

HCR 900ESII

FRD
FURUKAWA



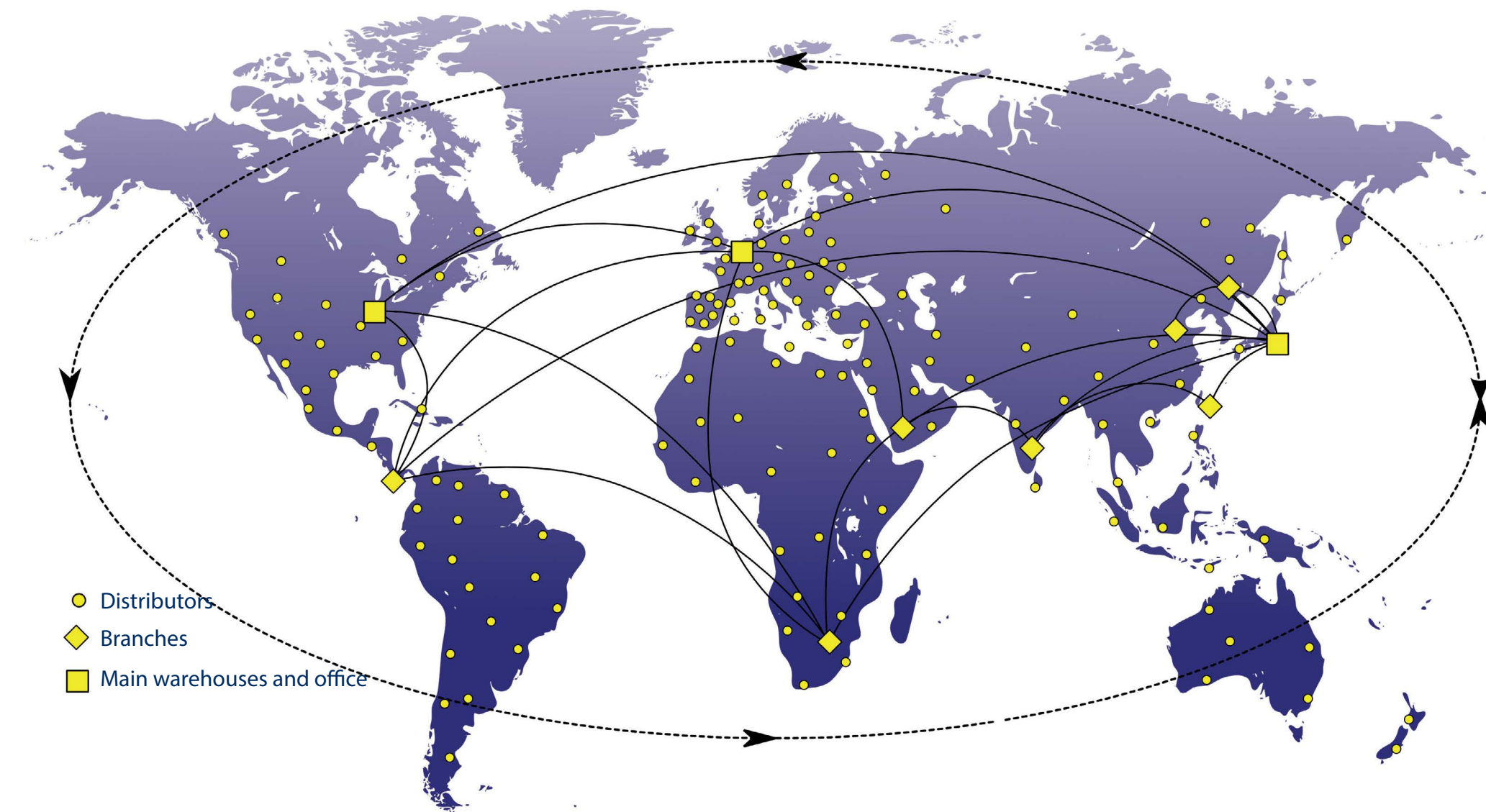
INSIDE FURUKAWA

Japan, a country of old traditions, has proven its highly technical performances in many different ways. Already, many years ago, Japanese electronic equipment contributed greatly to the possibility to reach the moon and other planets. In almost every computer, telephone or any other kind of electronic equipment we can find some Japanese components. In the car industry Japanese engineers have achieved high performances in order to produce more efficient and economical cars. Car tests in different countries have often concluded that Japanese cars are the most reliable and with a minimum of maintenance costs. Also Furukawa is one of those traditional concerns, which could show continuous growth through their ongoing product improvement and development.

Everything started in 1875, when Furukawa opened the Kusakura Copper Mine. The mining of the ore always required new and specific solutions to improve ore production. For this reason Furukawa started in 1900 to produce their own mining equipment, which led to higher production levels of the mine. With this step Furukawa unintentionally created the base for a new, high technology concern. The better results with their custom made machinery soon created a demand for similar machines in other mines. To be able to fulfill these requirements, Furukawa started to separate their activities in different divisions.

In 1918 Furukawa Mining Co. Ltd was founded and, in 1920, Furukawa Electric Co. Ltd. Later in 1961 the start of Furukawa Rock Drill Co. Ltd was an answer to the demand to be able to sell worldwide, the machines that initially were meant only for their own use. In 1971 Furukawa established a new factory in Yoshii for the production of crawler drills and demolition equipment. The demand for those products was so large, that in 1976 a second production unit was established in Takasaki. Since then, far more than 35.000 crawler- and Jumbo drills, numerous hydraulic breakers, demolition grabs, concrete- and steel crushers, have been produced and delivered all over the world. In the meantime Furukawa Rock Drill division has built an international sales and service network, which secures an optimum after sales service for all equipment. Our slogan " FRD – WHERE EXPERIENCE COUNTS" we take as seriously as other Japanese traditions and we hope you will approach us with your specific demands. We and our dealer network are ready to help you.





GLOBAL DISTRIBUTOR NETWORK

LOCAL SERVICE AND SUPPORT

FRD seeks firstly to supply a product of undoubted integrity. Then back this up with a support network of dedicated Distributors to ensure whatever support, wherever and whenever needed. The FRD-Distributor combination has been made unbeatable.

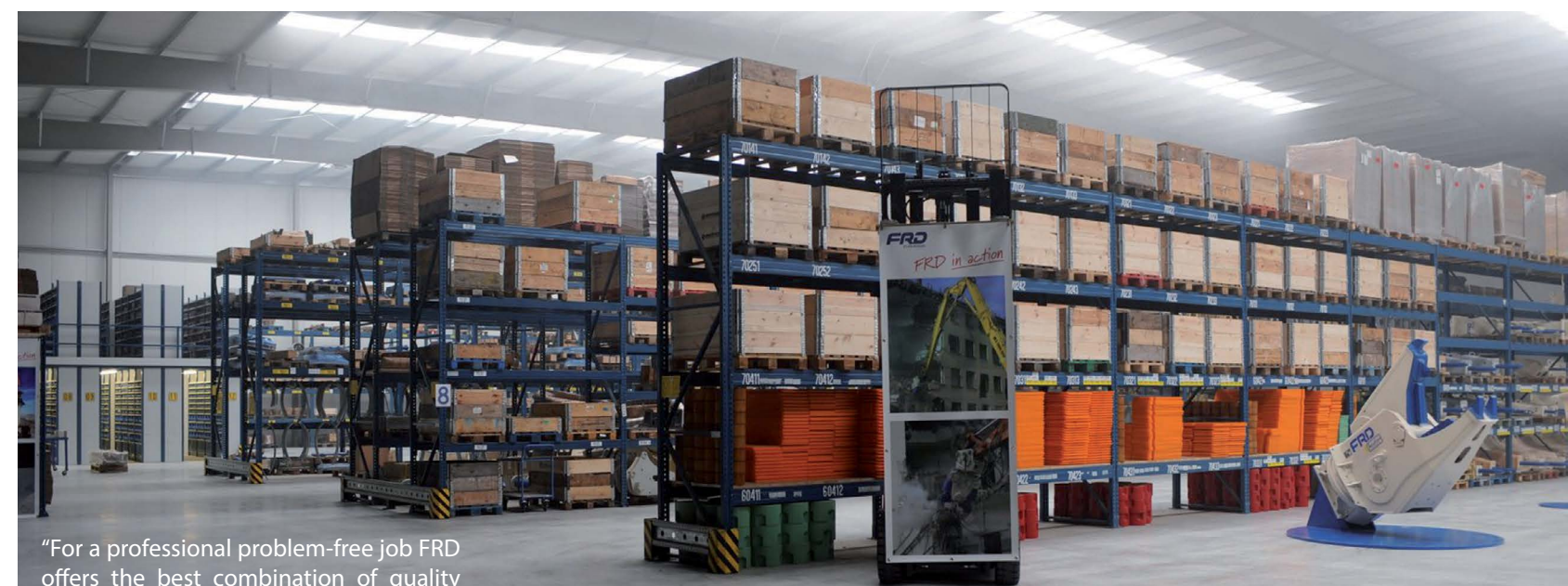
FRD Distributors have been selected for their professional competence, their market coverage, their dedication to quality and their willingness to work. They receive intense training on all machines and systems and every support that a committed manufacturer can give them. They actively exchange experience between each other to ensure their clients get the latest lessons from the market. They are a skilled and fast team of professionals.



VALUE FOR MONEY

Buying FRD products is a smart investment. A reasonable price for top quality, long life-time, low maintenance and low breakdown time products in the long term makes financially good sense.

Next steps? FRD Europe and its Distributors have a vast resource of information beyond what can be mentioned here. Do not hesitate to get in touch for more detail and an unbeatable quote.



"For a professional problem-free job FRD offers the best combination of quality equipment and instant service and support. The Distributor network is outstanding."

ECO-friendly, Energy-saving, & High-productivity

Combining performance and economy

The HCR900 is ideal for demanding site preparation applications. Simple, durable and efficient, the HCR900-ES and the HCR900-ES20 incorporate a self-adjusting drillsystem designed to maximize drilling efficiency through to the bottom of the hole. By automatically controlling the impact force, feed force, rotation force and dual dampener pressure, the HCR900-ES continuously adapts to the changing rock conditions. As a result, drilling performance and the life of the drill tools are increased, while lowering fuel consumption.

Extension boom

Extension boom increases drilling pattern flexibility.

Advanced hydraulic & pneumatic systems

Thanks to advanced hydraulic and pneumatic technology, output energy can be transferred to each component with minimum power loss. These systems support high productivity.

Power-saving selector

By using the power-saving selector, fuel consumption is reduced during light working conditions.

Standard: 2.500 min-1

Power-saving: 2.200 min-1

Low-emission engine

The powerful CAT engine is fully compliant with Tier 3/ Euro stage-3 emission control regulations.

HCR900ESII

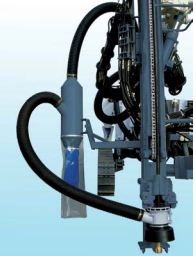


Maximize operator performance with the ultimate in drilling technology

Ergonomically designed to minimize operator fatigue the engine, compressor and hydraulic oil temperature gauges are highly visible, allowing the operator to monitor machine functions while remaining focused on the drilling.

High output compressor & dust collector

High output compressor increases flushing air, provides faster drilling and decreases bit wear. The upgraded dust collector has a suction capacity higher than previous models. The dust collector includes an effective precleaner to reduce the escape of drilling dust. An optional dust suppression system is available for difficult drilling conditions.



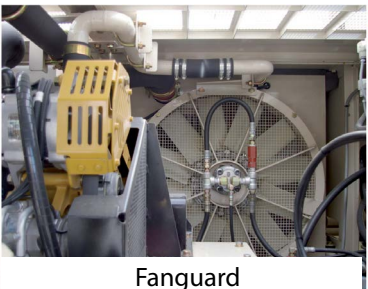
Acces to the right side cover



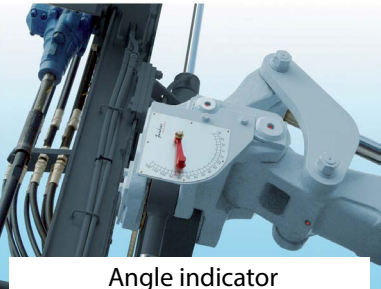
Acces to the left side cover



Acces to the rear cover



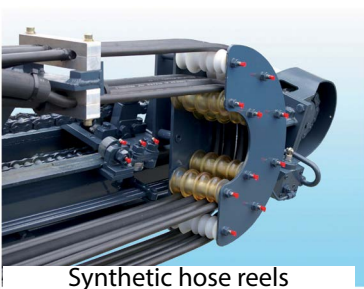
Fanguard



Angle indicator



Tramming lever



Synthetic hose reels

Maintenance & Safety

Walk-around, ground-level maintenance provide fast, easy up keep or repair. Hinged service doors provide easy acces to required areas

Accesibility for maintenance

Fully opened acces over make acces tot he radiator, the greascan and the drilling-controlvalve easier. Service for the engine, the electric control palen can be made from the left side acces cover. Filters are within the reach.

Model		HCR900-ES II / HCR900-ES II (20)	HCR910-DS	HCR1000-EDS II	HCR1200-DS III	HCR1200-ED II	HCR1500-ED II
Weight & dimensions							
Operating weight with ROPS/FOPS cab	kg	10270 / 10930	10450	12000	11940	14000	17820
A Overall length	mm	9750 / 10150	8635	9215	9210	9755	10010
B Ground contact length	mm	2425	2425	2425	2395	2780	2780
C Overall width with pre-cleaner	mm	3220	2865	2400	3355	3125	3720
D Width over tracks	mm	2570	2400	2390	2400	2400	2400
E Width of shoe	mm	300		300	330	330	330
F Overall height (traveling)	mm	2730	2830	2950	2860	3605 (2975)	3325
Drifter							
Model		HD709	HD709	HD709	HD712	HD712	HD715 II
Weight	kg	185	185	185	220	220	302 (with RP)
Impact rate	min ⁻¹	2250 - 2500	2250 - 2500	2250 - 2500	2300	2300	2150
Number of rotations	min ⁻¹	0 - 250	0 - 250	0 - 250	0 - 190	0 - 190	0 - 150
Undercarriage							
Ground clearance	mm	550	550	550	585	460	515
Oscillating angle	deg	±10°	±10°	±10°	±7.5°	±7.5°	±7.5°
Travel speed	km/h	0 - 3.5	0 - 3.8	0 - 3.8	0 - 3.2	0 - 3.1	0 - 4.2
Grade ability	%	57.7 (30°)	57.7 (30°)	57.7 (30°)	57.7 (30°)	57.7 (30°)	57.7 (30°)
Engine							
Make/model		CATERPILLAR / C7	CATERPILLAR / C7	CATERPILLAR / C7	CATERPILLAR / C7	CUMMINS / QSB 6.7	CATERPILLAR / C9
Type		Turbocharged and air to air after cooled diesel, direct fuel injection, electronic governor	Turbocharged and air to air after cooled diesel, direct fuel injection, electronic governor	Turbocharged and air to air after cooled diesel, direct fuel injection, electronic governor	Turbocharged and air to air after cooled diesel, direct fuel injection, electronic governor	Turbocharged and air to air after cooled diesel, direct fuel injection, electronic governor	Turbocharged and air to air after cooled diesel, direct fuel injection, electronic governor
Output/speed (gross)	kW/ min-1	168 / 2200	168 / 2200	168 / 2200	168 / 2200	179 / 2500	261 / 2200
		Meets Tier 3 and EU stage-3	Meets Tier 3 and EU stage-3	Net usable output available at flywheel of the installed engine with all the standard accessories. SAEJ1349, SAEJ1995 conditions.	Net usable output available at flywheel of the installed engine with all the standard accessories. SAEJ1349, SAEJ1995 conditions.	Net usable output available at flywheel of the installed engine with all the standard accessories. SAEJ1349, SAEJ1995 conditions.	Net usable output available at flywheel of the installed engine with all the standard accessories. SAEJ1349, SAEJ1995 conditions.
Piston displacement	Liter	7.2	7.2	7.2	7.2	6.7	8.8
Fuel tank capacity	Liter	330	320	320	330	420	660
Hydraulic pump							
Type		2-variable displacement piston pumps supply pressure oil for both travel and drilling. 3-gear pumps for cooling, boom and dust collector.	2-variable displacement piston pumps supply pressure oil for both travel and drilling. 3-gear pumps for cooling, boom and dust collector.	2-variable displacement piston pumps supply pressure oil for both travel and drilling. 3-gear pumps for cooling, boom and dust collector.	2-variable displacement piston pumps supply pressure oil for both travel and drilling. 3-gear pumps for cooling, boom and dust collector.	2-variable displacement piston pumps supply pressure oil for both travel and drilling. 3-gear pumps for cooling, boom and dust collector.	2-variable displacement piston pumps supply pressure oil for both travel and drilling. 3-gear pumps for cooling, boom and dust collector.
Hydraulic oil tank capacity	Liter	170	170	170	170	215	240

Model		HCR900-EDS II / HCR900-ES II (20)	HCR910-DS	HCR1000-EDS II	HCR1200-DS III	HCR1200-ED II	HCR1500-ED II
Compressor		AIRMAN	AIRMAN	AIRMAN	AIRMAN	AIRMAN	AIRMAN
Model		PDS265-S35B	PDS265-S35B	PDS265-S35B	PDS265-S35C	PDS265-S32A	PDS290-S15B
Free air delivery	m³/ min	6.1	5,4	6.1	7.1	7.8	13.5
Working air pressure	MPa	1.03	1.03	1.03	1.03	1.03	1.03
Boom							
Model		JE326	JF200	JE326	JF325	JE326-132	JE326-241
Lift angle (up-down)	deg	45° - 15°	43° - 30°	45° - 15°	54° - 20°	45° - 20°	45° - 20°
Swing angle (right-left)	deg	37° - 43°	45° - 10°	30° - 10°	45° - 10°	35° - 5°	38° - 7°
Extension length	mm	1500	Fixed boom	1200	Fixed boom	1200	900
Guide shell							
Model		GH831	GH831	GH831	GH831	GH832-30	GH885-41
Length	mm	7534 / 8944	7015	7675	7825	7800	8000
Feed length / with reverse percussion	mm	4480 / 4305 / (5786 / 5611)	4089 / 3904	4704 / 4529	4736 / 4561	4620 / 4440	4700 / 4520
Guide slide length	mm	1200	1200	1500	1500	1200	1500
Swing angle (right-left)	deg	40° - 40°	50° - 50°	30° - 90°	30° - 90°	30° - 90°	38° - 90°
Tilt angle	deg	180°	180°	180°	180°	170°	170°
Rod pull	kN	28.5	24.5	24.5	31.4	29.5	31
Dust collector							
Suction capacity	m³/ min	20	20	20	26	30	40
Number of filter	pcs	4	4	5	5	5	6
Rod arrangement							
Type		Rack	Rod changer	Rod changer	Rod changer	Rod changer	Rod changer
Number of rods	pcs	4	4 + 1 (starter rod)	5 + 1 (starter rod)	4 + 1 (starter rod)	6 + 1 (starter rod)	6 + 1 / 8 + 1 (starter rod)
Bit and rod							
Bit diameter	mm	65 - 89	65 - 89	65 - 89	76 - 102	76 - 102	89 - 127
Type of bit		Cross, Button, Ballistic, Conical	Cross, Button, Ballistic, Conical	Cross, Button, Ballistic, Conical	Cross, Button, Ballistic, Conical	Cross, Button, Ballistic, Conical	Cross, Button, Ballistic, Conical
Rod size		R32, R38, T38, T45	R32, R38, T38, T45	R32, R38, T38, T45	R32, R38, T38, T45	R38, T38, T45, T51	T51
Rod length	mm	3050 / 3660 / 6100	3050	3050 / 3660	3660	3660	3660
Starter rod length	mm	4270 / 6100	3660 / 4270	3660 / 4270	3660 / 4000	3660 / 4270	4270 / 5000
The contents of these specifications are subject to change without notice.							

SPECIFICATIONS

OPTIONS

Option	HCR900-ES II	HCR910-DS	HCR1000-EDS II	HCR1200-DS III	HCR1200-ED II	HCR1500-ED II	DCR20	PCR200	PCR DTH
Central lubrication	O	O	O	O	O	O	O	O	O
Detergent system	O	O	O	O	O	O	O	O	O
Fuel pump	O	O	O	O	O	O	O	-	-
Fire prevention system	O	O	O	O	O	O	O	-	-
Rear jack	-	-	-	-	-	-	O	-	-
Low horizontal option	-	-	-	-	O	O	-	-	-
Rod magazin 8+1	-	-	-	-	O	O	-	-	-
Working lights 2 x 70W	O	O	O	O	O	O	O	-	-
Winter package	O	O	O	O	O	O	O	-	-
Rear camera	-	O	O	O	O	O	O	-	-
2D angle indicator	O	O	O	O	O	O	O	-	-
3D angle indicator	O	O	O	O	O	O	O	-	-
Engine and drill data transfer (Flash stick)	O	O	O	O	O	O	O	-	-
Engine and drill data transfer (GMS)	O	O	O	O	O	O	O	-	-
Global position tracking (GPS)	O	O	O	O	O	O	O	-	-
Engine remote shut down (GMS)	O	O	O	O	O	O	O	-	-

O = option, - = not available





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