



Hempel restores a Czech architectural icon

Hempel has taken part in the restoration of the double-arched steel train shed of the Main Train Station in Prague. The project was completed with financial assistance from the European Union.

Designed by architect Josef Fanta and built from 1901-1909, the station building is one of the most prominent Art Nouveau monuments in the Czech Republic. The largest edifice of its kind in the country at the time it was built, the station featured lavishly appointed waiting rooms, restaurants, and lounges for VIP travelers that included the likes of Thomas Edison, Le Corbusier, and Charlie Chaplin. At the end of the 20th century, the Main Train Station lost its importance in the makeup of Prague's transport system and fell into a state of disrepair. In 1993, however, the facility was included in the Prague Heritage Reservation, and after the New Connection was completed in 2010, the Railway Infrastructure Administration (RIA) began overall restoration of the steel roof of the train shed. The project has reinforced the importance of the Main Train Station as a transportation hub, reinstating the past glory of this historical monument and improving passenger comfort and safety at the same time. The general contractor responsible for restoring the roof was a consortium of Metrostav and PROMINECON CZ.

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Metrostav is a construction company whose key areas of expertise include transport projects, underground structures, civil engineering, and industrial and environmental projects for both public and private investors. Metrostav possesses extensive experience with executing complicated projects in the Czech Republic and in 15 other European countries.

Restoring the corrosion protection coating on the steel structure was a major part of the project. The task was contracted to Proficolor, a company specializing in corrosion protection for steel structures and process equipment. In addition to the application of coatings, Proficolor's team of seasoned professionals devises custom corrosion protection solutions based on the requirements of individual clients. A key role in executing the Main Train Station restoration project was played by the company's corrosion protection expertise as well as the state-of-the-art technologies at Proficolor's disposal. Hempel was given the opportunity to take part in the venture as the supplier of the coating system.

Because the project was executed without interruption between February 2015 and August 2017, Hempel had to develop a coating solution incorporating reduced overcoating intervals that could be applied during the winter.

Accordingly, Hempel recommended the Hempadur Mastic 45880 high-solid epoxy coating system and Hempadur Quattro 17634 for application during the winter. The topcoat consisted of the Hempthane HS 55610 polyurethane coating for RAL tints and Hempthane TL87 87480 for DB tints. The two coating systems conformed to the contracting authority's requirements for the restoration of steel structures owned by the RIA.

The paint solutions proved very successful in previous contracts awarded by the RIA, not least thanks to Hempel's track record of meeting delivery times and providing onsite supervision by the company's coating specialists.



Special work procedures had to be devised to allow the station to serve passengers during the restoration process. To reduce noise and dust levels, surfaces were prepared using a water jet with a pressure of 2,000 bars. The effectiveness of this method was tested on the train shed's frame before the beginning of the project. To prevent paint from dripping onto trains and into passenger areas, the primer was applied by brushes. The remaining layers of the coating system were applied using rollers. In addition, a stripe coat was applied in inaccessible spots and on all riveted, welded, and other joints.

Thanks to the project, travelers passing through Prague's Main Train Station can today enjoy greater comfort and admire the facility's beauty that has been restored to its former glory. Apart from the new paint job, the lighting conditions throughout the station have also been improved, where the skylights and roofing materials were renovated or replaced to allow natural light to enter the facility.

Hempel is honored to have taken part in a project that married historical architecture with modern-day requirements for safety, durability, and environmental protection. We trust that travelers will once again admire this jewel of Czech urban design, as they did a century ago.

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