

GEOTOOL

PROBING RIG GTR 1100

Fully hydraulic
multifunctional probe
on rubber tracks

GTR 1100

GTR 1100 ON RUBBER TRACKS

The GTR 1100 sets new standards. Designed for heavy-duty work and fast, safe work processes. The GTR is intuitive to use and promises rapid work progress.



GTR 1100 MAST-CHAIN

Circular mast chain with drivers for moving and operating the attachments

- DYNAMIC PROBING WITH DROP WEIGHT
- SAMPLING WITH HYDRAULIC JACK HAMMER
- LINER SAMPLING WITH DROP WEIGHT
- SURFACE CORING

GTR 1100 DP6T

Hydraulic mast cylinder with high retraction force and carriage for mounting attachments

- ROCK CORING
- AUGER AND MUD DRILLING
- DIRECT PUSH
- PERCUSSION DRILLING



GTR 1100 - ALL-ROUNDER FOR GEOTECHNICAL ENGINEERING – ROBUST AND PRECISE / MAST-CHAIN

Geotechnical drilling is challenging in constantly changing environments and soil conditions – the GTR 1100 is the ideal solution for a wide range of applications – and is intuitive to operate, while being compact for transport



Dynamic Probing – classic penetration testing methods with drop weight unit. DPL, DPM, DPH, and SPT with continuous rod extension with fixed and lost tip.

Sampling – with hydraulic hammer and open window sampling rods.

Liner Sampling – using AFNOR drop weight unit with single and double-walled liner systems for undisturbed soil samples.



Extraction of **Surface Cores** – with an easy-to-install attachment, stone and asphalt surfaces can be drilled in the center of the borehole.

Integrated **Rod Extraction** – using a freely movable casing puller and the fast automatic pulling system, the sample rod is brought back to the surface with up to 15 tons (33,000 lbs) of pulling force.

TECHNICAL DATA

OVERVIEW MAST-CHAIN

Dimensions	Height transport	1,600 mm / 5.25 ft
	Height working position	3,000 mm / 9.84 ft
	Width transport	1,100 mm / 3.61 ft
	Length transport	2,600 mm / 8.53 ft
	Weight	1,600 kg / 3,530 lbs
Engine	Motor	Hatz 2L41C 2-cylinder diesel
	Power	27 kW at 2,600 rpm
	Torque	100 Nm / 74 ft-lbs
SPT-Drop Weight / Dynamic Probing	DPL	10 kg / 22 lbs
	DPM	30 kg / 66 lbs
	DPH	50 kg / 110 lbs
	SPT	64 kg / 140 lbs
	Blow energy	467 Joule
	Blows/min.	15-30
	Drop height	50 cm / 75 cm 20 in / 30 in
Hydraulic Hammer / Direct Push Sampling	Weight	25 kg / 55 lbs
	Frequency	1.500 blows/min.
	Blow energy	95 Joule
AFNOR-Drop Weight / Undisturbed Sampling	Weight	32 kg / 64 kg / 96 kg / 128 kg 70 lbs / 140 lbs / 210 lbs / 290 lbs
	Drop height	75 cm / 30 in
	Diameter max.	115 mm / 4.53 in
Surface Coring / Core Probes	Diameter max.	350 mm / 13.78 in
	Revolutions	400 rpm
Casing Puller	Extraction force max.	15 t / 33,000 lbs
	Passage	120 mm / 4.72 in
	Weight of unit	27 kg / 60 lbs

GTR 1100 – DRILLING TECHNOLOGY FOR GEOTECHNICAL INVESTIGATION – COMPACT BUT POWERFUL / DP6T

Geotechnical drilling often requires further exploration, e.g., in solid rock. The GTR 1100 offers solutions here. The same applies to auger and mud drilling with the rotary drill head.

Core drilling – with double core tube and high-pressure piston pump, 2-speed core drill head and, if required, with lost or circulating flushing. The DP6T delivers high retraction forces for breaking off the drill core.

Auger drilling – powerful drilling with augers with and without casing, matching hydraulic clamps and strong retraction force provided by the DP6T. It is also possible to mud drill using a swivel.

Direct Push – using a hydraulic hammer mounted on the DP6T carriage. Sample down and pull it back up immediately with the DP6T.

Percussion Drilling – rope percussion mechanism at the mast head of the rig in combination with a lifting clamp for holding and moving casing.



TECHNICAL DATA

OVERVIEW DP6T

Dimensions	Height transport	1,750 mm / 5.74 ft
	Height working position	3,000 mm / 9.84 ft
	Width transport	1,100 mm / 3.61 ft
	Length transport	2,600 mm / 8.53 ft
	Weight	1,800 kg / 3,968 lbs
Engine	Motor	Hatz 3H50TIC 3-cylinder diesel
	Power	43,7 kW at 2,600 rpm
	Torque	203 Nm / 151 ft-lbs
Rock Coring / DP6T	1. Gear	600 rpm at 350 Nm / 260 ft-lbs
	2. Gear	1,400 Nm / 1,032 ft-lbs at 80 rpm
	Retract Force	6 t / 13,200 lbs
	Water pump	e.g. 40 liter/min. at 70 bar e.g. 10 gal/min. at 1,015 psi
Auger Drilling / DP6T	Drill head	2,500 Nm / 1,843 ft-lbs at 80 rpm
	Diameter max.	150 mm / 5.91 in
	Pulldown Force	1,8 t / 3,968 lbs (unanchored)
	Retract Force	6 t / 13,200 lbs
Hydraulic Hammer / DP6T	Weight	25 kg / 55 lbs
	Frequency	1.500 blows/min.
	Blow energy	95 Joule
	Retract Force	6 t / 13,200 lbs
Percussion Drilling / with Lifting-Clamp	Frequency	40 strokes/min.
	Stroke height	300 mm / 11.81 in
	Passage clamp	200 mm / 7.87 in
Casing Puller	Extraction force max.	15 t / 33,000 lbs
	Passage	120 mm / 4.72 in
	Weight of unit	27 kg / 60 lbs

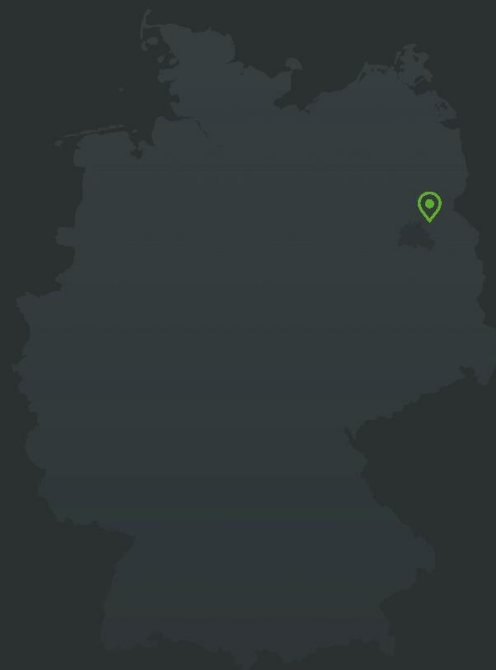
CONTACT

Do you have questions about our equipment or are you looking for a solution for your project? GEOTOOL stands for personal consultation, technical expertise and partnership support.

Feel free to call us – together we'll find the right solution.
We look forward to your inquiry.

OUR LOCATION IN GERMANY

+49 33398 9142-0
info@geotool.de
www.geotool.de



GEOTOOL

GEOTOOL Maschinenbau-
gesellschaft für Geotechnik mbH
Weststraße 6, 16356 Werneuchen

Visit us on
our social media
channels

