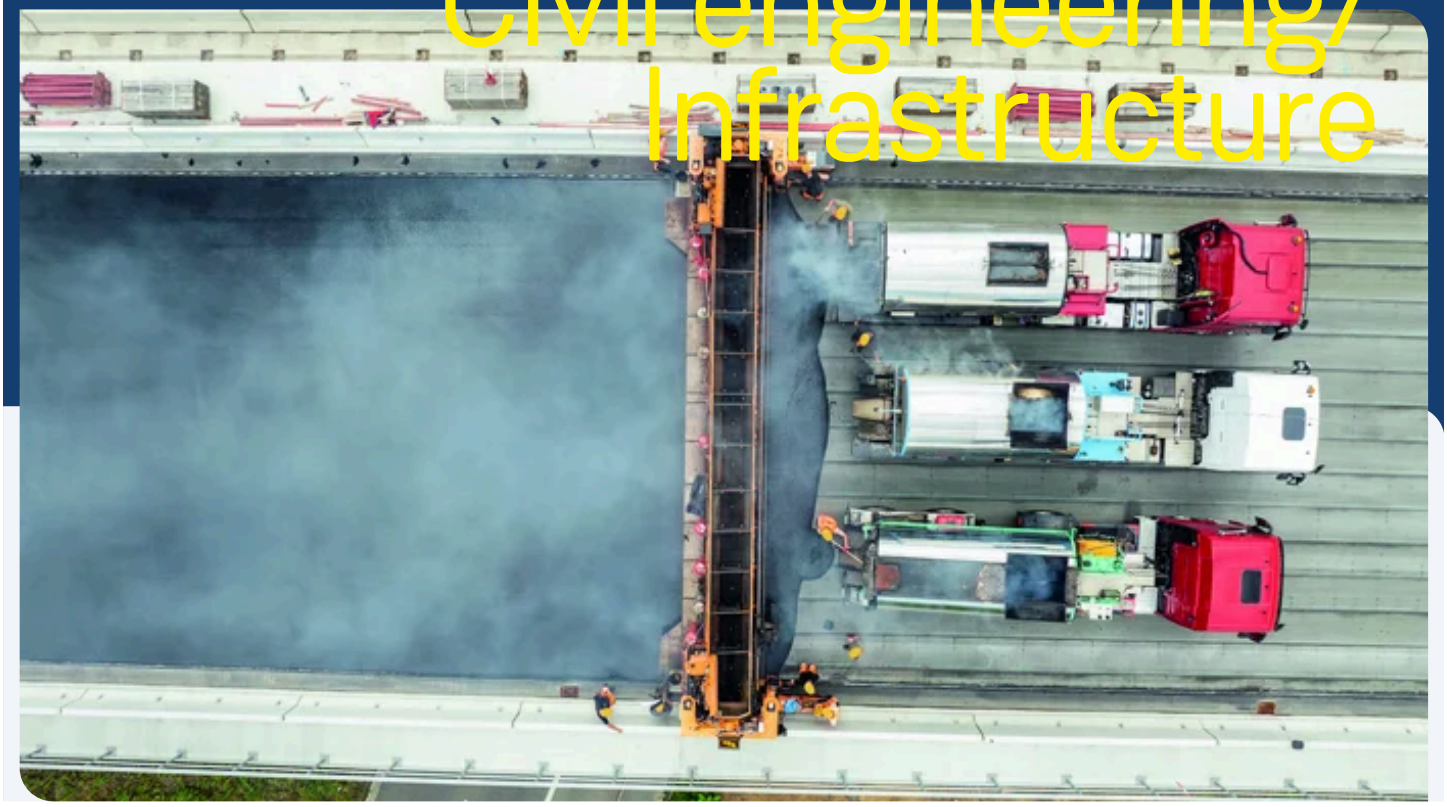
BEHIND THE CONSTRUCTION FENCE | CONSTRUCTION DETAILS

Bridging the gap

03.12.2025 / Deutschland / Salam K., Project Manager at PORR GmbH & Co. KGaA, Construction Engineering

Civil engineering/ Infrastructure



Exactly 1,365 days after the spectacular demolition, our PORR closed the huge gap in the motorway across the Salzbach valley. PORRians completed the construction of state-of-the-art bridge infrastructure in record time.

The last barriers come down. The sound of engines can be heard again. Not from construction machinery, but from cars. Because suddenly it's back: the connection between Wiesbaden, Mainz, and Frankfurt. For years there was a gap where thousands used to commute. Now, a new engineering landmark stands in its place: the Salzbachtal Bridge. Stronger, more modern, and ready for all future requirements.

Dilapidated connection

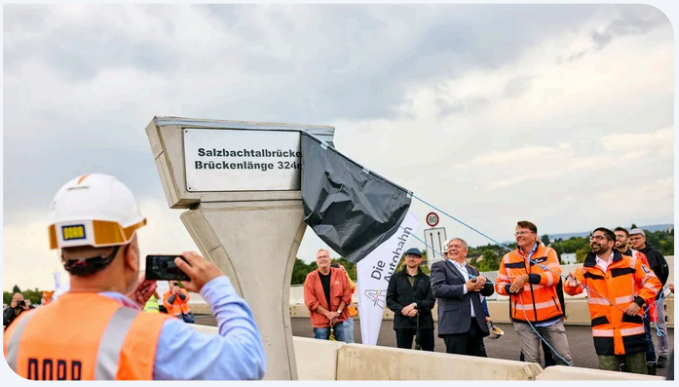
The 304-metre long bridge dating back to the 1960s had serious damage and was no longer able to cope with the sharp increase in heavy goods traffic. Following the damage to the south bridge in June 2021, the entire dilapidated structure was blown up in November. This meant that the A66 motorway – a key traffic artery in the Rhine-Main region – was interrupted. And that led to major traffic obstructions.

New modern structure

As soon as the dust from the demolition had settled, we started rebuilding. We completed the new, 324-metre-long bridge as part of a consortium with Plauen Stahl Technologie GmbH. The contract from the federal motorway company Autobahn GmbH included two modern steel composite bridges with six reinforced concrete piers and four abutments, as well as a reinforced concrete bridge over the single-track section of the Aarltalbahn railway. In addition, three rainwater harvesting basins were integrated into a modern drainage system. Precision, expertise, and working shoulder to shoulder were required to complete one of the region's biggest infrastructure projects on time.

Precise engineering

PORR Spezialtiefbau installed 186 bored piles for the foundation. In September 2022, we pushed the first 100-metre-long, 940-tonne steel section of the south bridge across the valley with millimetre precision. In December 2023, we were able to complete the southern section of the bridge on schedule and reopen it to traffic. At the same time, the north bridge was getting bigger. The bridge was built in June 2024. We also carried out terrain modelling and paving work below the bridge and connected the drainage pipes. As with all our projects, the safety of our team was our top priority. “The new Salzbachtal Bridge is not only a symbol of modern engineering, but also of team spirit, precision, and reliability. I would like to thank everyone involved for their great commitment and expertise in making this milestone possible,” says PORRian and project manager Salam Khuzandar. The new Salzbachtal Bridge is already equipped for the six-lane expansion of the A66 motorway, fulfils the toughest requirements for noise protection and traffic flow, and is therefore much more than just a gap filler.



FAQ about the New Salzbachtal Bridge

1. Why did the original Salzbachtal Bridge need to be replaced?

The original 304 m-long bridge from the 1960s had suffered severe structural damage and was no longer capable of handling the significantly increased volume of heavy goods traffic. Following the partial collapse of the southern section in June 2021, the entire structure had to be demolished in November of the same year for safety reasons, interrupting the vital A66 transport link in the Rhine-Main region.

2. What are the key features of the new Salzbachtal Bridge?

The new bridge spans 324 m and was constructed as a modern composite steel structure with six reinforced concrete piers and four abutments. The project also includes a reinforced concrete bridge over the single-track Aar Valley Railway and an integrated drainage system with three stormwater retention basins. The new infrastructure meets the highest standards for noise protection, traffic flow, and future load requirements.

3. How was the project completed in such a short time?

Thanks to precise planning, state-of-the-art construction technology, and close collaboration between all project partners, the reconstruction was completed in record time. For example, 186 bored piles were installed for the foundation, and a 100 m-long, 940-ton steel section was pushed into place across the valley with millimetre precision. While the southern bridge was completed and reopened to traffic in December 2023, work on the northern section continued in parallel, enabling the final bridge connection in June 2024.