

Tilvirket fra artikel bragt i BFT, Juni 2008

fibo intercon constructs mobile batching plants for installation in Iraq

The Ministry of Water Resources in Iraq visited the company fibo intercon in Videbæk, Denmark from 5th to 11th of April 2008 on the occasion of the delivery of the batching plants which have been especially designed for being applied in the construction of irrigation channels in Iraq.

The cooperation between the two institutions commenced in 2005, because the ministry was looking for a supplier for development and design of a concrete mixing plant being suitable on the climatic and infrastructural conditions in Iraq. Influences such as too long transport distances to remote areas and very high outside temperatures between 30 °C and 60 °C entail that concrete is hardening there much quicker than on usual conditions.

The mobile mixing plant ensures that concrete reaches the construction site still in processible condition. The system of the batching plant is constructed in a way that the mixing water is only added to the aggregate-cement mixture 10 to 20 minutes before reaching the construction site. The plant comprises four parts in total. The first one consists of a cement silo being 32 m³ large, a water tank containing 5,000 litres and a generator (60 kW) providing the power supply. This unit is mounted on a trailer. The cement silo is furnished with vibrators and air nozzles on the sides preventing any agglutination by air supply and vibration and thus consequently any unusable properties of the cement.

The second part – a metering unit- is fixed on a travelling device. This unit comprises a weighing unit, two hoppers for sand and gravel respectively, a short conveyor belt as well as a special control system recording a certain number of concrete recipes. When entering a recipe, a message is passed to the hoppers of the metering unit and to the cement silo, which allocate the corresponding quantities of sand, cement and gravel necessary for the respective mixture. Afterwards, the aggregates are supplied to the weighing unit, where the quantities requested are metered in one of the three weighing cells. Then these quantities fall down to a short conveyor belt which carries them to a long inclined belt feeder. This belt again discharges them into a concrete mixer mounted above. Shortly before the aggregates are supplied to the mixer, water is running out of the water tank of the batching plant into a separate water tank. Owing to the often quite long driving distances, delays, possible traffic obstructions as well as high temperatures it is important that the driver supplies water to the mixture just shortly before



reaching the construction site, in order to prevent early hardening of the cement. 10 to 20 minutes before the arrival at the final destination all portions are admixed in the concrete mixer. Then the concrete can be cast directly at the construction site.

The fourth part of the batching plant consists of a container accommodating the crew which is furnished with beds, air conditioning and other equipment adapted to the conditions in Iraq. This container might be loaded on a trailer for transportation and positioning elsewhere without any problems. In case of changing the construction site the long belt feeder can be transported on top of the cement silo being packed together.

Consequently the batching plant of fibo intercon provides an optimum solution for the requirements in concrete processing on the extreme conditions regarding weather and logistics prevailing in Iraq. Over the past three years, a total of 15 batching plants has been supplied to the Ministry.
