

An Australian lives his dream in Norway, building bridges. Not just any bridge, but the longest railway bridge in the country. And not just anyhow, but for the first time with LEAN.

Brendan Young has been fascinated by bridges since he was just a lad. Born in Australia in 1988, he participated in an international exchange programme to Norway in 2009. Brendan was inspired. Five years later, he came back to live in the country and follow his dream, embarking on a career in bridge construction. After graduating from his second Master's degree programme

at the Norwegian University of Science and Technology (NTNU) in 2017, Brendan accepted a job with <u>PNC.</u> During his studies, he had become convinced that the implementation of LEAN methods in construction projects would have many advantages. Now he's proving this theory.

## Green

The 13.5km Eidsvoll Nord-Langset rail stretch is part of the planned extension to the Intercity Rail in Østland, implemented as a joint venture between Hæhre and PNC, a subsidiary of the PORR Group. Shorter travel times and more seats are key features designed to make sustainable rail traffic even more attractive. The client for this project is Bane NOR SF, the state-owned company responsible for railway infrastructure. The contract is worth a total of

2.2 billion Norwegian kroner, or 214.8 million euros. The highlight of the project is the Minnevika bridge, which is being constructed under the leadership of <a href="PNC">PNC</a> in Minnesund. Norway's longest rail bridge spans a total of 836m. Our team is responsible for fabricating 268 piles, installing 5,300t of steel, and pouring 35,000m³ of concrete. <a href="PNC">PNC</a> is supported by <a href="Per Aarsleff A/S">Per Aarsleff A/S</a>, <a href="NRS">NRS AS</a>, <a href="KB Spennteknikk AS">KB Spennteknikk AS</a>, <a href="EB Marine">EB Marine</a>, and <a href="Arctic B&C Norway AS</a>.



(c) PORR

## And

Brendan believes in the strength of diversity when it comes to implementing this project – and with good reason. PORRians from Germany, Poland, Norway, Iran, and Austria are working on the <u>PNC</u> project team. When you look at the entire team involved in the project execution, you will also find

colleagues from Slovakia, Croatia, Denmark, Laos, and Indonesia. As a result, clear communication and superior coordination are especially crucial to the success of this project.

## Lean

In 2020, we launched the LEAN@Minnevikabru initiative. This was PORR's first LEAN bridge construction project. First, we had to ensure the project team was familiar with the LEAN philosophy. Then we introduced them to the Last Planner system. The LEAN department in Vienna conducted several training sessions on this system.

The next step was for a LEAN facilitator, responsible for implementing further project optimisation measures, to join the team. Our goal was to use a variety of

tools – systems like 5S or multi-moment recording – to reduce waste and optimise on-site processes such as material searches. The safety of the construction site team was also improved by this approach. We were able to present our LEAN system in real-time operation to COO Jürgen Raschendorfer when he visited us in Norway. We also enjoyed an exciting discussion about the further possibilities opened up by this future-oriented system. What about Brendan Young? He is looking forward to building plenty more bridges across Norway.



## Gallerie

















