

Liebherr crawler tractor PR 766: Update in the 50 tonne category

- Innovative engine management, proactive power adjustment and Eco mode to optimise machine performance and fuel consumption
- Stage IV/Tier 4 emission standards by means of SCR only (without diesel particulate filter)
- Work efficiently, safely and comfortably thanks to the continued development of ergonomics
- Successful Liebherr drive technology ensures a high level of reliability

Leoben (Austria), 24 October 2017 – The new PR 766 crawler tractor offers the best conditions for continuing the success story of Liebherr crawlers in the 50 tonne category. With operating weights of between 46,200 kg and 54,200 kg, the PR 766 is the successor model to the successful PR 764. The latest model in the crawler tractor generation is driven by a powerful 310 kW (422 hp) 8-cylinder V-engine.

The diesel unit in the PR 766 embodies the latest generation of Liebherr engine technology and therefore complies with Stage IV/Tier 4 emission standards. In this generation of engines, Liebherr combines emission reduction in compliance with the applicable standards with additional combustion savings in two technological steps. First, an optimised combustion process minimises the particles while they are still inside the engine. Liebherr has achieved this by developing its own Liebherr common rail injection system in conjunction with the engine control also developed by the company. In the second step, the exhaust gas aftertreatment concept uses selective catalytic reduction. As a result, the new Liebherr diesel engines surpass Stage IV/Tier 4 emission standards without the use of a diesel particulate filter.

Best performance and high level of efficiency

As a result of the hydrostatic drive in the PR 766, the speed of the diesel engine can be kept constant in practical use regardless of the required load. The unit therefore always runs at the optimum efficient speed. The fact that speed fluctuations are avoided, sets the Liebherr travel drive apart from all other large crawler tractor drive concepts

currently available on the market. Essential drivetrain components are developed in-house and optimally coordinated, which increases the efficiency of the system as a whole.

As with all of Liebherr's Generation 6 crawler tractors, the PR 766 comes equipped with the 'ECO function'. This gives the driver the opportunity to choose between high performance and maximum efficiency. In lightweight to moderately heavy applications, the ECO control system ensures increased efficiency and therefore additional fuel savings compared to conventional drive concepts.

The proactive power adjustment is another innovative feature of Generation 6. This involves both internal engine and external machine parameters being recorded, such as the deflection of the drive joystick, and the engine power is automatically increased for a short period based on the current demand. As well as enhanced response behaviour, this results in a noticeable improvement in performance capability and torque output.

The new PR 766 Litronic is equipped with an oscillating undercarriage as standard. This allows the track rollers to be flexibly adapted to the surface. As a result, the machine's traction, but also its smooth running, is significantly increased, particularly when used on stony ground. Unevenness in the ground is ironed out through the elastic suspension and impact loads are reduced to a minimum. This not only increases comfort for the driver, but also improves the service life of the undercarriage and reduces the wear on the installed components and the steel structure.

When operating crawler tractors in low temperatures, Liebherr offers numerous special options ex-works, which have been developed in close collaboration with end users.

Driver comfort and intuitive operation

The large cab in the PR 766 is identical to the driver's platform in the 70 tonne PR 776 crawler tractor launched in 2016. During the development of this new driver's platform, the focus was placed on simple and safe machine operability. The driver will get to grips with the interior of the modern cab designed for maximum comfort immediately

and intuitively. With Liebherr's successful single-lever operation, the driver can control all driving and steering movements with just one joystick.

The spacious work area in the PR 766 provides the best conditions for effortless work. The special features in the cab include the centralised control elements and the touch-controlled colour display, as well as many storage areas and a climate-controlled storage compartment. The driver can use the central display to intuitively control important operating parameters, such as the ECO function, the travel drive's response behaviour and the steering, and use comfort and safety functions, for example the rear view camera, which is fitted as a standard.

The driver can adjust the control elements for the travel drive, blade and rear-mounted ripper to the most suitable ergonomic position for them. The ergonomically optimised shaping of the joystick makes working as comfortable as possible. The desired travelling speed range can be preselected directly on the joystick. This way, control of the tractor can be apportioned precisely, especially at low speed. Driver detection takes place automatically by means of the integrated seat contact switch, without the driver having to actuate a safety lever. The joystick for the rear-mounted ripper is a new feature; this can now be adjusted in two axes and serves as a handle for the driver during the ripping process.

The modern design of Liebherr's new PR 766 offers the driver an excellent view in all directions, which makes work particularly efficient and increases safety in daily use. Edges which slope away on all sides and the all-round panoramic window ensure ideal panoramic visibility of the land, as well as the blade and rear-mounted ripper.

Wear-free components, simple maintenance and fleet management as standard

The successful hydrostatic Liebherr travel drive omits high-wear components, such as torque converters, multi-speed gearboxes, steering clutches and service brakes. Instead, high-quality and particularly reliable hydraulic pumps and hydraulic motors operate with virtually no wear.

Centralised maintenance points, wide-opening access flaps and engine compartment doors, as well as a tilting operator's cab as standard, enable perfect maintenance access. This is enhanced by engine compartment lighting as standard, which guarantees that daily checks can be performed quickly and efficiently, even in poor lighting conditions. The intervals for changing the hydraulic oil on the new PR 766 can be extended to up to 8000 operating hours if the hydraulic oil is monitored accordingly.

The LiDAT fleet management system, which is supplied as a standard, provides comprehensive machine data with this state-of-the-art communication technology. This additionally improves efficiency in practical, by enabling optimised operational planning and reliable remote monitoring. The data is updated several times a day and can be conveniently called up at any time using a web browser. An automatic alarm can be set up for particularly important information, for example if the machine leaves a predefined zone or if a critical operating situation arises.

Captions

liebherr-pr766-crawler-tractor_1.jpg

Liebherr's new crawler tractor, the PR 766, is the successor model to the successful PR 764 in the 50 tonne category.

liebherr-pr766-crawler-tractor_2.jpg

The spacious cab in Liebherr's PR 766 crawler tractor offers perfect panoramic visibility.

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