



COLORED CONCRETE WORKS™

Case Study

Project:

Ahornbahn, Mayrhofen

Tyrol, Austria



Austria's largest aerial tramway can transport up to 160 passengers over a distance of 3 km to the plateau of Mt. Ahorn in only 6 ½ minutes.

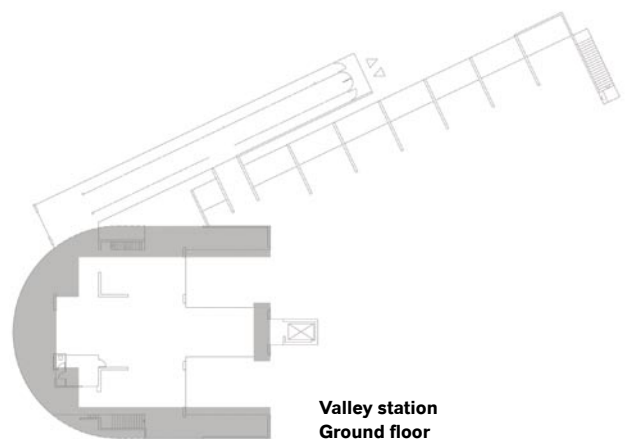




An aerial tramway in harmony with its surroundings.

Precise integration into the town and the landscape.

The new Mayrhofen Ahornbahn (Mt. Ahorn aerial tramway), located in the Tyrolean Ziller Valley, is an architectural monument to the mountains and a gateway to nature. What separates this project by M9 Architekten Senfter + Lanzinger from many contemporary lift facilities is the bold and precise integration into the town and the landscape. The special use of concrete as a construction material and the high-quality workmanship places the structure in dialog with its surroundings. Rather than exposing it, the architecture deflects attention from the high-tech equipment concealed within the structure, only revealing the technical intricacies of the aerial tramway to its guests shortly before departure.



**Valley station
Ground floor**

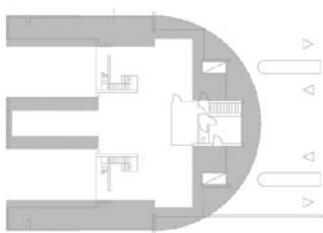
A photograph of a modern, curved concrete building with a large, angled glass entrance. The building is situated on a hillside, and a gravel path leads towards the entrance. A small, yellow and white striped sign is visible on the upper part of the building.



The Ahornbahn was recognized with the 2007 Architecture Prize of the Austrian Cement Industry Association (Vereinigung der Österreichischen Zementindustrie VÖZ) and the "best architects 08" award.

Monolithic architecture.

Their coherent coloration and material character make the buildings of the aerial tramway monolithic accents in the landscape. The materials used – concrete colored black with Bayferrox® 330 from LANXESS and black sheet metal – help to more easily integrate the superstructures into the natural environs (gray-brown to dark- & olive-green tones of the high plateau). This integration into the townscape and above all into the landscape is symbolic of the responsibility taken for maintaining an intact natural and cultural landscape, and demonstrates that an intelligent attitude toward construction and contemporary access to architecture can add value to a structure.



Mountain station
Ground floor



“Color is an intermediary between nature and architecture.”

*Architect
Antonius Lanzinger*

*M9 Architekten
Senfter + Lanzinger,
Innsbruck*



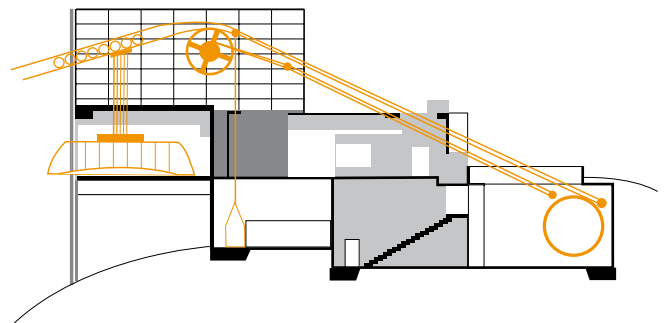
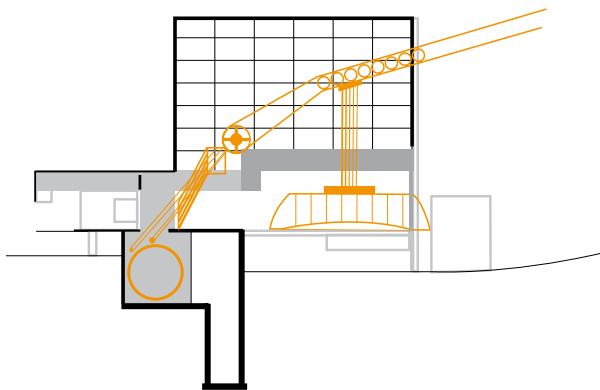
Exciting specialty mixture.

Manually metered, quickly dispersed and everlasting.

The two aerial tramway stations represent a masterpiece of concrete construction. Vormperbach-based Derfesser, Tyrol's largest supplier of ready-mix concrete, processed and transported a total of 27 metric tons of the LANXESS pigment Bayferrox® 330. The powder pigment was manually metered directly into the mixing drum of the truck mixer in portions according to specified formulations. The rapid and precise fine dispersion of the pigment ensures good integral coloration of the specialty concrete, which retains its intense coloration even under the extreme light and weather conditions of the Tyrolean mountains and is thus maintenance free.



The concrete, which is through-colored black using Bayferrox® 330, and all other materials are optimally matched to the surroundings.



Cross-section through the valley and mountain stations

For more information contact our LANXESS country representative.

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Data Sheet

Project:
Ahornbahn, Mayrhofen
Tyrol, Austria

Project data



Location

Mayrhofen, Tyrol, Austria

Architecture

M9 Architekten Senfter + Lanzinger, Innsbruck

Principal

Mayrhofner Bergbahnen AG

Project participants

Mader + Flatz Baustatik, Bregenz (statics);
Rieder (execution of concrete); Grömer (structural steel);
Trinkl (metalwork); Foidl (glass);
Salzmann Ingenieurbüro (aerial tramway planning)

Aerial tramway construction

Doppelmayr

Structure type

Mountain and valley station

Construction

Solid reinforced concrete construction

Pigment

3 % Bayferrox® 330/kg cement

Year of construction

2006



Bayferrox® 330

Technical data

- Aerial tramway: Elevation: 1,300 m; Inclined length: 3,045 m; Speed: 10 m/s
- Capacity: 1,200 passengers/h; Travel time: 6:33 min
- Cable weights - Haulage cable: 27.6 t (3,200 m long)
Balance cable: 10.2 t (3,200 m long); Per track cable: 97.4 t (3,430 m long); Total dead weight: approx. 430 t; Pylons: 2
- Track cable diameter: 70 mm; Haulage cable diameter: 47 mm (horizontal cable tension force 600)
- Gondolas: 40 m² base area; Interior cabin height: 2.2 m; Empty weight: 5 t; Weight with interior appointments: 12 t; Passengers: max. 160

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