



TRACKMOUNTED

EX-PROOF DRILLING RIGS

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EXC SERIES
BDU500EXC - BDU700EXC - BDU1500EXC





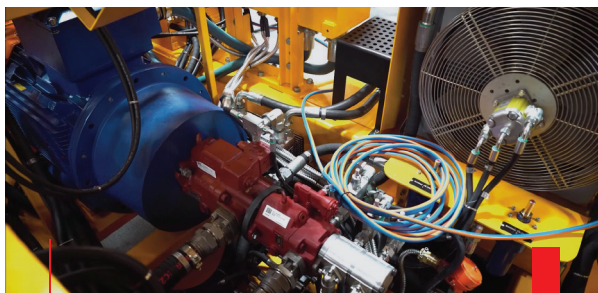
01 100% explosion-proof drilling rigs

BARKOM is Türkiye's first and only manufacturer of ATEX-certified explosion-proof drilling rigs, designed for safe operation in hazardous environments where methane gas emissions create explosive risks.



02 High-end electric motor

Our ATEX-certified underground drilling rigs are powered by ex-proof ABB or CEMP electric motors, ensuring high performance and reliability. With power outputs ranging from 55 to 110 kW and speeds up to 1480 rpm, they deliver efficient and consistent drilling capability.

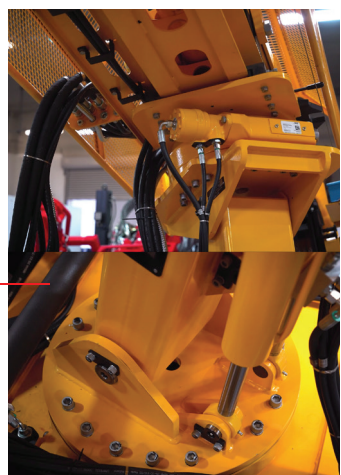


03 Robust hydraulic pumps

Our ATEX-certified underground drilling rigs feature four ex-proof KAWASAKI hydraulic pumps in a tandem configuration, operating at 280 or 315 bar pressure. The system is cooled by an ex-proof HYDAC water-cooling unit and an ex-proof air-cooling system from PARKER or AKG.

04 Vigorous rotary head

Designed for maximum efficiency, the open-feed spindle rotary head reaches speeds up to 1200 rpm with torque ranging from 1020 to 2060 Nm. It is powered by PARKER or REXROTH ex-proof hydromotors for smooth and powerful operation.



05 Easy navigation with double reducers

Two hydraulically-controlled reducers are positioned at the bottom and at the boom-to-mast connection. This setup allows for effortless and fast 360° drilling in underground operations.

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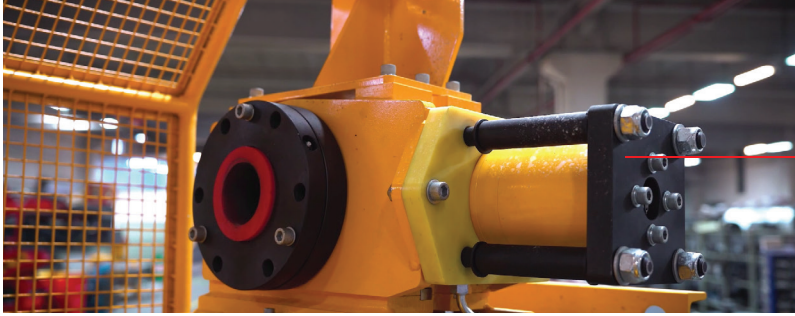


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06 Wireline system with automatic winding feature

The automatic winding wireline system reduces manual handling risks and ensures consistent tension control. It prevents cable snapping, minimizes wear and tear, and improves core retrieval speed and accuracy.





07 High-strength rod holder

The gas-pressure-operated rod holder secures rods using TC insert jaws, providing an axial holding force of 70 to 130 kN, ensuring firm and reliable grip.



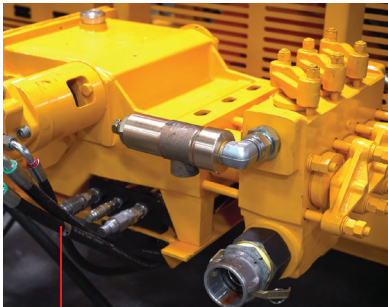
08 User-friendly control panel

An intuitive and easy-to-use control panel allows precise control over drilling operations while maintaining advanced functionality.



09 High-quality crawler system

Manufactured by USTEC, the ex-proof crawler system delivers excellent traction and stability, reaching speeds of up to 3.4 km/h for smooth maneuverability.



10 Integrated flush pump

The triplex mud pump, attached onto the rig chassis, provides a flow rate of 90 - 140 l/min at 60 - 70 bar pressure, ensuring efficient flushing performance.



11 Safety cage for sound operations

A mechanically or hydraulically controlled safety cage enhances operator safety during drilling operations.



12 Dual emergency stop system

An emergency stop button is located on the control panel, with an additional wire emergency stop positioned on the mast for immediate shutdown in critical situations.



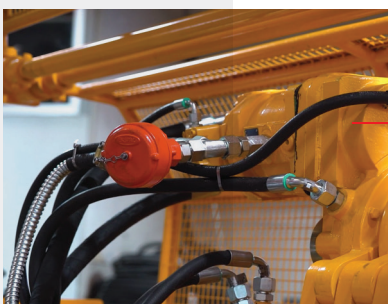
13 D-type explosion-proof electrical box

The D-Type electrical enclosure prevents internal sparks or arcs from igniting external gases or dust. Its flameproof construction ensures containment of internal explosions, protecting both the equipment and the operator.



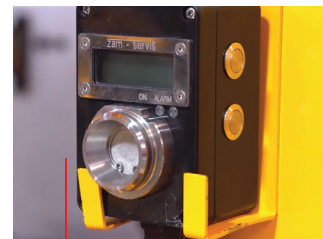
14 Explosion-proof power input system

The ex-proof power input box is designed to eliminate ignition risks, containing internal sparks or explosions and preventing their propagation to the external environment.



15 Integrated thermocouple for automatic overheat protection

A thermocouple continuously monitors hydraulic oil temperature. If it reaches 120°C, the system automatically shuts down, preventing overheating and protecting key components.



16 Methane gas detector

A methane detector continuously monitors CH₄ levels, preventing dangerous gas buildup and ensuring safe drilling in coal mines and other hazardous environments.



17 Fire-resistant hydraulic tank

The 130-liter hydraulic tank is filled with HFD-U 68 fire-resistant synthetic hydraulic fluid, meeting strict ex-proof safety regulations for underground operations.

		BDU500EXC	BDU700EXC	BDU1500EXC	
Drilling capacity	PWL	-	200	400	m
	HWL	200	350	700	m
	NWL	500	700	1500	m
	BWL	700	1000	2000	m
Electric motor	Brand	ABB or CEMP	ABB or CEMP	ABB or CEMP	-
	Power	55 (74)	90 (121)	110 (148)	kW (hp)
	Voltage	660 or 1100	660 or 1100	660 or 1100	V
	Speed	1480	1480	1480	rpm
Rotary head	Type	Open feed (spindle)	Open feed (spindle)	Open feed (spindle)	-
	Max. rotation speed	1200	1200	1200	rpm
	Max. torque	1020	1420	2060	Nm
	Inner diameter	78	101	101	mm
	Max. rod diameter	70	89	89	mm
	Chuck axial holding force	100	150	150	kN
	Hydromotor brand	PARKER or REXROTH	PARKER or REXROTH	PARKER or REXROTH	-
	Hydromotor capacity	80	110	160	cc
Feed system	Feed cylinder	Telescopic	Telescopic	Telescopic	-
	Mast rotation	360	360	360	°
	Feed stroke	1800	1800	1800	mm
	Pull-up capacity	55	70	135	kN
	Pull-down capacity	55	70	135	kN
Rod holder	Max. rod diameter	89	114	114	mm
	Axial holding force with TC insert jaws	70	70	130	kN
Wireline crane	Empty drum pull capacity	21	21	21	kN
	Full drum pull capacity	8,5	8,5	8,5	kN
	Wire rope diameter	4,8	4,8	4,8	mm
	Wire rope length capacity	1000	1000	1500	m
	Hydromotor brand	DANFOSS	DANFOSS	DANFOSS	-
Hydraulic system	Connection	Tandem	Tandem	Tandem	-
	Brand	KAWASAKI	KAWASAKI	KAWASAKI	-
	Pump 1	80	112	140	cc
	Pump 2	28	45	45	cc
	Pump 3	16	28	28	cc
	Pump 4	11	11	11	cc
	Operating pressure	280	280	315	bar
	Oil tank capacity	130	130	130	ℓ
	Water cooling brand	HYDAC	HYDAC	HYDAC	-
	Air cooling brand	PARKER or AKG	PARKER or AKG	PARKER or AKG	-
Flush pump	Type	Triplex	Triplex	Triplex	-
	Valve	Steel	Steel	Steel	-
	Flow rate	90	140	140	ℓ/min
	Operating pressure	60	70	70	bar
Dimensions	Height with mast open	3,7	3,7	3,7	m
	L x W x H	5,2 x 1,87 x 2,28	5,2 x 1,87 x 2,28	5,3 x 1,87 x 2,28	m
	Weight	6,2	7,2	7,7	ton
Crawler	Brand	USTEC	USTEC	USTEC	-
	Max. speed	3,38	3,38	3,38	km/h
	Track width	300	300	300	mm
	Track height	500	500	500	mm
Crawler engine	Brand	PERKINS	PERKINS	PERKINS	-
	Type	4-cylinder diesel engine	4-cylinder diesel engine	4-cylinder diesel engine	-
	Power	37 (50)	37 (50)	37 (50)	kW (hp)

The technical data presented in this brochure is provided as a general and theoretical reference only. The drilling capacities of the rigs are calculated based on drilling in a fully vertical (90°) position, considering the available pull/feed force, the weight of the drill string in the borehole, and the average weight on the bit. Due to variable factors such as the geological structure of the drilled rock formation and operator use, BARKOM does not guarantee that these capacities can be achieved under all working conditions. The dimensions and measurements indicated in the tables and drawings may be subject to minor changes.

EXC SERIES



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 **BARKOM**



BARKOM reserves the right to modify the technical specifications of the rigs presented in this brochure at any time. The technical data sheet provided at the quotation stage contains the final specifications, and rig production is carried out based on the customer's approval of the data in the relevant document.

The features displayed in this brochure include standard and optional specifications available for our rigs. BARKOM welcomes customer-specific design and technical modifications and is open to providing customized production solutions based on the special needs and requirements of customers.