Piling productively

Specialist contractor Implenia Bau recently carried out some piling work for main contractor Keller Bauunternehmung on a project at Rorschach in Switzerland.

The work involved the construction of a secant pile wall as part of a project to build the Raiffeisenbank, located next to a key road. The company opted to use a Liebherr LB28 piling rig equipped with a DBA200 rotary head. The specifications required the installation of 3,000 linear metres of piles to form a secant drilled pile wall within 10 weeks. The 225 piles measure from 12-16m with diameters of 700mm. The whole construction project lasted 4 months in total. The secant pile wall was built using a DBA200 double rotary head delivering a torque of up to 200kNm at the drill casing and 100kNm at the auger. The drill casing and auger were drilled out in one working cycle, with concreting carried out as the drilling equipment was removed and the reinforcement placed later.

Liebherr
www.liebherr.com

Repairing potholes

Improved infrared asphalt repair technology is speeding pothole repairs in applications in North America.

Specialist Kasi Infrared has had numerous successes with local authorities which use the equipment to deliver seamless infrared asphalt repairs in less than 20 minutes. This method is said to be achieved at a fraction of the cost for conventional remove and replace techniques. Asphalt Technology, a California-based company is using the Kasi equipment to deal with failures caused by water intrusion. Using the equipment makes considerable savings over conventional remove and replace methods. Asphalt Technology opted for a new upgraded infrared asphalt repair option from Kasi. The infrared chamber upgrade enables seamless asphalt repair in under 20 minutes and doubles infrared chamber longevity to over 10 years. A key feature is a new, deeper 8 converter chamber which allows more asphalt to be heated faster, deeper, and more evenly. The contractor transports the equipment in Kasi’s Minute Man trailer-mounted system, which has an asphalt reclaimer to keeps the material at plant mix temperature. Unlike traditional saw, cut, and remove or crack filler repair techniques, Kasi’s infrared system leaves no seams for water and ice to penetrate and patches should last twice as long. The infrared repair’s continuous surface also eliminates the need for tack-coating the edges, boosts durability, and allows roads to be opened to traffic immediately. Lab studies show there is no change in asphalt integrity from the use of its infrared equipment according to Kasi.

Kasi Infrared
www.kasiinfrared.com

Parking construction

A Manitowoc 2250 crawler crane and a Grove GMK6250L all-terrain crane have been used to help construct a two-storey underground parking structure at a mixed-use apartment complex at Minnesota in the US.

The cranes were rented from Vic’s Crane and Heavy Haul by Hanson Structural Precast, the precast subcontractor working for general contractor Frana Companies. The two cranes lifted and placed the precast concrete wall panels and flooring sections. The heaviest load, an 18m double T floor section, weighed 29.5tonnes. The load-bearing walls each weighed 10.7tonnes. Vic’s Crane and Heavy Haul first used the GMK6250L all-terrain crane to place the precast wall sections. The sections were taken directly from the trucks and placed into position as load-bearing walls. With the perimeter walls complete, the Manitowoc 2250 crawler crane was used to place the heavier flooring slabs and the interior walls. To ensure the trucks could access the jobsite while keeping the crane on steady ground, the 2250 was assembled with Series 3 counterweights and 64m of main boom. Both cranes remained on the jobsite for one month.

Manitowoc
www.manitowoc.com