Materials Services Infrastructure

KRUPP Double Head HR60-HB45.



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KRUPP Double Head System HR60-HB45

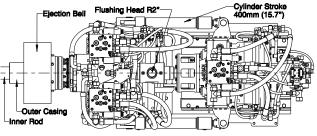
Compact design – the ideal double head system assembled to one slege plate for larger drill rigs.

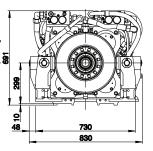


- Especially designed as low profile double head system for overburden drilling, to drill very close in front of a wall; only 400 mm distance between drilling axle and top edge of the rotary drive system.
- With cylinders arranged between the rotary head and the drifter a relative adjustment between outer casing and inner rod of 400 mm (+/- 200 mm) is possible.
- Casing diameter up to 300 mm (12 inch).
- Optional: electric or hydraulic changeover for the rotary drive speed and for the percussion mechanism frequency.
- Options: flushing head, discharge ejection bell, integrated RPM sensor and central lubrication system.

Rotary Head HR60 Drifter HB45

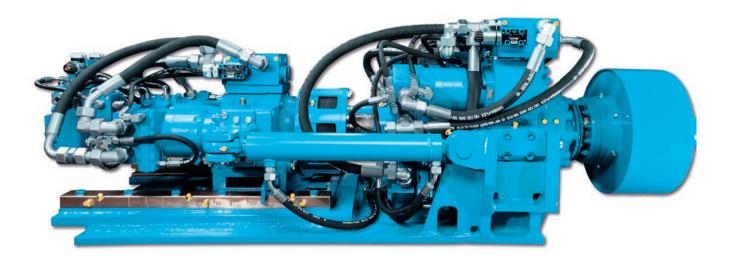
Main Dimensions





Weight Rotary Head + Drifter approx. 1150 kg Sledge approx. 530 kg

Retraction Force HR60 max. 250 kN HB45 max. 120 kN



KRUPP Double Head System HR60-HB45

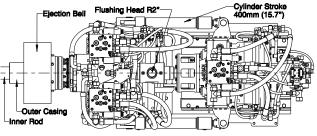
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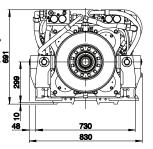


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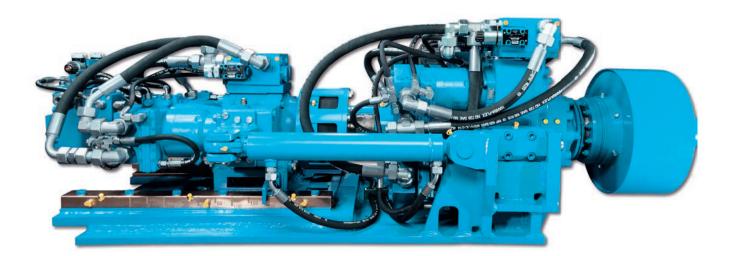
Main Dimensions





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Retraction Force HR60 max. 250 kN HB45 max. 120 kN



Rotary Drives HR60 (for outside casings)

Motor-	Aotor-Version 2x HP480 ccm + 2x 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
ite	$150 \begin{array}{c} {}^{\text{Torque (Nm)}} \\ {}^{\text{Speed (rpm)}} \end{array}$	6,100 60	9,200 40	12,200 30	18,400 18	7,400 60	11,100 40	14,800 30	22,200 18	8,600 60	13,000 40	17,300 30	25,900 18	10,100 60	15,100 40	20,200 30	30,300 18
flow rate m)	$240_{\text{Speed (rpm)}}^{\text{Torque (Nm)}}$	6,100 96	9,200 64	12,200 48	18,400 28	7,400 96	11,100 64	14,800 48	22,200 28	8,600 96	13,000 64	17,300 48	25,900 28	10,100 96	15,100 64	20,200 48	30,300 28
Oil flo (Ipm)	$340 \stackrel{\text{Torque (Nm)}}{\text{Speed (rpm)}}$	6,100 136	9,200 91	12,200 68	18,400 40	7,400 136	11,100 91	14,800 68	22,200 40	8,600 136	13,000 91	17,300 68	25,900 40	10,100 136	15,100 91	20,200 68	30,300 40

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

Motor-Version 4x HP677 ccm (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
i ÷	$150 \begin{array}{c} {}^{\text{Torque (Nm)}} \\ {}^{\text{Speed (rpm)}} \end{array}$	7,200 51	10,700 34	14,300 26	21,500 15	8,600 51	13,000 34	17,300 26	25,900 15	10,100 51	15,200 34	20,200 26	30,400 15	11,800 51	17,700 34	23,600 26	35,400 15
	$240_{\text{Speed (rpm)}}^{\text{Torque (Nm)}}$	7,200 82	10,700 55	14,300 41	21,500 24	8,600 82	13,000 55	17,300 41	25,900 24	10,100 82	15,200 55	20,200 41	30,400 24	11,800 82	17,700 55	23,600 41	35,400 24
	$340_{\text{Speed (rpm)}}^{\text{Torque (Nm)}}$	7,200 116	10,700 77	14,300 58	21,500 34	8,600 116	13,000 77	17,300 58	25,900 34	10,100 116	15,200 77	20,200 58	30,400 34	11,800 116	17,700 77	23,600 58	35,400 34

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

Rotary Drives HB45 (for inner rods)

Motor-	Versio	n 2x HP48	0 ccm															
Pressure	e at rotai	ry drive		140) 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
te	90	Torque (Nm) Speed (rpm)	1,300 121	2,100 80	3,100 60	4,700 40	2,100 121	3,300 80	4,600 60	7,000 40	2,500 121	3,900 80	5,400 60	8,300 40	3,000 121	4,600 80	6,400 60	9,700 40
flow rate n)	150	Torque (Nm) Speed (rpm)	900 201	1,800 134	2,800 101	4,400 67	1,700 201	2,900 134	4,400 101	6,700 67	2,100 201	3,600 134	5,200 101	8,000 67	2,600 201	4,300 134	6,200 101	9,400 67
Oil flo (Ipm)		Torque (Nm) Speed (rpm)	800 228	1,600 152	2,700 114	4,300 76	1,500 228	2,800 152	4,300 114	6,600 76	1,900 228	3,400 152	5,100 114	7,900 76	2,400 228	4,100 152	6,100 114	9,300 76

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

Motor-Version 2x HP677 ccm (standard)

Pressure	at rota	ry drive		14() _{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)	1,900 86	3,000 57	4,300 43	6,600 29	2,900 86	4,700 57	6,500 43	9,900 29	3,500 86	5,500 57	7,700 43	11,600 29	4,200 86	6,500 57	9,000 43	13,600 29
	150	Torque (Nm) Speed (rpm)	1,300 143	2,500 95	4,000 71	6,200 48	2,400 143	4,100 95	6,200 71	9,500 48	3,000 143	5,000 95	7,400 71	11,300 48	3,600 143	6,000 95	8,700 71	13,300 48
	170	Torque (Nm) Speed (rpm)	1,100 162	2,300 108	3,900 81	6,100 54	2,200 162	3,900 108	6,000 81	9,300 54	2,700 162	4,800 108	7,200 81	11,100 54	3,400 162	5,800 108	8,500 81	13,100 54

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

Other motor versions are available

Percussion Unit

Operating pressure (kp/cm ²)	180 - 200 bar
Oil flow rate (I/min)	70 - 90 lpm
Impact rate (min ⁻¹)	1,200 / 1,800 / 2,500 bpm
Single impact energy (Joule)	590 / 400 / 340 Nm

Shank Adaptors (Striker Bars)

Male thread

C64 left, C64 right

Other shank adaptors (striker bars) are available

Materials Services Infrastructure

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Rotary Drives HR60 (for outside casings)

Motor-	Aotor-Version 2x HP480 ccm + 2x 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
ite	$150 \begin{array}{c} {}^{\text{Torque (Nm)}} \\ {}^{\text{Speed (rpm)}} \end{array}$	6,100 60	9,200 40	12,200 30	18,400 18	7,400 60	11,100 40	14,800 30	22,200 18	8,600 60	13,000 40	17,300 30	25,900 18	10,100 60	15,100 40	20,200 30	30,300 18
flow rate m)	$240_{\text{Speed (rpm)}}^{\text{Torque (Nm)}}$	6,100 96	9,200 64	12,200 48	18,400 28	7,400 96	11,100 64	14,800 48	22,200 28	8,600 96	13,000 64	17,300 48	25,900 28	10,100 96	15,100 64	20,200 48	30,300 28
Oil flo (Ipm)	$340 \stackrel{\text{Torque (Nm)}}{\text{Speed (rpm)}}$	6,100 136	9,200 91	12,200 68	18,400 40	7,400 136	11,100 91	14,800 68	22,200 40	8,600 136	13,000 91	17,300 68	25,900 40	10,100 136	15,100 91	20,200 68	30,300 40

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

Motor-Version 4x HP677 ccm (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
i ÷	$150 \begin{array}{c} {}^{\text{Torque (Nm)}} \\ {}^{\text{Speed (rpm)}} \end{array}$	7,200 51	10,700 34	14,300 26	21,500 15	8,600 51	13,000 34	17,300 26	25,900 15	10,100 51	15,200 34	20,200 26	30,400 15	11,800 51	17,700 34	23,600 26	35,400 15
	$240_{\text{Speed (rpm)}}^{\text{Torque (Nm)}}$	7,200 82	10,700 55	14,300 41	21,500 24	8,600 82	13,000 55	17,300 41	25,900 24	10,100 82	15,200 55	20,200 41	30,400 24	11,800 82	17,700 55	23,600 41	35,400 24
	$340_{\text{Speed (rpm)}}^{\text{Torque (Nm)}}$	7,200 116	10,700 77	14,300 58	21,500 34	8,600 116	13,000 77	17,300 58	25,900 34	10,100 116	15,200 77	20,200 58	30,400 34	11,800 116	17,700 77	23,600 58	35,400 34

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

Rotary Drives HB45 (for inner rods)

Motor-	Version 2x HF	480 ccm															
Pressure	e at rotary drive		14	0 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
te	90 Torque (N Speed (rp		2,100 80	3,100 60	4,700 40	2,100 121	3,300 80	4,600 60	7,000 40	2,500 121	3,900 80	5,400 60	8,300 40	3,000 121	4,600 80	6,400 60	9,700 40
Oil flow rate (lpm)	150 Torque (N Speed (rp		1,800 134	2,800 101	4,400 67	1,700 201	2,900 134	4,400 101	6,700 67	2,100 201	3,600 134	5,200 101	8,000 67	2,600 201	4,300 134	6,200 101	9,400 67
	$170 {}_{\text{Speed (rp)}}^{\text{Torque (N)}}$		1,600 152	2,700 114	4,300 76	1,500 228	2,800 152	4,300 114	6,600 76	1,900 228	3,400 152	5,100 114	7,900 76	2,400 228	4,100 152	6,100 114	9,300 76

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

Motor-Version 2x HP677 ccm (standard)

Pressure	at rota	ry drive		14() _{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)	1,900 86	3,000 57	4,300 43	6,600 29	2,900 86	4,700 57	6,500 43	9,900 29	3,500 86	5,500 57	7,700 43	11,600 29	4,200 86	6,500 57	9,000 43	13,600 29
	150	Torque (Nm) Speed (rpm)	1,300 143	2,500 95	4,000 71	6,200 48	2,400 143	4,100 95	6,200 71	9,500 48	3,000 143	5,000 95	7,400 71	11,300 48	3,600 143	6,000 95	8,700 71	13,300 48
	170	Torque (Nm) Speed (rpm)	1,100 162	2,300 108	3,900 81	6,100 54	2,200 162	3,900 108	6,000 81	9,300 54	2,700 162	4,800 108	7,200 81	11,100 54	3,400 162	5,800 108	8,500 81	13,100 54

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