

**Liebherr 42 KR.1 fast-erecting crane on crawler-track undercarriage used on the construction of a tunnel at the Luxembourg Airport.**

**Job-  
Report**



**LIEBHERR**

# High mobility across rough terrain: Two Liebherr 42 KR.1 fast-erecting cranes during tunnel construction.

Two Liebherr 42 KR.1 fast-erecting cranes on crawler-track undercarriage were used on the construction of a tunnel at the Luxembourg Airport. Crawler cranes are used when rapid, uncomplicated changes of location plus a high degree of mobility across rough terrain and minimal ground pressure are needed.

Due to their mobility and the site circumstances with a tunnel length of 300 metres, two tower cranes on crawler-track undercarriage were the ideal solution for these requirements. The width of the tunnel between 13 and 27 metres could be optimally covered with the maximum working radius of 36 metres. A total of approx. 17,000 m<sup>3</sup> of concrete and 2,000 t of steel were used for this construction site.

Both 42 KR.1 were each working on different phases of construction. The two fast-erecting cranes travelled on their compact crawler-track undercarriages to the operating points where they were needed.

A big advantage of this kind of cranes is that they can be moved upright. This cut costs and time since erection and dismantling were not necessary. Another advantage was that the crawler cranes could be operated independently thanks to their power generator thus ensuring a high mobility on site.

The wireless radio remote control offered maximum flexibility for the crane driver who could reach even very inaccessible spots, always had an optimum view of the load and could directly take part in the work on site without being bound to the crane.

