Slurry Wall Cutter LSC 8-18 L



LIEBHERR





Situation

Every day it rattles once round the earth. The distance covered by the suburban railway in Munich is staggering and it has now reached its limits. But the old lady will find her feet again thanks to the expansion of the rail network, Munich's largest construction project for the coming years. In order to cope more efficiently with the bustling stream of passengers

the Deutsche Bahn is building a second core line between the stations Laim and Leuchtenbergring. A central entrance to the tunnel is in the Altstadt at Marienhof. Here the joint venture VE 41 comprising Implenia and Hochtief is carrying out slurry wall work using the Liebherr cutter LSC 8-18 L.

Highest demands

The challenges lie in the large dimensions of the slurry walls and the extremely confined space on the construction site. Due to the partially historical buildings in the immediate surroundings an application with low vibration is necessary for the installation of the slurry walls. But at the same time it must also meet the high demands for compactness and verticality.

The cutter's high weight, high cutter frame and low centre of gravity provide the optimum basis to achieve the necessary verticality. Maximum process safety is achieved through the

full integration of the verticality measurement in the Liebherr control system. Furthermore, 12 independently controllable steering flaps can correct the cutting direction should any possible deviations occur. The actual position of the flaps is displayed in real time on the monitor in the operator's cab.

The new equipment from Liebherr cuts its way through 33 m^3 of soil per hour and requires 8 hours for a primary trench. A total of 108 trenches measuring $1500 \times 3200 \text{ mm}$ with 30 cm overlap must be installed on the construction site in Munich.

Complete Package

The carrier machine for the cutter is a duty cycle crawler crane type HS 8130. It's excellent stability in combination with the largely dimensioned winches make the HS 8130 the perfect basis for such heavy equipment. The joint venture is using the separation plant SPC 600 C, which Liebherr offers

as part of a complete package for slurry wall applications. The package also includes grab, cutter and duty cycle crawler crane. The plant can process up to 600 m³ support fluid including excavation material per hour.

Cutter:



https://youtu.be/rQKkMd9Xos8

Verticality assistant:



https://youtu.be/Wy5gtzT6IGU

Business model:



https://youtu.be/Bdp7udl8LtA

