Bild:

**Photo** Foto**:** *Südwestdeutsche Salzwerke AG*

**Location** Ort**:** *Heilbronn, DE*

**Editor** Autor**:** *Franziska Brielbeck*

**Date** Datum**:** *Apr-21*

**Südwestdeutsche Salzwerke: The compact SENNEBOGEN 613 E telescopic mobile crane proves its flexibility and safety in the mine**

**This time the traditional German miners‘ greeting “Glückauf” (“Good luck”) is the motto for the 16 t telescopic crane from SENNEBOGEN, because in Europe's largest rock-salt mine in Heilbronn, the mobile crane is going underground to support the miners in their work in the underground chambers. Südwestdeutsche Salzwerke AG has already purchased 12 SENNEBOGEN cranes since 2000.**

Mining is one of the most traditional industries in Germany and the world. Also at the Heilbronn rock-salt mine, salt has been extracted from salt layers up to 50 meters thick for more than 125 years. In addition to the extraction of raw materials, however, waste disposal is also an important business area of the mine. Waste materials are treated safely and maintenance-free and then recycled or disposed of. For a long time now, the miners have been supported by powerful machines and the latest technologies – also from SENNEBOGEN. Recently, they welcomed a new SENNEBOGEN 613 E telescopic mobile crane in their fleet, which, thanks to its compactness and flexibility, is perfect for demanding underground operations.

**Maximum flexibility despite tight space conditions**

When you think of a mine, you usually think of narrow chambers and shafts, and you're often right. In order to reach its underground destination, the 16 t mobile crane therefore first had to be prepared accordingly. At the manufacturer's the 613 E was dismantled into suitable individual parts for transporting it through the shaft to a depth of 180 – 200 m. After that, it was reassembled on site together with the service technicians of the responsible dealer Schwab GmbH Baumaschinen & Baugeräte. Fully mounted, the modular telecrane proves to be a perfectly equipped tool for underground work thanks to the extra compact yet three-part 14.6 m telescopic boom, individual software adaptations and the electrical and hydraulic packages particularly designed for the salt mine. The overall height of the machine, including the FOPS protective roof grating on the cab, is only 3.28 m, so that the crane fits easily into the hollow spaces.

The crane's mobile undercarriage offers maximum mobility and a small turning radius, which means that despite the often winding corridors, the miners can approach the respective work site directly and conveniently. Adjusted reversing signals via broadband audio increase safety when navigating underground. Specially curved outrigger feet have been used in the integrated 4-point outrigger of the mobile crane to additionally reduce the outrigger area for the narrow shafts, while still ensuring excellent stability when lifting loads thanks to the 400 x 400 mm large outrigger pads.

**Safety is the top priority when handling waste underground**

In the mine, the 16 t telescopic mobile crane is now primarily used as a stacking vehicle for moving big bags of waste materials weighing up to 2 tons, so that they can be handled and disposed of in a long-term safe and environmentally friendly manner. When picking up and positioning the load, the continuously telescoping full-power boom of the 613 E is not only extended and retracted frequently, but also generally operates with a very flat boom angle due to the low ceiling height. An electronic load moment indicator (LMI) of the latest generation ensures top-level safety during these complex lifting operations. At any time, the LMI compares the currently attached load, boom extension and angle with the load chart and initiates safety-related functions if the values are exceeded. This supports the crane operator in his work and prevents possible risks. Likewise, a permanently installed fire extinguishing system is mounted on the machine from the outset for safety reasons.

Miners and mine operators are fully satisfied with the SENNEBOGEN cranes: "Südwestdeutsche Salzwerke AG has already purchased 12 SENNEBOGENs since 2000. Certainly a very good testimony to our satisfaction," summarizes Daniela Pflug, Group Press Officer.

**Captions:**

Picture 1: *The 613 Mobil telescopic crane is perfectly adapted to the tight space conditions in the mine.*

Picture 2: *Various safety devices such as the latest generation load moment indicator (LMI) monitor the flat lifting of the big bags weighing up to 2 tons.*