

Job Report

# Kelly drilling with LB 36

**“We are using GPS. That works perfectly. It’s a huge support for positioning the piles in the water.”**

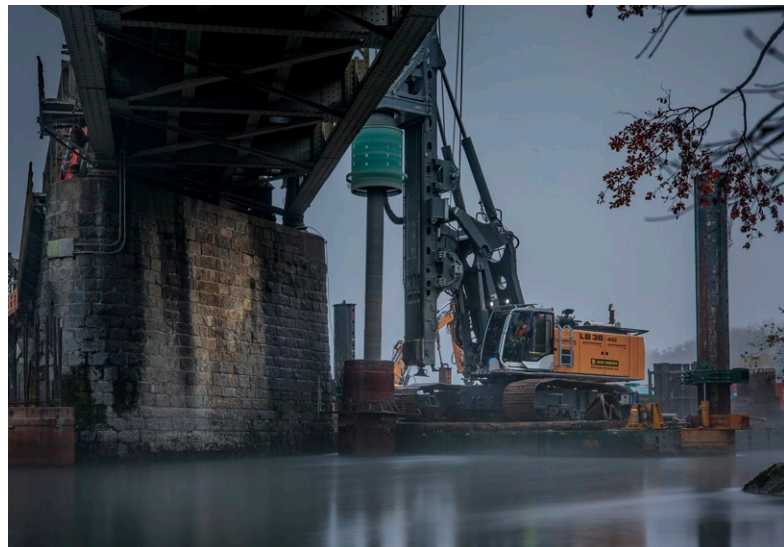
Patrick Fuchs, Foreman  
Birchmeier Spezialtiefbau AG



**LIEBHERR**



Koblenz  
Switzerland



**“That was extremely close ...”**

... explains Adrien. He climbs out of the small fishing boat and sets foot on the pontoon. His gaze wanders to the bridge directly above him. “When we first passed through there was a gap of 50 to 60 cm between the leader and the underside of the bridge, due to the water level.”

**“This is a very special jobsite”**

The LB 36 drilling rig is working beside Adrien. It was a huge challenge bringing the 115-tonne machine here. In fact, a small harbour was specially built on the Aare in order to assemble the machine and it now serves as an access to the pontoon. From there, the drilling machine was transported

**“It’s a huge support”**

The 130-year-old bridge needs to be renovated. “This is being done through four pillars. We are making four piles surrounded by a sheet pile wall for each pillar,” continues Adrien. As site manager he knows everything about the jobsite. Using the Kelly drilling method, Birchmeier is boring the 16 piles with the LB 36 from Liebherr. Each pile has a diameter of 1.5 m and is between 12 and 20 m deep.

During the drilling work it also became evident how special this jobsite is. The workers cannot mark the water with the

From the distance you can hardly see it. Thick fog surrounds the historical Aare Bridge in Koblenz, Switzerland. An SBB train rattles across it as if to make itself noticed.

upriver. After days of rain the high water level further intensified the situation and made the plan to manoeuvre the LB 36 under the bridge even more difficult. “This is a very special water construction site,” acknowledges Daniel Kunz, Director of the contractor Birchmeier Spezialtiefbau AG.

spray can. “We are using GPS for positioning. That works perfectly even though we are under a bridge and close to electric lines.” When the site foreman Patrick Fuchs talks about GPS, he means the assistance system LIPOS from Liebherr. “We have never had any interference with the signals and could always work. It’s a huge support for positioning the piles in the water.”

**Technical data – LB 36, Kelly drilling:**

Max. torque:	410 kNm
Max. drilling depth:	88 m
Max. drilling diameter:	3,000 cm

LIPOS:

