Crawler Tractor

PR 764



LIEBHERR

Situation

Gemeinschaftskraftwerk Veltheim GmbH (GKV) is a large thermal power plant located in Veltheim, a district of Porta Westfalica, Germany. It is located on the right bank of the river Weser, the water of which is used for cooling purposes. Solid fuels are delivered via a rail link (coal) and by road (secondary fuels).

The power plant is jointly owned by E.ON Kraftwerke GmbH and Stadtwerke Bielefeld GmbH. It has an installed output of 892 megawatts. The primary feed fuels are bituminous coal and natural gas, as well as fuel oil. Secondary fuels have also been added to the fuel mixture at the power station since 2003. These are substitute fuels that are defined by law, mostly thermally recyclable waste materials such as sewage sludges.



Spreading coal on the tip



Task

When the power station operates at full load during the winter months, as much as 3,300 tonnes of coal are consumed every day to generate electricity. With a storage capacity for 1-2 months, about 100,000 tonnes of coal are stockpiled as a reserve. To keep this topped up, 1,000 tonnes of coal are delivered three times a day by train and then stockpiled in the coal storage area.

Technical data

Engine	Liebherr D9508 A7
Engine output (ISO 9249)	310 kW / 422 HP
Operating weight	51.2 t

Equipment

Coal U-blade______ 36.7 m³



Solution

To move these vast volumes of coal around in the storage area, a 50-tonne Liebherr PR 764 Litronic crawler tractor, equipped with a 36 m³ coal U-blade, is used. With pushing distances of up to 250 m, the crawler tractor is capable of moving up to 500 tonnes per hour, this means that each coal train can be unloaded in about two hours.

The Liebherr PR 764 crawler tractor is also used for feeding the underground conveyor belts with the coal needed for burning.

GKV's decision to use the hydrostatically driven PR 764 was based on their positive experience with the smaller predecessor machine, the Liebherr PR 752 - which had worked at very low operating costs – and on their need for a higher turnover rate of coal.

The operator is very satisfied with "Heinrich" - as GKV has named its PR 764 - and especially mentioned its exceptional pushing power, convenient joystick operation, and good allround visibility.



Transporting coal to the underground conveyor belts