



A Tata Steel Enterprise

Case Study

Schneider Stahlbau AG, Jona, Switzerland

Products:

MONTANATHERM® MTW V 140/1000	Deep Grey	807 m ²
MONTANATHERM® MTW V 140/1000	Champagner Grey	147 m ²
MONTANATHERM® MTW V 140/1000	RAL 9002	763 m ²
MONTANATHERM® MTW V 140/1000 CARRIER	RAL 9002	138 m ²
MONTANATHERM® MTW V 140/1000 EI30	Champagner Grey	194 m ²
MONTANATHERM® MTW V 80/1000	RAL 9002	925 m ²
SWISS PANEL® SP 111/930 A	sim. RAL 9002	4'856 m ²
SWISS PANEL® SP 26/1000	RAL 9006	337 m ²
SWISS PANEL® SP 45/900	RAL 9006	124 m ²
SWISS PANEL® SP 45/900 A	RAL 9006	265 m ²

Owner:

Schneider Stahlbau AG, Jona

Facade construction:

Blemo AG, Dürnten

Architect:

Ziegler + Partner Architekten AG, Jona

Construction time:

2021/2022

More than just grey in grey

Switzerland's most modern corrosion protection plant impresses with extreme matt colours.



A state-of-the-art production line for steel bridge construction and Switzerland's most modern corrosion protection plant are both located in Jona. With the construction of its new production hall in 2021, locally based Schneider Stahlbau AG has set an example of innovation and growth. Together with the neighbouring Marty Korrosionsschutz AG, the company operates a state-of-the-art corrosion protection plant here. Steel parts from companies throughout Switzerland can be protected there in future. Façade and roof elements from Montana Building Systems Ltd., which were installed by Blemo AG, provide for a high-class appearance and good energy efficiency of the modern production hall.

What appearance lends itself to a steel processing company? That may not have been the primary question, but certainly an important one that Schneider Stahlbau AG asked itself when planning its new production hall. The appropriate answer came from the architect's office Ziegler + Partner, also from Jona, and the answer was: grey. What initially sounds drab – especially in the context of industrial and commercial construction – corresponds to a state-of-the-art building design in the implementation. While the exterior – straight-lined and high-class – represents the character of the company, the interior of the new hall combines functionality with natural incidence of daylight.

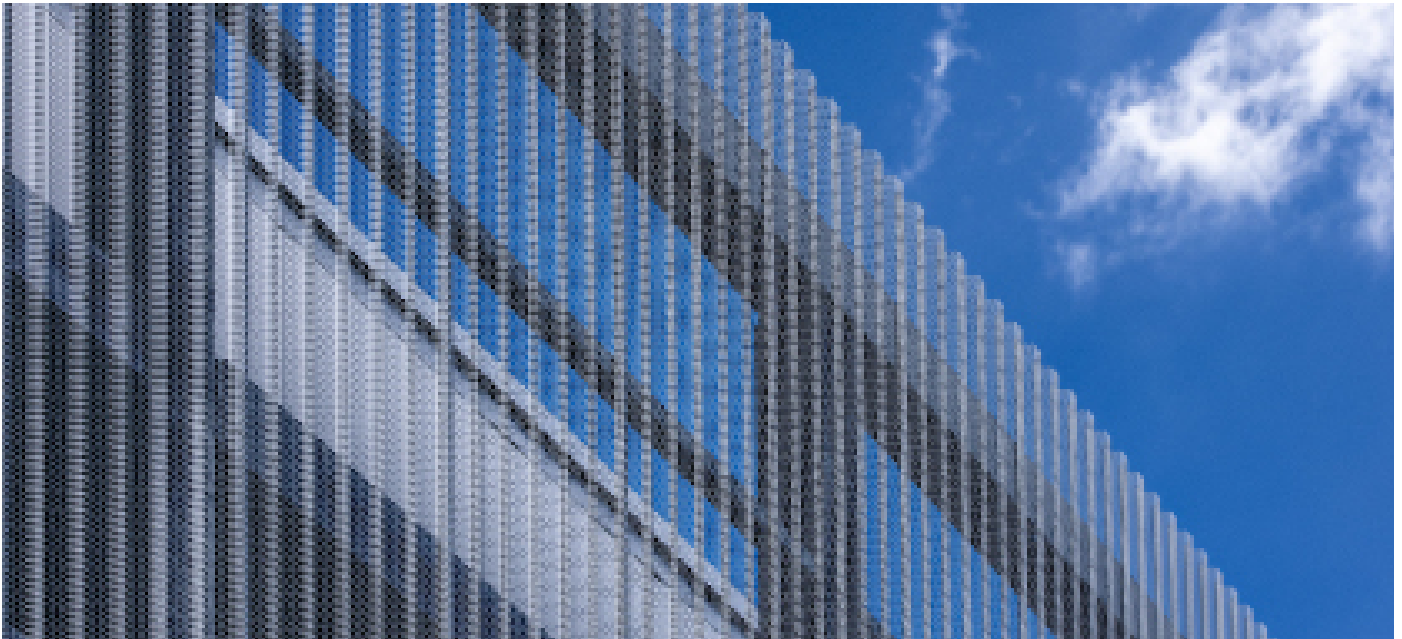
Colour and function in harmony

Measuring 170 x 25 metres, Schneider Stahlbau AG's new production hall offers sufficient space for the future manufacture of heavy steel constructions and even steel

bridges. On the outside, the building represents what is manufactured on the inside by means of colour and straightforwardness. Blemo AG and Montana Building Systems Ltd. provided valuable support in the realisation of this architectural concept. "The products from Montana were exactly what we needed here", explains Tobias Ziegler, member of the executive board of the architect's office Ziegler + Partner. "We wanted a high-class building envelope and knew from personal experience that we were bringing in a reliable partner in Montana."

The MONTANATHERM® façade panel in two different Matt Anodized colours was used in Jona. These panels stand out due to their extremely matt surfaces, thus creating an unusual characteristic. Panels in the colour "Champagne Grey" were installed in the lower half of the façade. In the upper area – up to the edge

of the roof – the choice fell on the much darker Matt Anodized colour "Deep Grey". "That is already going in the direction of anthracite – in fact it's almost black – so the logos from Schneider and Marty, which were applied in white, are presented perfectly and are visible from afar due to the contrast", Ziegler stresses. The two colour blocks of the façade are separated by a row of windows that extends over the entire length of the hall and is only interrupted by the entrance portal. This underlines the straight-line overall appearance on the one hand and the lettering and logos of the building operators on the other. A further advantage is that a great deal of daylight floods into the hall through the row of windows. Thus, less artificial light needs to be used, which is advantageous for the work processes inside the hall and also increases cost-effectiveness.



Use of existing resources

However, attention wasn't only paid to light in Jona with regard to sustainability and the use of existing resources. In addition to the photovoltaic system on the roof, which covers the vast majority of the local power requirement, the work processes are also re-used to improve energy efficiency. Like several adjacent buildings, the new hall is heated by waste heat from the compressors. The MONTANATHERM® panels used on the façade exhibit a U-value of up to 0.15 W/(m²K), which provides for the necessary thermal insulation of the building envelope. The heating warmth is thus prevented from dissipating too quickly.

A further argument in addition to the good energy efficiency was the cost-effectiveness of the Montana elements. Both the MONTANATHERM® façade panels and the SWISS PANEL® profiled sheets installed on the roof have a very low maintenance requirement. In addition, the use of the tried-and-tested systems guarantees rapid installation on site. Attachment to the load-bearing steel substructure was also easy. The use of a special fire-protection wall

cladding from Montana inside the new production hall also guarantees extra safety.

The right environment for innovations

The new, modern building in Jona is now creating the environment for production-related innovations in its interior. Among other things, the building houses what is currently the most modern and highest-performance corrosion protection plant in Switzerland. In future, steel parts weighing up to 100 tonnes and measuring up to 40 x 9.5 metres can be given an effective corrosion-protection treatment here. With the aid of state-of-the-art plant equipment, it is also possible to protect particularly large surfaces within a short time. In addition



to classic paint coating processes, further methods are implemented, such as zinc and aluminium spraying.

The high aim – and ultimately the result achieved – of the new building was to create a centre of competence in steel bridge construction. A state-of-the-art production line now ensures that steel bridges can be manufactured locally and immediately provided with the appropriate corrosion protection, even before they leave the plant. As a traditional steel and bridge construction company, Schneider Stahlbau AG has thus created new capacities in order to strengthen its own market position and secure jobs in the long-term. Overall an investment in the future.

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