

Furukawa
ROCK DRILL

HCR1200 HCR1500



FURUKAWA

ALL NEW, HIGH-PERFORMANCE DRIFTER HD700 series

FURUKAWA HD700 series: All-new drifter delivers superior performance.

With the new HD700 series, it's easier than ever before to drill faster and straighter.

Industry-leading features of FURUKAWA HD700 series includes:

- Dual Damper System automatically turns the drifter for maximum performance regardless of the rock condition.
- New piston design, engineered to maximize energy transmission and to drill effectively in a variety of rock type.
- Automatic control of the drifter impact pressure on the HCR1500 and HCR1200 models enhances drill performance.
- New drifter design minimizes drill noise and vibration.
- Simplified operation allows even inexperienced operators to perform well.
- The HD700 series-the key to high-performance drilling.



■ DUAL DAMPER SYSTEM

For maximum energy transfer, system minimizes return of shock waves by keeping the bit firmly against the rock at all times during drilling.

This system limits energy loss and, by reducing the overall feed force required, produces straighter holes. An additional benefit is greatly improved shank and rod life.

■ COMPACT VALVE DESIGN

Takes a new approach to opening efficiency. A compact valve built in the HD700 cylinder, positioned closer possible to the piston, which provides rapid valve and piston response-both leading to outstanding drifter performance.

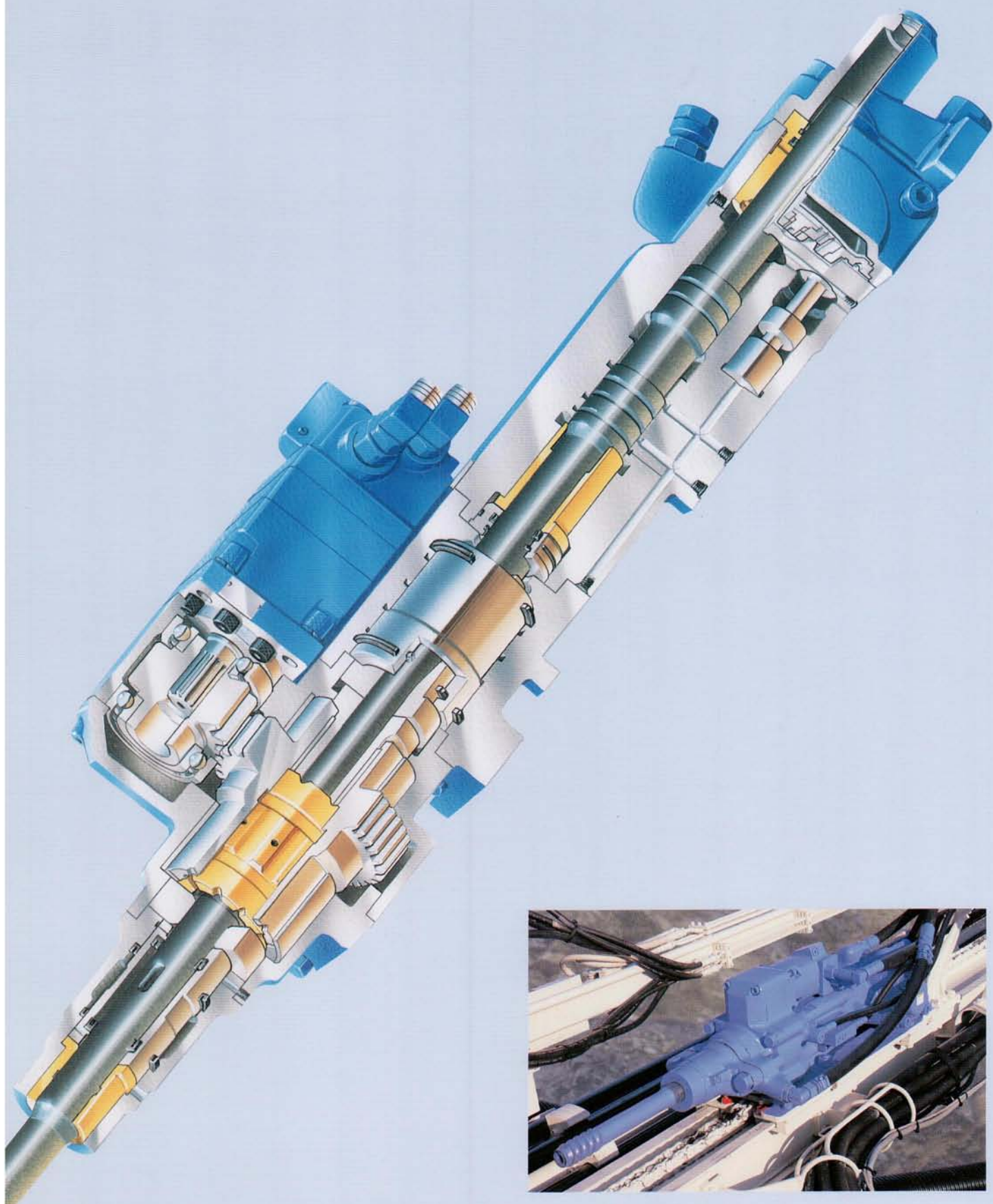
■ QUICK EXTRACTION DEVICE (Q.E.D.)

Makes it easier to free a stuck rod. A substantial increase in extraction force allows field proven Quick E.D. to remove stuck rod quickly.

■ INTEGRATED DRILLING SYSTEM

All-hydraulic drilling controls allow for automatic adjustment of impact force and feed force to match changing rock conditions. The Reactive Damper Control system reduces damper pressure in soft rock and increases it in hard rock. Working together, these integrated systems are the key to outstanding drilling performance.





Drifter
HD 712/HD 715

THE ULTIMATE COMBINATION OF PERFORMANCE AND ECONOMY

New drifter design with automatic drilling system delivers the highest-possible drilling performance at low running cost.



■ SELF-ADJUSTING DRILL SYSTEM

Because drilling conditions vary throughout a drilling depth and location, the systems on the HCR1200 and HCR1500 have been designed to maximize drilling efficiency through to the bottom of the hole. By automatically controlling the impact force, feed force and rotation force, and dual damper pressure, the systems on these drill rigs continuously adapt to the changing rock conditions, increasing drilling performance and drill tools life while decreasing fuel consumption.

■ AUTOMATIC FEED AND ROTATION FORCE ADJUSTMENT

For efficiency and economy, the HCR1500 and HCR1200 automatically adjust the feed and rotation forces in relative to each other.

■ HIGH-OUTPUT COMPRESSOR

High-output compressor increases flushing air, provides faster drilling and decreases bit wear. It also prevents redrilling of cuttings, and improves drilling speed.

■ IMPROVED DUST COLLECTOR PERFORMANCE

Is also more effective because of the increase in suction capacity. Highly effective precleaner reduces outlet of drilling dust.

■ PERMUTATION ROTARY ROD CHANGER

Permits the operator to add and withdraw rods using a single lever, and to select which rods in the rack to use, thereby spreading the wear evenly among all the rods in the rack and helping to reduce costs.

■ LOW-EMISSION ENGINES

Quiet, powerful engine meets major exhaust-emissions regulations, European Union, the United States, and Japan. In addition to being clean, it is also economical, offering low fuel consumption.

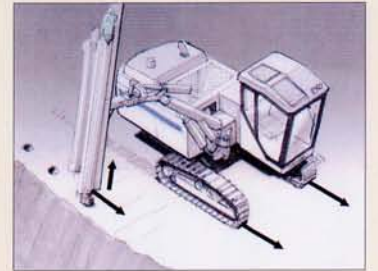
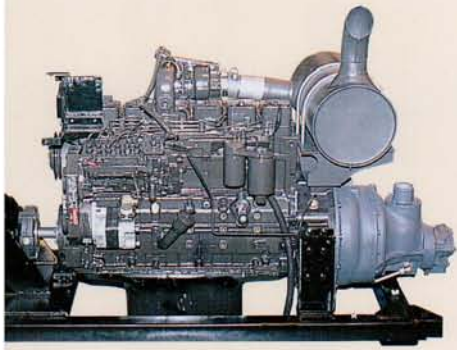
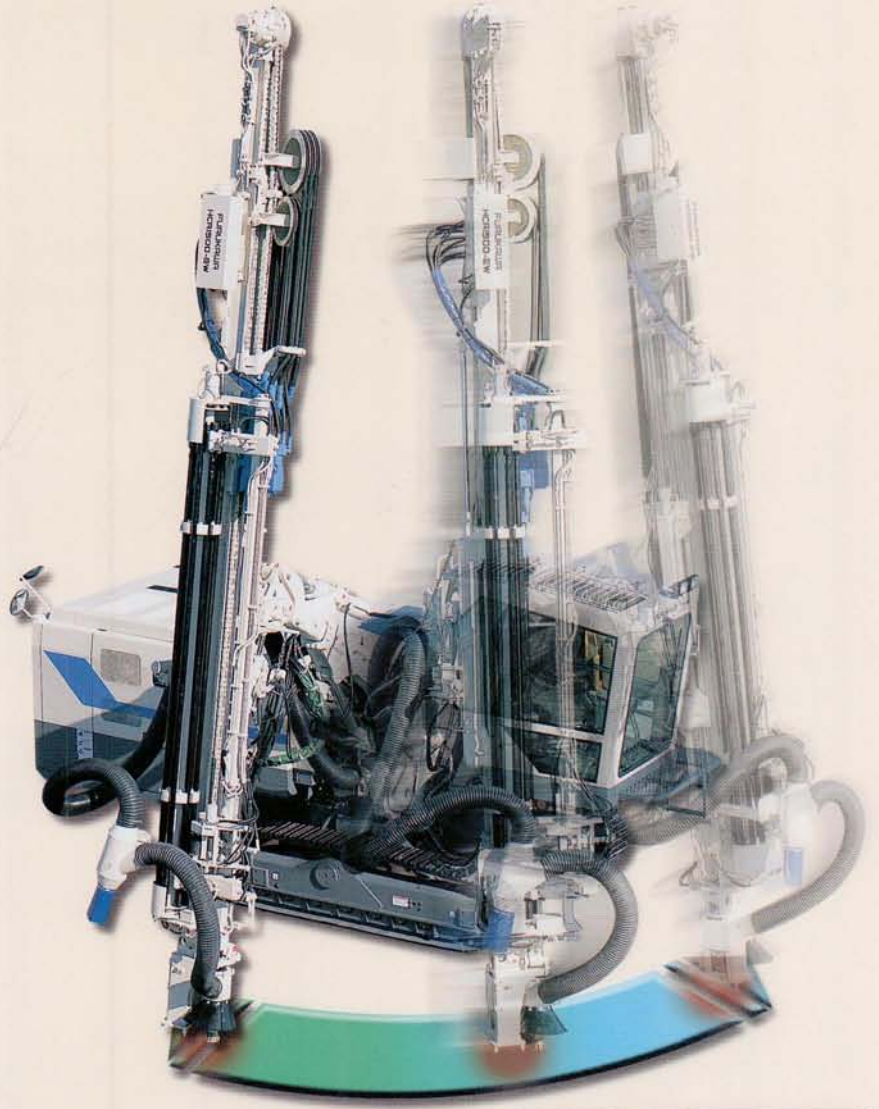
	HCR1200	HCR1500
Make	Cummins	Cummins
Model	6BTA5.9-C	6CTAA8.3-C
Output/speed	149kW/2500min ⁻¹	224kW/2200min ⁻¹
Displacement	5.9 liters	8.3 liters

And, thanks to an engine frame that sits on rubber mounts, the operator's cab is isolated from engine vibrations. In cold weather, an intake air heater ensures quick starting.

■ LINE DRILLING

EW models come standard with a boom that can swing a full 90 degrees from the line of travel. The operator's spring suspension seat can likewise be swiveled 90 degrees so that the drifter is always in full view. Drilling holes parallel to the machine while tramping forward reduces maneuvering time and wear and tear on the undercarriage.





ALL NEW CAB WITH ERGONOMIC FEATURES

In addition to industry-leading advances in machine design, FURUKAWA has created an all-new high-tech cab that minimizes operator fatigue.



■ NEW HIGH-TECH CAB

FURUKAWA offers 1100mm and 1300mm wide cabs, ROPS/FOPS and non-ROPS/FOPS cab options. Large windows at the front and on the right side maximize operator visibility. All cabs are air-conditioned and pressurized with filtered air to keep out dust. And, to further reduce operator fatigue, each cab is equipped with a comfortable, ergonomically designed seat. EW version features 1300mm wide ROPS/FOPS cab with plenty of room for the operator to move around comfortably.

■ 120 DEGREE SWIVELING SEAT

Seats on EW models feature spring suspension and are mounted on a turntable that allows the seat and the operator's console to rotate together, providing maximum visibility for safe, high-production drilling. They are adjustable for legroom, back angle, height, and operator weight.

■ SINGLE-LEVER DRILLING CONTROL

A single multi-function lever controls drifter. One each finger operated joystick controls air and rod changer.

■ HIGH VISIBILITY GAUGES

Hydraulic and air pressure gauges are mounted on the front right post, allowing the operator to

check them simply by glancing. This common-sense positioning lets the operator monitor machine functions while continuing to focus attention on the drilling.

■ WALK-AROUND GROUND-LEVEL MAINTENANCE

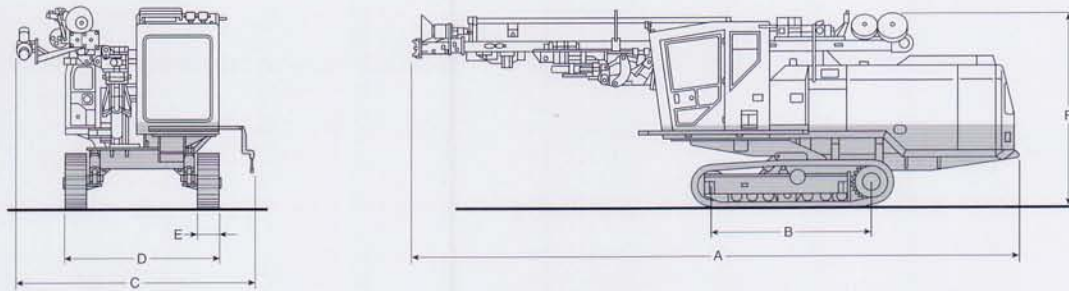
All daily maintenance can be performed at ground level. Gas-assisted dampers allow the hinged service doors to be opened easily for access to all required maintenance requirements.

■ HEAVY-DUTY UNDERCARRIAGE

Heavy-duty track frames provide strength and durability. They feature a pentagonal section design to reduce dirt build up and track wear. One-piece drive sprockets are manufactured with hardened wear surfaces for longer life. Track rollers and carrier rollers are forged and hardened for durability, and lifetime-lubricated to reduce maintenance requirements. Heavy-duty track links are forged from high-manganese alloy steel, and pins and bushings are induction-hardened. Alloy steel front idlers are hardened, and lifetime-lubricated. Standard full track guards protect under carriage. Track tension can be adjusted easily with a grease gun.



■ DIMENSIONS



■ SPECIFICATIONS

Model	HCR1200				HCR1500		
	D	ED	EW	E	D20	ED	EW
Weight & dimensions							
Operating weight	11900kg	12800kg	12900kg	11300kg	14550kg	15550kg	15850kg
A Overall length	9000mm	9630mm	9410mm	9340mm	10200mm	10050mm	9700mm
B Ground contact length		2510mm				2560mm	
C Overall width	3490mm	2960mm	3490mm	3280mm		3725mm	
D Width over tracks		2400mm				2400mm	
E Width of shoe		330mm				330mm	
F Overall height (traveling)	3120mm	3400mm	3230mm	3030mm	3300mm		3185mm
Drifter							
Model		HD712				HD715	
Weight		220kg				250kg	
Impact rate		2300min ⁻¹				2150min ⁻¹	
Number of rotations		0-190min ⁻¹				0-150min ⁻¹	
Undercarriage							
Ground clearance		550mm				565mm	
Oscillating angle		±10deg				±10deg	
Travel speed		0-3.1km/h				0-3.8km/h	
Gradability		58% 30deg				58% 30deg	
Engine							
Make/Model		Cummins / 6BATA5.9-C				Cummins / 6CTAA8.3-C	
Type		Turbocharged and jacket water after cooled diesel, direct fuel injection.				Turbocharged and air to air after cooled diesel, direct fuel injection.	
Output/speed		149kW/2500min ⁻¹				224kW/2200min ⁻¹	
		Net available power at flywheel of the installed engine with all the standard accessories. SAE J1349, SAE J1995 conditions.					
No. of cylinders-bore / stroke		6-102 / 120mm				6-114 / 135mm	
Piston displacement		5.9liters				8.3liters	
Hydraulic pump							
Type		2-variable displacement piston pumps supply pressure oil for both travel and drilling. 1-gear pump for cooling and dust collector.					
Compressor							
Model		PDS265-S32A				PDSF290-S14A	
Free air delivery		7.8m ³ /min				12.3m ³ /min	
Working air pressure		1.03MPa				1.03Mpa	
Boom							
Model	JF325-131	JF326-132	JF326-131	JF326-133	JF325-141	JF326-142	JF326-141
Lift angle up-down	40-40deg	45-20deg	45-25deg	45-20deg	40-25deg	45-20deg	45-25deg
Swing angle right-left	45-5deg	35-5deg	90-1deg	35-45deg	35-7deg		90-1deg
Extension length	-	1200mm	500mm	1200mm	-	900mm	500mm
Guide Shell							
Length		7800mm		7650mm	10200mm	8000mm	
Feed length /with Q.E.D.		4550/4380mm			6880/6700mm	4700/4520mm	
Slide length	1500mm	1200mm	1500mm	1200mm		1500mm	
Swing angle right-left	30-90deg		30-45deg	40-40deg	25-90deg	30-45deg	
Tilt angle		170deg				170deg	
Guide rotary angle	-	-	90deg	-		90deg	
Rod pull		29.5kN				31kN	
Dust collector							
Suction capacity		30m ³ /min				40m ³ /min	
Cab							
Type		Air-conditioned and pressurized with intake air filter.					
Width		1100mm	1300mm	-	1100mm	1300mm	
Rod arrangement							
Type		Rod changer		Rack	Rod changer		
Numbers of rod		6+1(starter rod)		4+1(starter rod)	6+1(starter rod)		
Bit and rod							
Bit diameter		76-102mm				89-127mm	
Rod size		38H,38R,45R,51R				51R	
Rod length		3.05m, 3.66m			6.1m	3.66m	
Starter rod length		4.00m			6.5m	4.00m	

The contents of this specifications are subject to change without notice in the future.

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