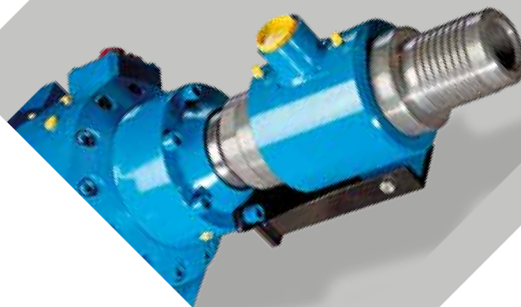
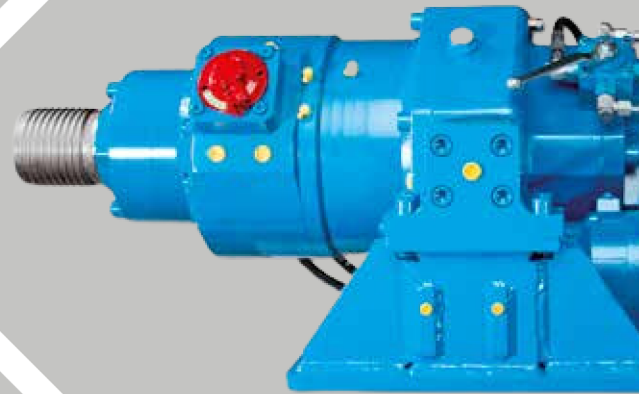
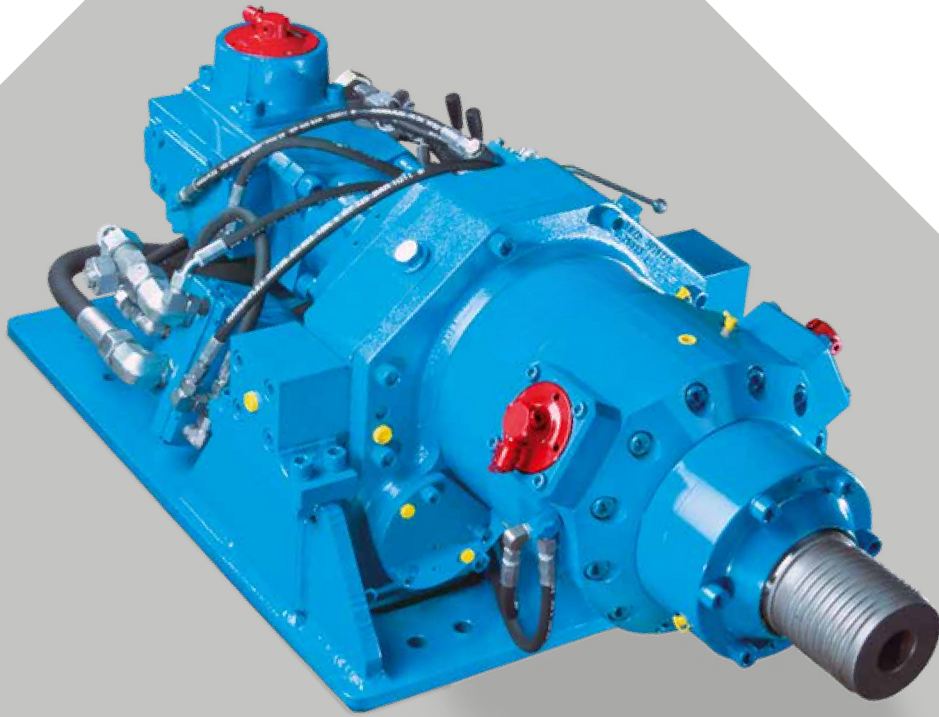


terra
infrastructure

safety: efficient and sustainable



DRIFTER
HB50

DRIFTER HB50

HB50 is a Drifter (top-hammer) especially developed for:

- Micropile drilling up to a casing diameter of 7 inches (ø178 mm)
- Overburden drilling up to an outside casing diameter of 6 inches (ø152,4 mm)
- Threaded hollow bar drilling (self-drilling anchors) up to a bar diameter of 4 inches (ø103 mm)
- Auger drilling (CFA) up to an auger diameter of 36 inches (ø900 mm)

HB50 has a standard built-in hydraulic damping mechanism to avoid blank impacts and to allow percussion during retraction of casings and augers.

HB50 achieves optimum drilling performance in different types of soil by adjusting the impact frequency and the impact energy; three different impact frequencies and impact energies are available.

HB50 offers three different ways to switch between the percussion mechanism and the speed of the rotary drive, either electrically or hydraulically or manually (by hand).

HB50 offers two different high-speed and high-pressure motors (677 ccm, 940 ccm) and two single-speed motors (670 ccm, 677 ccm).

Percussion Unit for Anchor Drilling

Operating pressure (kp/cm ²)	180 - 200 bar
Oil flow rate (l/min)	80 - 90 lpm
Impact rate (min ⁻¹) (20 32 40 Hz) 1,200 1,900 2,400 bpm	
Single impact energy (Joule)	840 540 420 Nm

Shank Adaptors (Striker Bars)

Male thread (standard)	C112 left C112 right
Male thread	C90 left C90 right
Male thread	R112 (H112) left R112 (H112) right

OPTIONS

- External flushing heads for casings and self-drilling hollow bars
- Built-in RPM sensor with external box for speed indication
- Central lubrication system
- Custom made hammer plate

Rotary Drives

Motor-Version 670 ccm (single-speed)

Pressure at rotary drive		140 bar				170 bar				200 bar			
Gear		2 nd		1 st		2 nd		1 st		2 nd		1 st	
Oil flow rate (lpm)	90	Torque (Nm)	4,300	8,600	5,300	10,800	6,400	12,900					
		Speed (rpm)	43	19	40	19	39	18					
	120	Torque (Nm)	4,200	8,500	5,300	10,700		12,800					
		Speed (rpm)	61	29	59	29		27					
	170	Torque (Nm)	4,100	8,500	5,200	10,700		12,800					
		Speed (rpm)	78	38	78	39		36					

1st gear (parallel mode), 2nd gear (serial mode)

■ Intermittend mode (max. 10% per minute)

Motor-Version HP677 ccm (single-speed)

Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar			
Gear		2 nd		1 st		2 nd		1 st		2 nd		1 st		2 nd		1 st	
Oil flow rate (lpm)	90	Torque (Nm)	5,100	10,900	6,200	13,200	7,400	15,600	8,800	18,300							
		Speed (rpm)	43	21	43	21	43	21	43	21							
	120	Torque (Nm)	4,800	10,600	5,900	12,900	7,100	15,300	8,500	18,000							
		Speed (rpm)	57	28	57	28	57	28	57	28							
	170	Torque (Nm)	4,100	10,100	5,300	12,500	6,400	14,800	7,800	17,500							
		Speed (rpm)	80	40	80	40	80	40	80	40							

1st gear (parallel mode), 2nd gear (serial mode)

Motor-Version HP677 ccm (two-speed) (standard)

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)	3,200	5,100	7,100	10,900	3,900	6,200	8,700	13,200	4,700	7,400	10,300	15,600	5,600	8,800	12,100	12,100
		Speed (rpm)	64	43	32	21	64	43	32	21	64	43	32	21	64	43	32	32
	120	Torque (Nm)	2,400	4,800	6,900	10,600	3,200	5,900	8,500	12,900	4,000	7,100	10,100	15,300	4,900	8,500	11,900	11,900
		Speed (rpm)	85	57	43	28	85	57	43	28	85	57	43	28	85	57	43	43
	170	Torque (Nm)	2,100	4,100	6,500	10,100	2,900	5,300	8,100	12,500	3,700	6,400	9,700	14,800	4,600	7,800	11,400	11,400
		Speed (rpm)	121	80	60	40	121	80	60	40	121	80	60	40	121	80	60	60

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

Motor-Version HP940 ccm (two-speed)

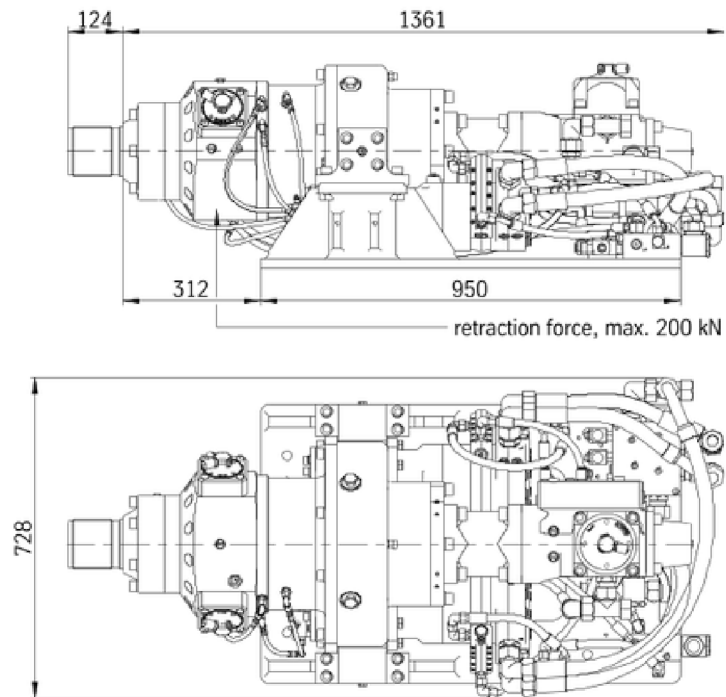
Pressure at rotary drive		170 bar				200 bar				240 bar				
Gear		4 th	3 rd	2 nd	1 st	4 th	3 rd	2 nd	1 st	4 th	3 rd	2 nd	1 st	
Oil flow rate (lpm)	90	Torque (Nm)	4,400	7,000	9,900	15,100	5,500	8,700	12,100	18,400	6,600	10,300	14,300	21,600
		Speed (rpm)	46	31	23	15	46	31	23	15	46	31	23	15
	120	Torque (Nm)	3,400	6,600	9,600	14,700	4,400	8,200	11,800	18,000	5,500	9,900	14,000	21,200
		Speed (rpm)	61	41	31	20	61	41	31	20	61	41	31	20
	170	Torque (Nm)	2,900	5,700	9,000	14,100	4,000	7,300	11,200	17,300	5,100	8,900	13,400	20,600
		Speed (rpm)	87	58	43	29	87	58	43	29	87	58	43	29

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

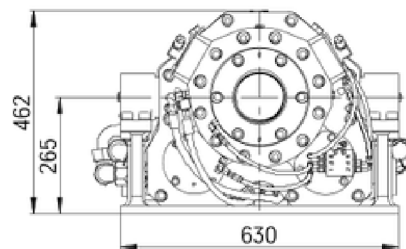
■ Intermittend mode (max. 10% per minute) between 200 bar and 240 bar

Dimensions

with hydraulic damping mechanism

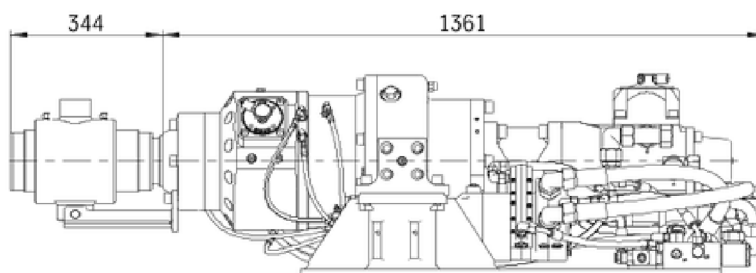


retraction force, max. 200 kN

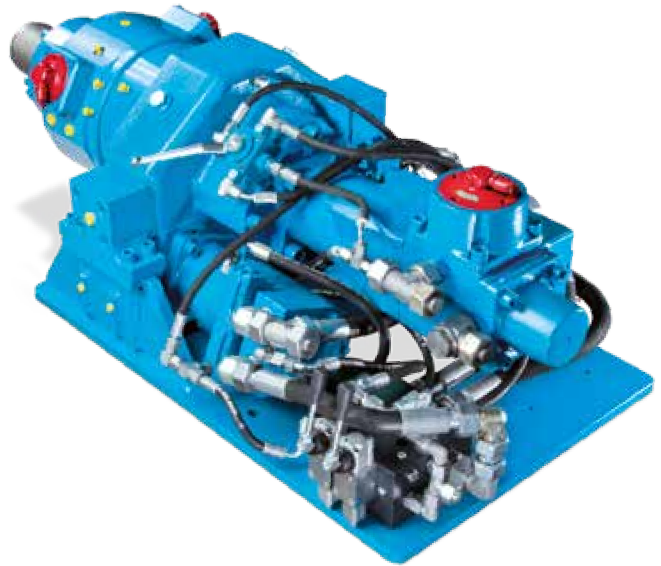
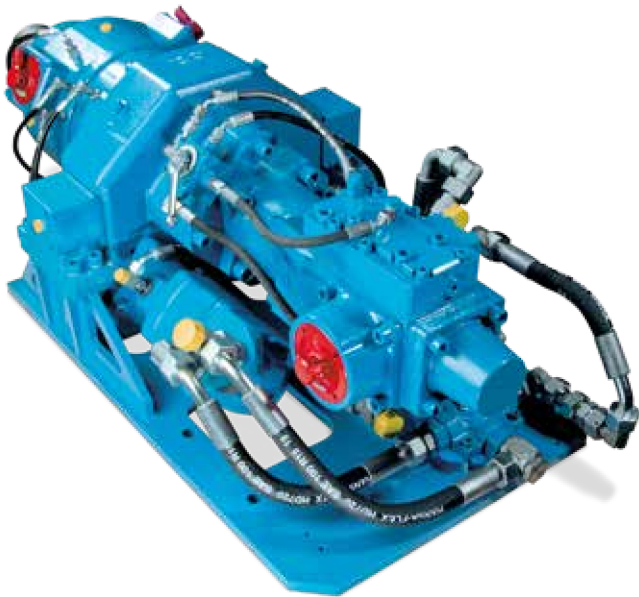
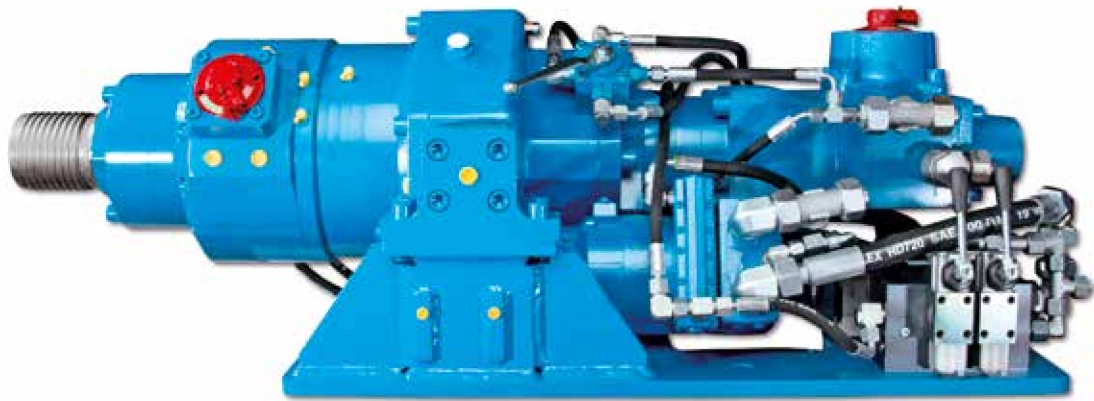


weight approx. 815 kg
(including base plate)

with hydraulic damping mechanism & external flushing head



weight approx. 860 kg
(including base plate)



HB50 drilling 152.4 mm casings 25 m deep for strand anchors

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