

Successful Mine Rescue in China using Bauer Technology

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For 36 days, hundreds of rescue workers fought for the lives of numerous buried miners in a gypsum mine in the Shandong province of eastern China. On January 29, four of them were eventually saved through a vertical emergency shaft, not least thanks to the drilling rigs from BAUER Maschinen Group that were in operation.

The disaster in the gypsum mine which buried 29 miners occurred on December 25, 2015. Eleven of them were rescued immediately, though one died during the accident. 13 miners are still missing. Four miners were able to escape to an enclosed space and signaled from there that they were alive. During the very first days after the collapse of the mine, a small supply hole was drilled so that food and clothing could be supplied.

The necessary rescue equipment was also sent straight to the mine. The most important system was a deep drilling rig which, under the type designation PRAKLA RB-T 90, was designed and built in Germany a few years ago for application in China during mine collapses; six machines were delivered. The concept was developed in the Bauer Equipment segment. No low-loader is required; instead, the unit is constructed on a trailer with four axles and only needs a tractor rig. This means that the machine can be put into operation quickly. The China Rescue Organisation holds the units at various locations in China in kind of standby mode. When it was required at the end of December, the drilling rig was ready for immediate use after an entire year on standby.

Two additional Bauer units were also in operation to drill the emergency shaft, a BG 26 and a BG 38. With these, pre-drilled holes were bored, before the RB-T 90 rig drilled down more than 200 meters. The difficult nature of the geology posed a large technical challenge for the rescue mission, as the ground was very instable due to the various layers of material, consistencies, water inflow and sink-holes. At first, the hole could not be stabilized and in the end, casings had to be used to support the hole.

A large team from Bauer was in operation, which comprised among others of many specialists from Schrobhausen who were already involved in the development of the RB-T 90 deep drilling rig. Bauer continuously monitored the operations during the whole action. "We are proud that, thanks to our modern machines, we are in a position to offer crucial assistance in such difficult situations and also that the PRAKLA RB-T 90 passed its acid test," said Dieter Stetter, Managing Director of BAUER Maschinen GmbH.

Source: BAUER Aktiengesellschaft; Bauer Group