VOLVO CE NEWS

Volvo adds a little modern to help the ancient

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Volvo CE has teamed up with Advanced Construction Technologies Ltd (ACT) to ensure the safety of two historic buildings in Chennai, India.

With a history going back virtually 180 years, at Volvo Construction Equipment we know that it's Good to be Old. So with our respect for tradition and our love of caring for the environment, it was with great enthusiasm that Volvo CE recently came to the rescue of two old buildings in India: the Rippon Building and the Victoria Hall.

The Rippon Building was commissioned in 1913, took four years to build and was named after Lord Ripon, the then Governor-General of India and the Father of local self-government. Victoria Hall was built to commemorate the golden jubilee of the British Empress Queen Victoria. It served as a theatre and public assembly room in the late 19th and the early 20th century and now houses the South Indian Athletic Association Club.

The challenge was how to protect those two famous landmark buildings flanking a structure that was being knocked down to make room for a new Metro Rail in India's dynamic city of Chennai, the Chennai Metro Rail Limited (CMRL) project.

This is the largest public project in Tamilnadu, with an enormous investment of 146 billion rupees ($3.2 billion). Phase one will create 44km of underground and overground space being used for the high speed state-of-the-art rail network. The main hub of this entire project will be at the famous Central Station, which is one of the busiest places in Chennai. But ancient and modern can live in harmony – especially with a little help from Volvo CE.

Mohan Ramanathan

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Time team

After careful study of the structures, ACT proposed to use two Volvo demolition excavators for the delicate deconstruction of Hotel Picnic that stood in the central station area of the CMRL project, sandwiched between the Rippon Building and the Victoria Hall.

CMRL approved the method of demolition because the machines chosen were deemed best for the job at hand. The tools in question were a Volvo EC240 BLC excavator fitted with a Soosan hydraulic crusher, and a Volvo EC460 BLC ultra high reach excavator, fitted with a 26m Kocureck triple boom and a MBI hydraulic crusher. Hydraulic concrete crushers are specified world-wide by leading institutions and city authorities for urban and industrial demolition because of their low noise level, minimal vibration, and economical and faster execution.

Work started on 30 October and was completed just two weeks later, taking just over 100 hours to finish the job.

Good low-vibrations

In June 2011, ACT had already introduced the concept of using low noise demolition by hiring hydraulic crushers to CMRL for the demolition of an old police headquarters for Mannady Station in Chennai. The method was new to Chennai, but CMRL was convinced that it wanted to use the excavator-based crusher for the rest of the project.

“We needed to bring the structure down safely and keep vibrations to a minimum because the hotel was situated between these two beautiful and important historic structures, with hardly 10m clearance on either side,” says Mohan Ramanathan, managing director of Advanced Construction Technologies, the contractor. “For demolitions we always use Volvo CE machines, because they have the best hydraulic system and I trust them to do the job without upsetting the foundations around the objective.”

This is the first time a high reach demolition machine of 26m has been used in Chennai. Dust is controlled by an in-built water spray system at the top of the high reach boom. With the introduction of such delicate demolition technologies, Volvo CE and ACT strongly believe that heritage structures near demolition sites can stay safe so that modern buildings can be built in place of derelict ones.

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