

KÖ-BOGEN IS TAKING SHAPE



One of the most ambitious construction projects currently underway is continuing to take shape. Kö-Bogen provides the city of Düsseldorf with a new center, a heart that meets the needs of the 21st century. On-site working conditions pose a special challenge, as daily traffic and business above ground continue as usual.

A constrained working environment, extreme time pressure and complex boundary conditions – these challenges make this project that calls for proven surface construction and civil engineering experts perfectly suited for the BBM Group. The North-South tunnel is about 800 meters long. A BBM team comprised of around 15 members is building it within just a few months – while accommodating the normal traffic flow – in 10- to 15-meter blocks. The additional connections required to further interlink and relieve the load on urban traffic pose special challenges. A connection to the Wehrhahn subway line, for instance, is created by a stairwell that has to be built as part of the project. In addition, the underground parking garage of the Dreischeibenhaus high-rise will be connected to the tunnel as well.

The work is carried out using the cut-and-cover method with a previously created box of shoring (diaphragm) walls. A construction period of about 15 months has been scheduled for the project. The North-South tunnel at Kö-Bogen is to be completed in August 2015. An interim assessment shows that the time schedule, safety and quality requirements, as well as all other aspects of the construction plan, have been smoothly adhered to. The BBM expert team that in partnership with general contractor Wayss & Freytag has been performing all the formwork and concrete work in normal traffic flow with maximum dedication and top performance is equally committed to delivering a perfect end result of the project.

For detailed information on the Kö-Bogen project, please contact us directly.

Düsseldorf Kö-Bogen Key Project Data, Sub-Project 20 – North-South Tunnel

Project description: Carcassing/shell work (formwork and concrete work) using the cut-and-cover method with connection to the Wehrhahn line via a stairwell and the underground parking garage of the Dreischeibenhaus high-rise

Length: 800 meters

Time frame: February 2014 to August 2015

Thickness of bottom plate: 0.80 – 2.10 meters

Thickness of outer walls: 0.50 – 0.85 meters

Thickness of ceiling: 0.70 – 1.45 meters

Mass of in-situ concrete: 28,000 cubic meters, of which 14,600 cubic meters are waterimpermeable concrete