Salzburg main railway station
A modern-day transport hub for Austria

Ductile driven piles make for secure bridge foundations

Salzburg is getting a new main railway station. The future through-station is going to be a national and international transport hub fully up to the demands of the modern age of rail travel. Excellent customer facilities, short distances to walk, changes of line without going through barriers, optimum information for passengers, a central concourse with shops and a unique architectural design that integrates parts of the old station that have listed-building protection into the very latest in station infrastructure will be creating a new gateway to the town so celebrated for its festival. With a total investment cost of well over 200 million Euros, the conversion is at the same time a prerequisite for the linking in of the suburban railway lines – a project that has for many years been Salzburg's extremely important for local and commuter travel. With up to 25,000 passengers a day passing through it, Salzburg's main railway station is one of the biggest railway stations in Austria and a very important transport hub in the Austrian state of Salzburg. The first sod of earth was turned for this immense project on 7 November 2008. Everything should be completed sometime in 2014.

It couldn't be done without TRM piles

Um den Hauptbahnhof optimal an die To allow the main railway station to be properly connected to the three-line track running to Freilassing, the railway bridges over the Plainstraße and Rainerstraße roads in the west of the plot of railway land are being replaced. The 100-year-old steel bridges are being taken down and replaced by bright newly-built ones. The current height of free passage of 3.6 metres is being raised to 4.2 metres and 4.6 metres.

The geological and hydrological survey revealed that under the strip foundations there is a four metre thick layer of gravel. Below that, to a considerable depth, there is the notorious "Salzburg lacustrine clay". "This is a not completely mineralized silt-like clay that will not carry any sort of load", explains Thomas Aumüller, TRM's Head of Cast Iron Pile Sales. "The invitation to tender for the load-bearing systems for the two bridges therefore envisaged a deep foundation. Because of the good experience we had had with ductile piles for bridge and anti-noise wall foundations on the neighbouring Taxham lot, this was another case where we were able to win out over small drilled piles."

In March 2009 the appropriate milestone was reached and the building of the new bridges began.

"The foundation work went ahead perfectly smoothly", says Aumüller. "Altogether, we delivered 15,000 metres of small ductile cast iron driven piles to the construction site. At the pile lengths that were required of 25 metres for a pile load of 500 kN and 30 metres for a pile load of 600 kN, our pressure grouted TRM piles gave proof of their excellent economy, which was apparent mainly from the quick and uncomplicated driving. The work was completed in 40 working days."