

All Terrain Crane

In June 2012, at the production plant at Ehingen, Liebherr presented the new LTM 1750-9.1 all-terrain crane to more than 2,000 customers from all over the world. The 750-ton mobile crane complements the Liebherr range between the highly successful models LTM 1500-8.1 and LTM 11200-9.1.

One particular feature of the new nine-axle machine is the fact that the complete telescopic boom can be carried when travelling on public roads. To help make operation even more economical worldwide, account was taken in the design concept of the LTM 1750-9.1 of the very widely differing transport weights and axle load variations. Another point of focus in the design, too, was particularly short set-up times.

A very broad range of equipment options means the new LTM 1750-9.1 has a particularly wide operational spectrum. With the 52-meter-long telescopic boom, the telescopic boom Y-guying system and a whole array of different lattice jibs, the crane has a large number of different boom systems available, and can achieve heights under hook of up to 154 meters and outreaches of up to 112 meters.

The LTM 1750-9.1 travels with its 52-meter telescopic boom, the front supports, an auxiliary support on the rear, and a complete hoist gear, with a gross weight of 108 tons at an axle load of 12 tons. Some countries, however, only allow for a gross weight of 99 tons with an axle load of 11 tons. These limitations can still be respected by the new 750-tonner if all the supports are taken off. As an alternative, the telescopic boom can be removed. And in order for the LTM 1750-9.1 to be driven on public roads in counties with even more restrictive regulations, the new crane can be dismantled to reduced gross weights of less than 40 tons.

When the LTM 1750-9.1 arrives on site with its telescopic boom and the front supports, it can fit the rear supports itself, without the need for an auxiliary crane.

All the crane functions for working operations are powered by the engine in the superstructure. In the event of a problem with the superstructure drive, all crane functions can then be driven by the engine in the chassis, simply by rearranging the plugging of just three electrical connections, rapidly and easily. This innovation has been introduced for the first time on the new LTM 1750-9.1.

Powerful travel drive in the carrier of the LTM 1750-9.1 is ensured by an eight-cylinder Liebherr Diesel engine, rated at 500 kW / 680 HP. The four rear axles of the nine-axle chassis of the new 750-tonner are actively steered electro-hydraulically and speed-dependent. In crab steering mode, all nine axles are steered, which means there is no longer any need for axles to be raised.

The Liebherr four-cylinder in-line engine in the crane superstructure delivers 270 kW / 367 HP and a torque of 1,720 Nm. The crane drive, which is provided with power steering and power regulation, is a Diesel hydraulic system with five axial piston adjustment pumps. The winches and the slewing gear are operated in a closed circuit to achieve maximum fine sensitivity. Four operating movements are possible simultaneously.

In October 2014, Kran Saller, based in Deggendorf, used an LTM 1750-9.1 at Berngerode wind farm near Fulda, Germany, where it erected concrete towers up to 89 meters high for twelve wind turbines. The heaviest parts were the foundation rings which each weighed in at almost 80 tons. Although the adapters used to connect to the steel tubular tower segments were considerably lighter at 55 tons, they had to be hoisted to a height of 89 meters by the LTM 1750-9.1.

"The LTM 1750-9.1 from Liebherr is the only crane in this load capacity class which can erect the concrete towers for Max Bögl towers", said Sascha Wolf, project planner from Kran Saller about his new flagship.



max. lifting capacity	1,637,000 lbs at 10 ft radius
Telescopic boom	53 ft - 171 ft
Lattice jib	20 ft - 299 ft
Carrier engine/output	Liebherr, 8-cylinder, turbo-Diesel, 505 kW
Crane engine/output	Liebherr, 6-cylinder, turbo-Diesel, 300 kW
Drive/steering	18 x 8 x 18
Travel speed	50 mph
Operational weight	237,600 lbs
Total counterweight	449,700 lbs