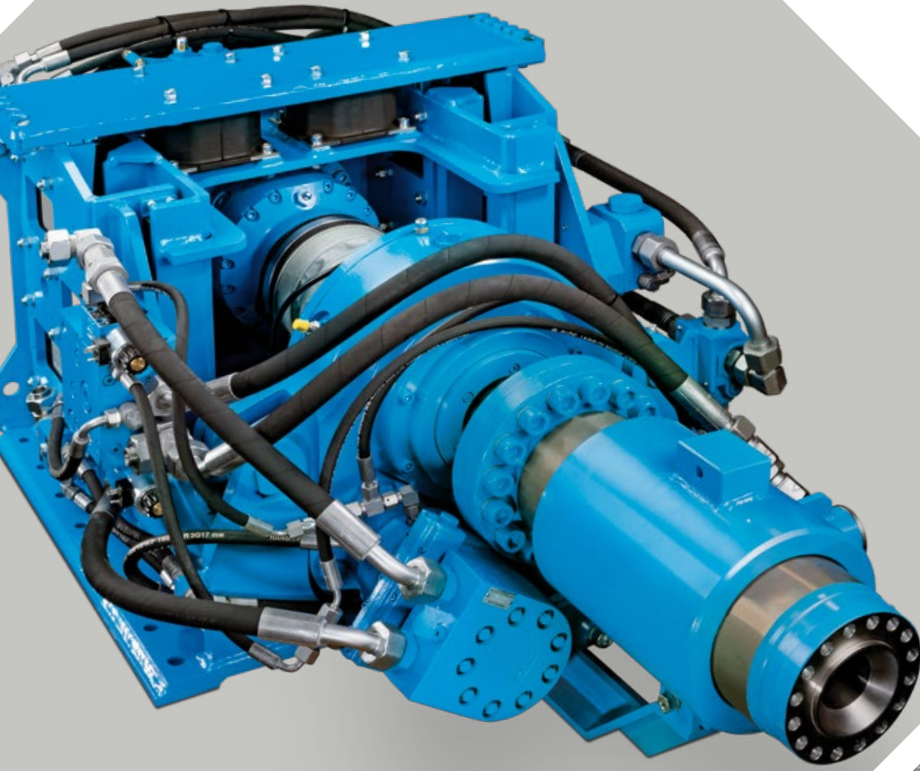


terra
infrastructure

safety: efficient and sustainable



VIBRO DRILL
VD150

VIBRO DRILL VD150

Frequency from 100 Hz to 120 Hz

VD150 is a Vibro Drill especially developed for:

- Micropile drilling up to a casing diameter of 8 inches (ø203 mm)
- Overburden drilling up to an outside casing diameter of 7 inches (ø178 mm)
- Threaded hollow bar drilling (self-drilling anchors) up to a bar diameter of 5 inches (ø125 mm)
- Geothermal drilling with one-time drill bits up to a casing diameter of 6 inches (ø152.4 mm)

VD150 has a standard built-in special rubber damping mechanism to avoid vibrations from being transferred into the drill mast.

VD150 achieve optimum drilling performance in different types of soil by adjusting the static moment; different static moments are available.

VD150 offers one high-speed and high-pressure motor (677 cm³).

VD150 has a total weight of 1,500 kg.

Vibro Unit	100 Hz	120 Hz
Operating pressure	260 - 360 bar	260 - 360 bar
Oil flow rate	126 l/min	144 l/min
Motor type	2 × 10 cm ³	2 × 10 cm ³
Impact rate	6,000 min ⁻¹	7,200 min ⁻¹
Centrifugal force	240 kN	240 kN
Casing weight	2,200 kg	1,400 kg

Performance Data

Drilling performance increased	up to 1 m per minute
Drilling accuracy	more precise (1-2 % deviation)
Drilling angle	0° - 90° (horizontal - vertical)
Casing diameter range	Ø 88.9 - 203 mm
Drilling depth	up to 80 m
Soil conditions	sand, gravel, clay, medium-hard rock

OPTIONS

- External flushing head for casings and self-drilling hollow bars
- Built-in RPM sensor with external box for speed and frequency indication
- Special drill rods, casings and drill bits

Rotary Drive

Motor HP677 ccm

Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar			
Gear		4 th	3 rd	2 nd	1 st	4 th	3 rd	2 nd	1 st	4 th	3 rd	2 nd	1 st	4 th	3 rd	2 nd	1 st
Oil flow rate (lpm)	90 Torque (Nm) Speed (rpm)	3,600 55	5,700 37	8,100 28	12,300 18	4,300 55	6,900 37	9,600 28	14,600 18	5,400 55	8,400 37	11,600 27	17,600 18	6,400 55	9,900 36	13,600 27	20,700 18
	120 Torque (Nm) Speed (rpm)	2,700 74	5,400 49	7,900 37	12,000 25	3,500 73	6,500 49	9,400 37	14,300 24	4,500 73	8,000 49	11,400 36	17,300 24	5,500 73	9,600 48	13,400 36	20,400 24
	170 Torque (Nm) Speed (rpm)	2,400 105	4,600 70	7,400 52	11,500 35	3,100 104	5,800 69	8,900 52	13,700 35	4,200 104	7,300 69	10,900 51	16,800 35	5,200 103	8,800 69	12,900 51	19,800 34

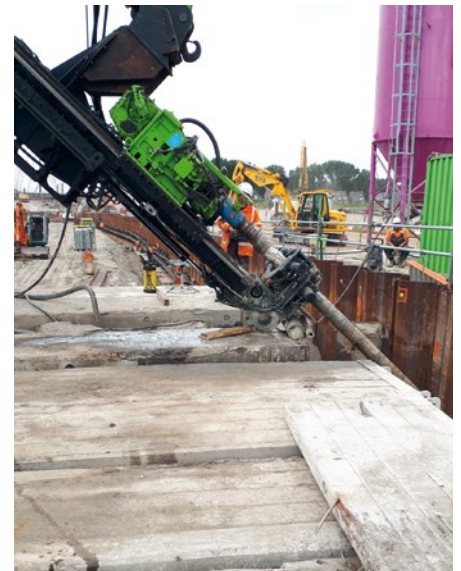
1st gear (parallel mode), 2nd gear (parallel + high-speed mode), 3rd gear (serial mode), 4th gear (serial + high-speed mode)



Flange connection for outside and inside drill string (overburden drilling)



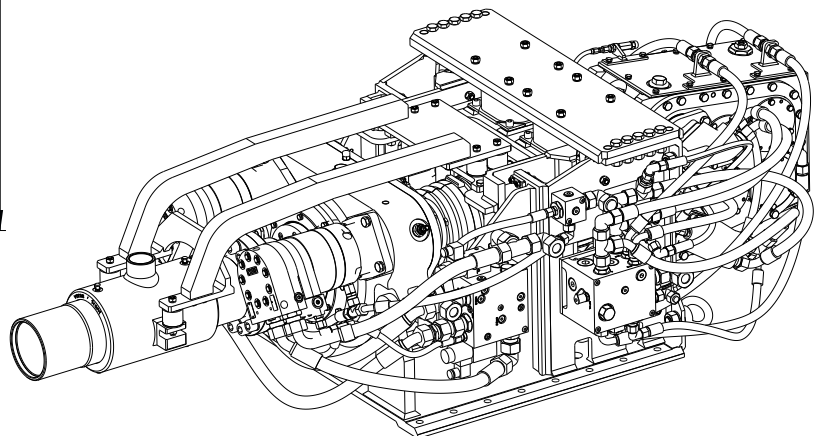
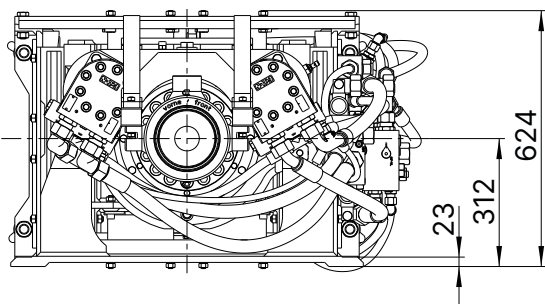
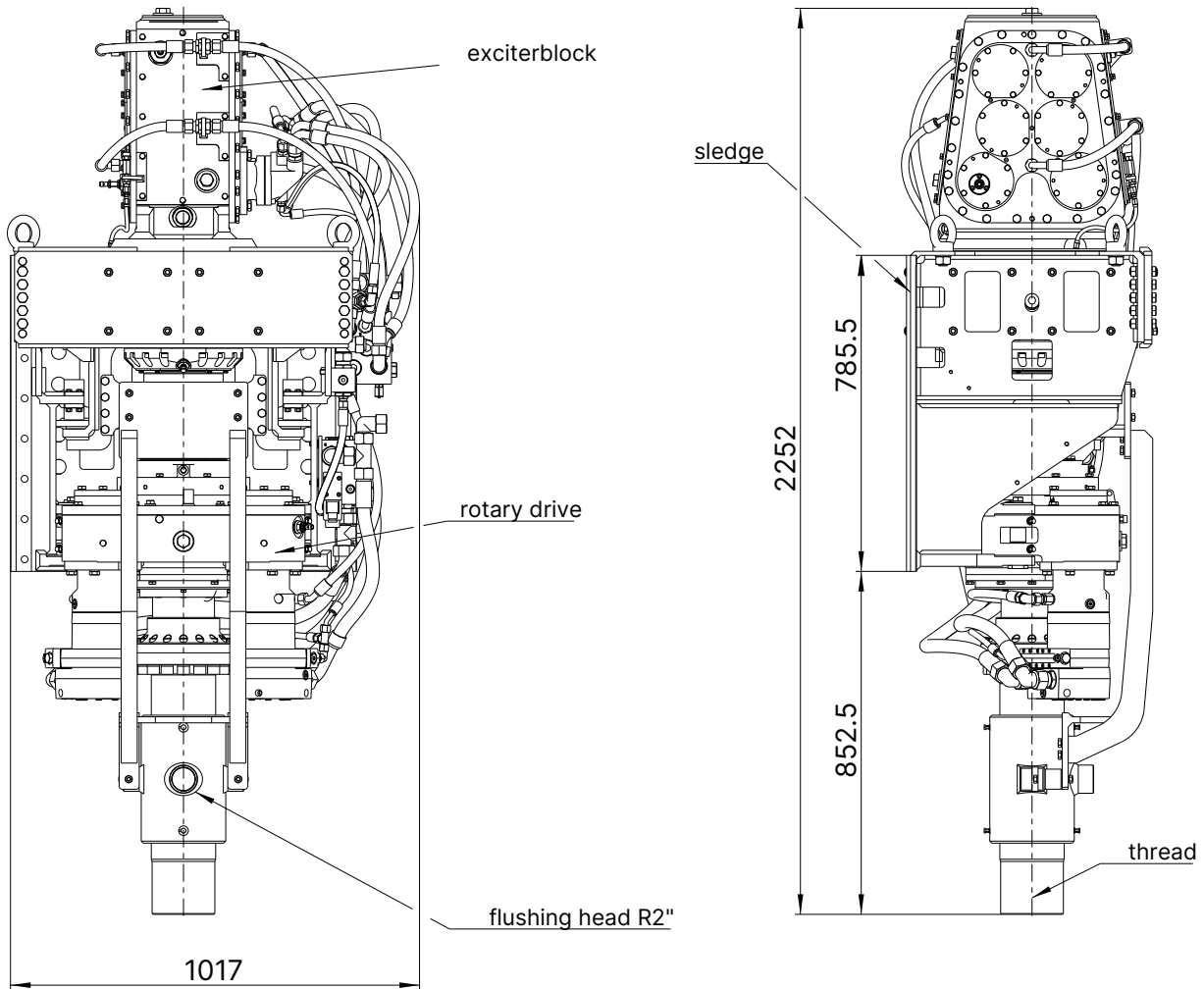
VD150 retraction of hollow bars, 60 m long



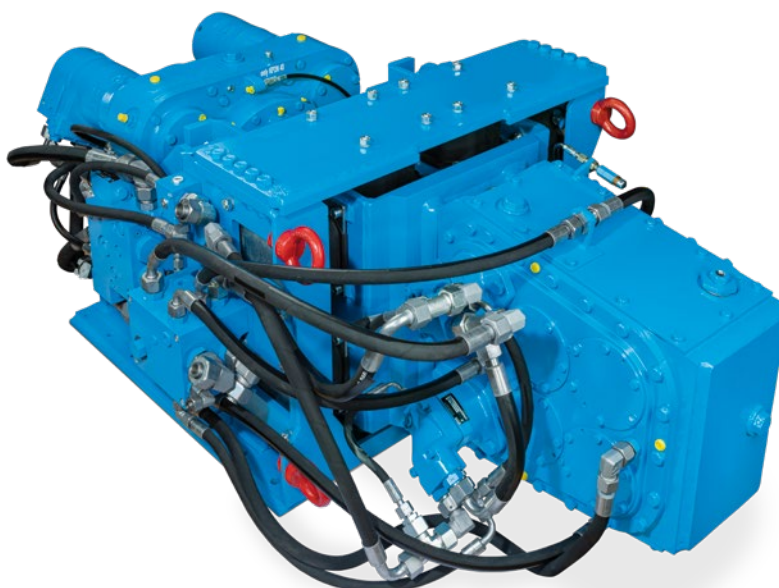
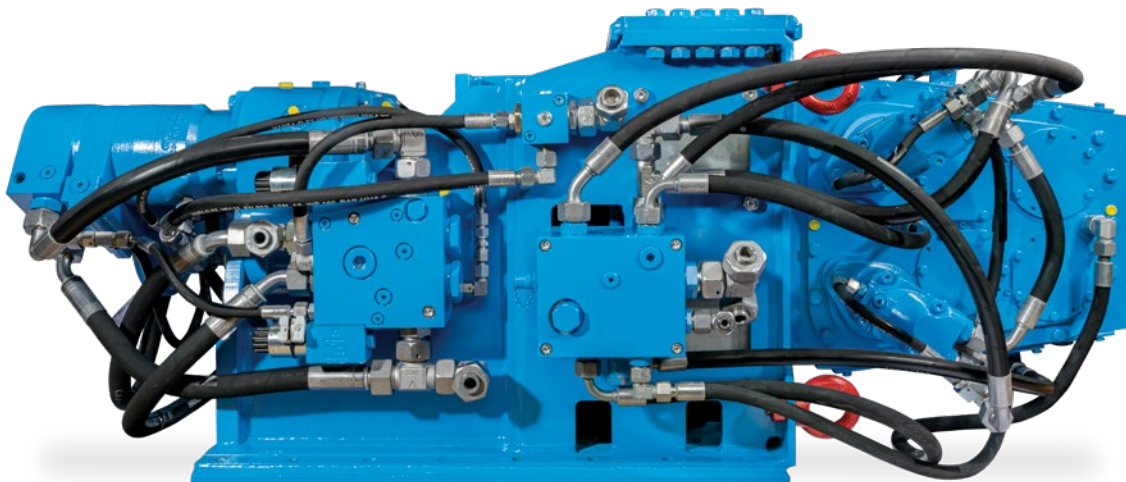
VD150 drilling 177,8 mm casings for strand anchors, 60 m long

Dimensions

VD150 with 6 unbalances
centrifugal force max. 240 kN



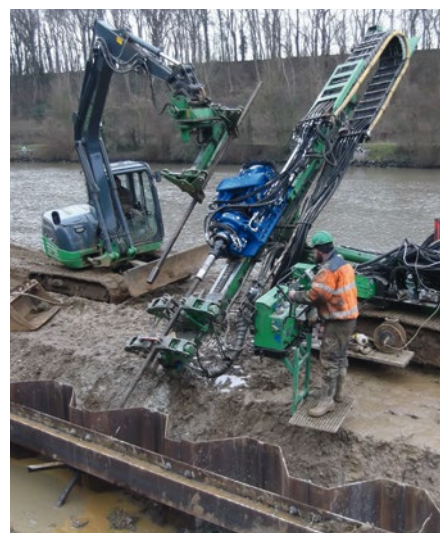
push down force max. 30 kN
retraction force max. 100 kN



Drilling overhead 178mm casings, 48 m deep with one time drill bit



Drilling 178mm casings and 60 m long beneath excavator in sand and gravel



Drilling 73mm selfdrilling hollow bars 65m deep into sand and gravel

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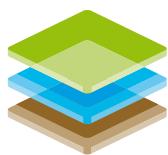
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