ABB lifts performance and safety

Italian tower crane manufacturer Recom Moritsch partnered with Swedish-Swiss industrial technology specialist ABB to develop the motor control systems for its second-generation luffing jib tower cranes based on the combination of a programmable logic-controller (PLC) with a variable speed drive (VSD).

ABB provided its ACS500-S safety PLC and ACS880 variable speed drive and fine-tuned the drive to work with Recom’s custom motors. “From the beginning, ABB’s engineers worked with us to understand our market needs in terms of safety and technology innovation,” said Mariano Moritsch, CEO at Recom. “A vital factor for us was that ABB offered an absolute guarantee that the PLCs and the VSD would communicate flawlessly with one another. The PLC uses IEC61131-3 programming language that was familiar to our technicians. It was also critical that we could have confidence that ABB’s equipment will be available and supported throughout the 20-year lifecycle of our cranes.”

The ACS880 drive has a removable memory card to store the application-specific software. This means that if variable power supplies or harsh conditions damage the drive a new one can be used from a local supplier rather than sending it to ABB for repair. Only the memory card has to be transferred and the crane becomes operational again with only minimal downtime.

For more information see: https://new.abb.com

Tower crane intruder alarm

The Anti-Climb Detector System from Wolff Onsite – the accessory division of tower crane manufacturer Wolffkran – is a digital alarm system designed to supplement physical intruder barrier systems on tower cranes.

It is based on the Motorola MOTOTRBO platform for telemetry and consists of two high-power IP57 infrared beacons that are strategically mounted to the crane’s internal climbing tower, crossing over to form an infrared matrix. If an intruder climbs the crane, either internally or on the outer side of the tower, the IR matrix will be breached, automatically activating an audible alarm on a radio system located on the ground. This radio will also receive an SMS, which will indicate which crane has been breached. HTC Wolffkran says that for projects with multiple cranes this feature is essential.

A 10 watt loudspeaker is installed inside the crane tower which will receive voice transmission from the radio system on the ground thus warning the intruder that they have been identified and action has been taken.

If specified, the system can also enable external text messaging, e-mail alerts and a recorded voice message if off-site monitoring is also required.

For more information see: www.wolffkran.com/website/en/gb

HOIST AT THE PARIS PHILHARMONIC

French construction company Bouygues Construction is using a Geda 2 PK crane operator hoist made by German company Geda-Dechentreiter on a top slewing crane at the new Philharmonie de Paris concert hall jobsite in Paris.

The rack and pinion hoist can transport two people and materials up to a maximum total of 200 kg. Lifting speed is 25 m/min and it lifts up to 120 metres, or more on request.

After installing and anchoring the base, 22 kg aluminium ladder sections are put in place. The car roof is open, and the car is mounted without any screws using a patented quick lock system. Control is via a panel in the car or an external control device is available.

At the Philharmonie de Paris jobsite a special version of the installation is being used, as requested by Bouygues Construction. The hoist does not go all the way down but stops 15 m above street level to leave room for a planned bridge between the street and the crane.

For more information see: https://www.geda.de/en/