

CHANG SHIN
International Co., Ltd.



KR5000

Secure and precise deep hole drilling machine

*2018 Up To New Environmental Standards
Tier-4 Final Engine Installation*





New leader of deep hole drilling machine!

Eco-Friendly KR5000

- Tier 4 Final Cummins engine installation,
- Turn-Table system for dust suppression.

Improved Structural Stability KR5000

- Structural stability by low position.
- Strong frame withstanding extreme working condition.
- Deep hole drilling carousel system(Automatic rods-exchanging).
- Tsubaki's super-chain & doubled-chain installed.
- Independent drive outrigger.
- Outrigger safety valve(Pilot check valve).

Field Requirements-Satiesfied KR5000

- Multi-tasking rotary head.
- Verticality of drilling within 1/300.
- Running and redirection performance improved track.
- Multi-line level installed.
- 303mm height drill rods.
- 65mm height air passage(Various compressor available).
- Position controllable pilot driver cab.





Down The Hole Drilling Specialist

CS KR5000

Eco-Friendly

KR5000

Low-Noise·Eco-friendly Tier-4 Final Engine

Approximately 250HP.

High-powered capacity is operated by qualified performance after strict process and high-tech Tier-4 engine.



Cummins Engine System.

- Exhaust gas regulation satisfied by aftertreatment.
- Durability enhancement by robust sash mount structure.
- Vibration reduction and aftertreatment protection by bellows pipe.
- High Torque despite low RPM by engine optimization.
- Remarkable fuel reduction effect.
- Automatic shut-down/Automatic idling function.
- DPF-Free gas treatment system.

Turn-Table system for dust suppression.

Due to preventing rising dust during drilling, No need additional set up for dust suppression.





Down The Hole Drilling Specialist

CS KR5000

Improved Structural Stability

KR5000



Structural stability by low position

Center of gravity is considerably low because of its structure of which highest is approximately 12.7m, so that roll-over risk is rare.

Strong frame withstanding extreme working condition

Durability is improved ever by high-strength design and intense frame through special welding makes the operation reliable.



Tsubaki's super-chain & doubled-chain installed.

Super-chain is double-chain installed and which has about 30% more improved allowable tension and tensile strength than the previous one. Reliable drilling is operated by high durability and transmission of power ability.



Deep hole drilling carousel system (Automatic rods-exchanging)

Deep hole drilling capacity is due to 5pcs of additional extension tubes to the max, and each of which is 7meter-height.

Hydraulic cylinder and lower gear make carousel installation so that rods are exchanged conveniently, quickly and securely.



Independent drive outrigger

As per conducting situation, the outrigger operates in every direction independently, so that horizontal operation could be conducted at any lays of area.



Outrigger safety valve (Pilot check valve)

Reliable operation is performed even when abnormality on hydraulic system, in virtue of well-balanced equipment by pilot check valve installed to 4 outriggers independently.



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Field Requirements—Satisfied

KR5000

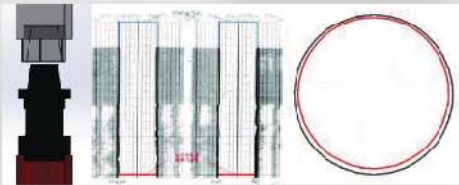


DTH Hammers & Three-cone bitting are available for Rotary head

High-powered rotary head is mounted and which is 80% higher than before. Shift gears from 1st to 2nd, DTH hammers & three-cone bitting are all available.

Parker Motor

- A long output of power.
- Durability improvement of outside axle and radial shaft with high-load roller bearing.
- Inertia by structural analysis and high durability on twisting.



Verticality of drilling within 1/300

Fastened method with not hexagonal joints but solid screws retains cylindricity among rods so that duration of verticality.



Running and redirection performance improved track.

Powerful motor makes running performance much advanced, and free change of direction lets the operation highly perform at various kinds of sites.



Multi-line level installed

Horizontal or vertical operation is performed even on the rough area due to multi-line level covering horizontal and vertical.

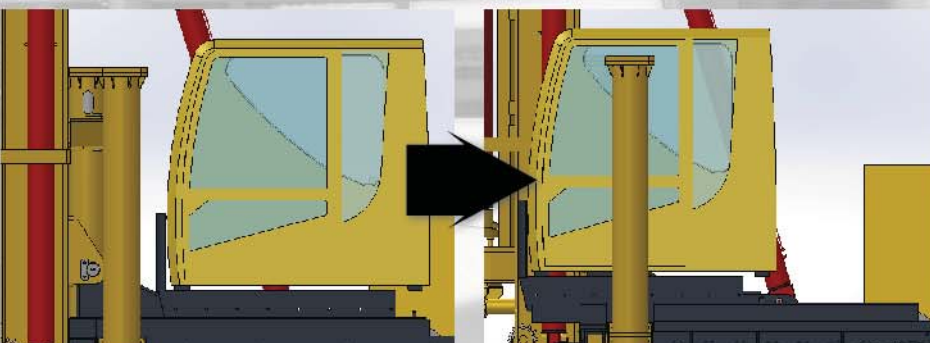


303mm height drill rods

Drill rod installation availability is 303mm which has been improved about 30mm than before. Broken rock bits are drained easily so that qualified drilling is available.

65mm height air passage (Various compressor available)

Connecting various compressor is available by using 65 air-passage.



Position controllable pilot driver cab

For driver's convenience and expanded view, transports are inatlated at the front and the rear. Operation is well-performed conveniently in the driver cab, even at any position.



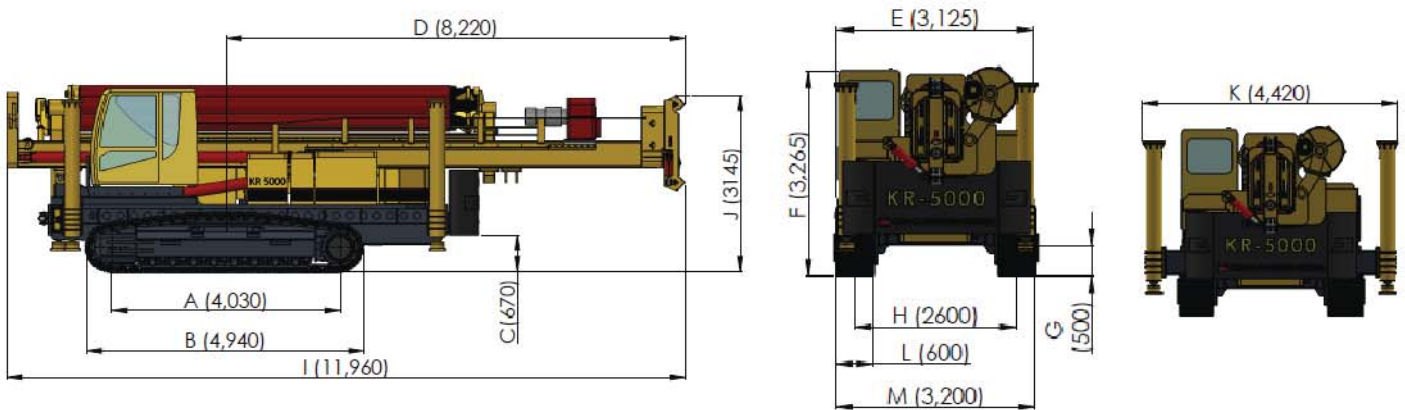


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CS KR5000

DIMENSIONS & WORKING RANGE

KR5000 Appearance chart

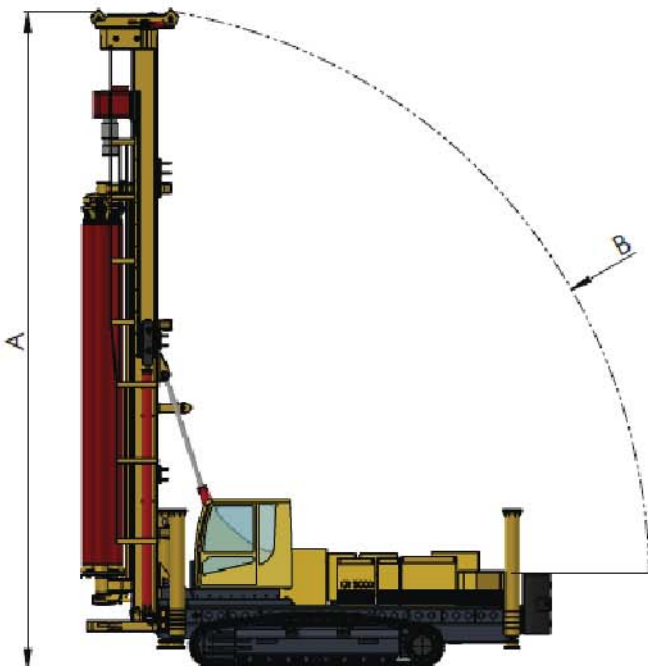


Item	Unit	Specifications	
Weight (Including rod)	Kg	48,500	
Engine	Brand/Model	Cummins Engine QSB 6.7	
	Fuel type/Cylinder	Diesel/Six-cylinder	
	Rated power	ps/rpm	252.8/2000
	Maximum torque	kgf·m/rpm	98.9/1500
	Fuel tank capacity	ℓ	500
Hydraulic	Working pressure	bar	350(Max)
	Pump model	cc	Main : 140x2/secondary : 26.4, 46
	Flow rate	ℓ	190, 320
Crawler base & Feed system	Traveling speed	Km/hr	Max 3.3
	Climbing capacity	°	20
	Ground pressure	kg/cm ²	0.93
	Winch capacity	ton	3
	Pull-back speed	m/min	34.28 @ 1500rpm
	Pull-back capacity	ton	24.5 @ 200bar
	Pull-down speed	m/min	20.88 @ 1500rpm
	Pull-down capacity	ton	40.2 @ 200bar
Power head torque	kg·m / rpm	4,200 @ 200bar (1st, 2nd shift)	

KR5000

	Item	Unit	Specifications
Dimension	A Tumbler distance(center)	mm	4,030
	B Track length	mm	4,940
	C Counterweight Height	mm	670
	D Backend length	mm	8,220
	E Upper Width	mm	3,125
	F Cabin height	mm	3,265
	G Minimum ground clearance	mm	500
	H Track width(center)	mm	2,600
	I Whole length	mm	11,960
	J Whole height	mm	3,145
	K Outrigger extended	mm	4,420

Traveling machine	L Shoe width	mm	600
	M Overall width	mm	3,200
	Roller quantity(Up/Down)	ea	2/9



KR5000 Work Range

	Item	Unit	Data
Dimension	A Maximum mast length	mm	12,680
	B Maximum mast angle	°	90
Drilling capacity	Standard drilling depth (Based on standard rod)	m	42

*It will be changeable up to rock formation & working condition.

*Standard Rod : 303x7,135



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