenknecht is confident of overcoming this challenge. It had previously supplied tunnel boring machines for the Stormwater Management and Road Tunnel (SMART) project.

"The machines will be specially designed to create a pressure shield made up of bentonite and air pressure that are able to counter-balance the pressure from ground water and loose soil," Martin said.

"This will drastically reduce soil settlement or sinkholes on the road surface," he added.

Just last week, Mass Rapid Transit Corp Sdn Bhd awarded MMC Gamuda KVMRT the RM8.28 billion tunnelling package of the Klang Valley Mass Rapid Transit Project.

This job entails the design and construction of tunnels, seven underground stations along 9.5km from Jalan Semantan to Taman Maluri, Cheras.

Lin also highlighted that as the project delivery partner of the project, MMC Gamuda KVMRT (PDP) Sdn Bhd has an added responsibility to deliver the entire project within the agreed time and cost targets. This concept enhances the project manager role with built-in incentives and penalties.

Lin explained that this role empowers the company to step in and take over delivery of contracts that are behind schedule, where necessary, to ensure targets are met.