

KR 909-3G launched by Klemm

With the phased introduction of new emission levels for mobile machinery exhaust gases and the new European safety standards for drilling devices, manufacturers have been forced to diversify existing product lines to comply with technology standards that differ globally. Due to the high-level acceptance of the KR 909-2, which is still in production, in certain markets outside of Europe, Klemm Bohrtechnik has developed a parallel device for the European and North American markets, the KR 909-3G.

The Klemm KR 909-3G inherits the essential features of the KR 909-2 and is thus a compact and powerful device, which can be easily adapted to a variety of tasks. The device can not only be worked to full capacity but the robust and simplified design, as well as the exclusive use of standardised add-ons, also guarantees maximum availability and lowest capital expenditure for the customer.

The drilling device can be used in special civil engineering, for example for drilling holes for temporary or permanent anchors, soil nailing, lift anchor drilling and high-pressure injections for installing columns, foundations, underpinning or soil exploration. Klemm rotary heads or hydraulic drifters, or a combination of these in double head drilling units, can be assembled to make a variety of applicable drilling methods possible.

Possible options are e.g. a lateral sliding carriage, a cable winch (10kN), a rod handling system (Klemm

HBR 301) or even a rod magazine (Klemm MAG 2.5). In the HPI variant; the monitoring and control system for drill parameters, Klemm MBS 5, is available. There are even add-on components available for wire-line core drilling. All components can be retrofitted and intervention with the hydraulics or electrical system is not required.

In comparison to the previous model, Klemm KR 909-2, the operating pressure of the hydraulic system of 250-bar has been increased to 320-bar so that these modern drill drives can be constructed with even higher power density.

The core component of the drive train is a 129kW Caterpillar C4.4 ACERT diesel engine, which complies with the current most strict emissions standards, EEC 97/68 EC Stage 4 in Europe and EPA/CARB Tier 4f in North America. Thanks to the SCR-only emissions technology, an additional diesel particle filter (DPF) becomes obsolete but can be retrofitted. This gives operators the security of being prepared for all national and/or regional construction site standards.

For areas where low-sulphur fuel is not available, Klemm continues to produce the previous model, Klemm KR 909-2, which meets emissions standard 3A (Europe) and 3 (North America).

Two large load-sensing hydraulic pumps deliver 2 x 150l/min, supplemented by a maximum of three further auxiliary drive pumps (30l/min, 20l/min and 20l/min). By means of load-sensing technology, the patented Power Sharing and the newly developed EEP (automatic power and energy management), the machine automatically adapts itself to diverse consumer groups and operating conditions in an extremely energy-efficient way. With a total weight of approximately 14t and convenient transport dimensions, the device is easy to move and suitable for truck and container transportation.

The new and, at only 3kg, light radio remote control allows the device operator to independently choose a convenient and safe location from which to control the device. The remote control is

a standard component of all products in the Klemm portfolio, which is reflected in the high availability and easy interchangeability of control panels. The radio remote control has a mode switch for ROM (Restricted Operation Mode) and SPM (Special Protective Mode) at its disposal, in accordance with current safety standards. The CAN-bus control with performance level 'c' architecture, fully conforming to EN 16228, guarantees an especially high level of functional safety.

The device's mast, with an increased cross section and hydraulic feed cylinder, provides a pullback force of 97kN. This is the basis for all equipment configurations, whether for anchor drills or for high-pressure injection drilling (HPI).

The drilling locations are optimally accessible through the site-specific kinematics, and the construction simultaneously guarantees a stable operation in all configurations, without additional supports.

The first rig was introduced to the industry at the Bauer in-house exhibition in April 2018 and went into its first use on a construction site in Germany immediately afterwards.



The KR 909-3G has been introduced by Klemm to meet the latest European and North American standards