

200 kN Light Weight Crawler LWC 200



The newly designed Geomil Light Weight Crawler with 200 kN twin ram pusher (LWC - 200) forms a compact and versatile self-propelled unit, made for CPT works and static soundings in confined or difficult to access areas where fully ballasted rigs can not be deployed but maximum forces and performance is required.



The rubber track propelled LWC-200 is based on a folded and self-supporting "box"-construction with rigid steel bumpers at both ends, providing a flat bottom free of hoses, pipes or struts.

As for the LWC-100 series, the longitudinal sounding beam forms the back-bone of the unit on which the pushing rams with integrated catching clamp are mounted.

With the 200 kN pusher, here centrally mounted, yet again parallel to the longitudinal axes, the operational crawler weight allows for 30 kN reaction force even without anchoring.

The required surplus reaction force created by anchoring depends on the soil conditions, desired penetration depth but also the top soil fabric and adhesion, and can be achieved by placing two (~ 85 kN + 30 kN) or four (~ 170 kN + 30 kN) ground anchors in an alignment extending the long axes of the LWC. This allows for a swift testing set-up at full reaction force and spares time when less forces are required.



Anchoring will be performed by a hydraulic and synchronised down-feed/rotation gear positioned at the rear of the rig.

The power-pack comes with a Hatz silent-pack 2-Cylinder Diesel engine to ensure for a low noise level so that the operator as well as the environment will suffer less from machine noises.

Four hydraulic jacks guarantee for a perfect horizontal levelling of the LWC and even small height differences of the ground can be compensated.



All hydraulic functions for moving and levelling the rig are controlled by proportional valves with three way compensation. All sections are equipped with electric valves, allowing for operation by a wireless remote control.

The operator has easy access to the pusher and the perpendicular positioned tube rack on roller bearings can be shifted left or right for an optimal working position.

Technical data LWC 200

LWC - 200

Weights & Dimensions

Total weight (net)	~ 3 000 kg
Total length	2 970 mm
Total width	1 250 mm
Rubber track width / length	250 mm / 1 510 mm
Height (idle position)	2 420 mm

Motor (Silent Pack)

Motor	2-Cyl. Hatz 2L41C
Power	20.9 kW at 2 000 RPM
Driving Speed	Two-speed: 3 or 6 km/h

Hydraulics

Pump	Flow regulated 2-stage axial piston
Max. flow	85 ltr/min at 2 000 RPM
Operating pressure	25 000 kPa
Valves	10 electric proportional, 3-way compensated
Hydraulic tank	150 ltr, integrated return & air filter
Control	Scanreco wireless remote
Levelling	4 hydr. Jacks / 500 mm

Pusher (twin ram)

Stroke	1 350 mm
Max push / pull force	200 kN / 260 kN
Adj. sounding speed	20 mm / sec.
Free upward speed	105 mm / sec.
Free downward speed	145 mm / sec.
Hydr. catching clamp	Integrated in sounding beam
Control	Electronic, joystick

Anchoring

Type	Hydr. drive gear
Torque	2 000 Nm, synchronised
Vertical travel	975 mm

Accessories

Tube rack	Shiftable, 9*5 tubes on swivel supports
Guiding device	Snapper & 36 mm guiding tube
Vice & Beacon	Yes
PC Weather protection	Yes
DC/AC power conv.	Yes