Switzerland and Austria are in the spotlight in the summer of 2008 as joint hosts for the European Football Championship. Traffic logistics, particularly in the capital Vienna, are sure to be a huge challenge. This city’s metro, first built in 1898, plays a crucial role in the public transportation system. During the past years, the city of Vienna has been motivated by a growing population and concerns for the environment, and has been actively promoting its subway rail system. And on June 29, when football fans travel on the renovated U2 line to the final at the Ernst-Happel Stadium, they will be travelling amongst Weidmüller products. Six hundred of Weidmüller’s Klippon® STB sheet-steel housings have been installed on the U2 extension between the Praterstern station and the stadium. They are being used for illumination along the route so that an emergency escape route is clearly lit at all times. The new route was officially commissioned on May 10.

Enclosures for harsh outdoor environments

The enclosures are made of electro-polished stainless steel and are resistant against UV radiation. They are also equipped with high-temperature seals and safety cable glands. Weidmüller Austria and BEA Electrics from Vienna developed them together. BEA Electrics specialises in the planning of electrical and control systems for industrial plants and infrastructure projects. For the U2 extension project, BEA Electrics is the main contractor for the entire electrical system. The Klippon® STB series of enclosures was developed specially for the extreme demands encountered in the chemical or food-processing industries, or in building and process automation. The Klippon® STBs are available in eight sizes and can be, upon customer request, equipped in Vienna with ceramic terminals from the SAKK range. Siegfried Schierl, project manager of infrastructure at BEA Electrics, explains why: “Ceramic terminals...”
are heat and spark resistant, and certified against leakage current. The material has a very high chemical stability and is particularly resistant to wear; that is perfect for this application. Before BEA Electrics and Weidmüller were rewarded the contracts there was quite some attention drawn to it; the Viennese Municipal Authority No.39 subjected the sheet-steel enclosures with terminal strips to a rigorous internal test. The assembled enclosures were tested successfully at 600° C. BEA Electrics is also very satisfied with the products from Weidmüller. Siegfried Schierl states: “It is our experience that we can really trust the high quality of these products”.

1.85 billion euros for 14 kilometres

With about 1.7 million residents, Vienna is the largest city in Austria. One-quarter of all Austrians live in the Vienna metropolitan area. The metro U1 – U4 and U6 rail lines cover almost the entire metropolitan area. The additional extension of the U2 beyond the stadium should be completed by 2010. But that is not nearly the end, as can be seen in the plans of the operators of the "Vienna Lines". At city and federal levels there are plans to continue expanding the metro in three stages until 2019. An investment of 1.85 billion euros is planned in this time frame to cover an additional 14 kilometres of rail line. That will give the entire metro system a length of 89 kilometres and over 116 stations. The metro expansion is also an important factor for the Viennese economy. According to a study by the Austrian Institute of Economic Research (WIFO), the fourth expansion until 2019 will help secure about 5,000 jobs. And it will surely be well received by tourists from all over the world (9.7 million overnight visitors in 2007, with 1.9 million of these coming from Germany); especially when the upcoming championship final is played in Ernst-Happel Stadium, with 50,000 visitors on location.

Important figures on the Viennese metro

Opened 1898, electrified 1925, modernised starting 1976
Total length of lines (2006) 65.7 km, 35.1 km underground
Number of stations (2006) 90
Number of wagons (2006) >700
Passengers per year (2006) 450 million
Train running interval during rush hours between two and five minutes, depending on the line
Max. speed 80 km/h
Average speed 31.8 km/h
Longest tunnel 9.39 km
Deepest station Karlsplatz, at -24.63 metres