FURUKAWA ROCK DRILL USA

Rock Drill Division

HCR1100-ED

HCR1100-ED Equipped with Cummins® Tier-IV EPA Compliant Engine.

Innovative Features For Higher Performance

HCR1100-ED

Cab designed for increased visibility.

Combining performance and economy.

Combining performance and economy, the HCR1100-ED is the perfect drill for quarries or construction sites. Simple, durable and efficient, the HCR1100-ED with extendable boom incorporates a self-adjusting drill system that ensures high productivity no matter what the drilling situation. By automatically controlling the impact force, feed force, rotation force and dual damper pressure, the HCR1100-ED continuously adapts to the changing rock conditions, increasing drilling performance and the life of drill tools while decreasing fuel consumption.

Drill straighter with the HD818 drifter.

The Furukawa HD818 drifter (patent applied for) is designed to minimize drill noise and vibration, while increasing percussion frequency by 24% versus the HD709 drifter, its predecessor.

Duel dampening system stabilizes the bit against the rock, ensuring efficient energy transfer and straighter holes. The system automatically adjusts the drifter for maximum performance regardless of the rock condition.

Maximize operator performance with the ultimate in ergonomic cab designs.

HCR1100-ED ROPS/FOPS cabs are ergonomically friendly with features that reduce operator fatigue. In addition, all cabs are air-conditioned and continuously pressurized with filtered air to maintain a comfortable operating environment.

Sliding suction cup minimizes dust for better visibility.

Manage fuel savings.

With FRD's TFSS (total fuel savings system), the operator selects the optimum engine speed for the application, allowing all fuel savings functions to be automatically managed during drilling operation.

The monitoring system incorporates gauges in the cabin, allowing the operator a quick visual of engine temperature, hydraulic oil temperature and fluid levels.

Added features bring versatility.

- Low emission, Tier-IV Cummins® engine meets strict North American exhaust emissions regulations.
- Rod changer with proven design allows for the install of five drill steels plus one 13' starter rod.
- Heavy-duty undercarriage – featuring a pentagonal section design to reduce dirt build-up and track wear – ensures strength and durability.
- High-output compressor provides faster drilling and decreases bit wear.
- Reliable dust control system provides effective pre-cleaner to reduce escape of drilling dust.
- Single-lever drilling control for easy operation.
- Walk-around ground level maintenance provides fast, easy upkeep or repair.
- Options available:
  - 2D/3D angle indicator.
  - Dust suppression.
  - Heavy-duty rear-mounted bumper.
  - Cold-start kit.
  - Rear camera.
  - Water.

Right access cover

- Easy access to filters and battery.

Left access cover

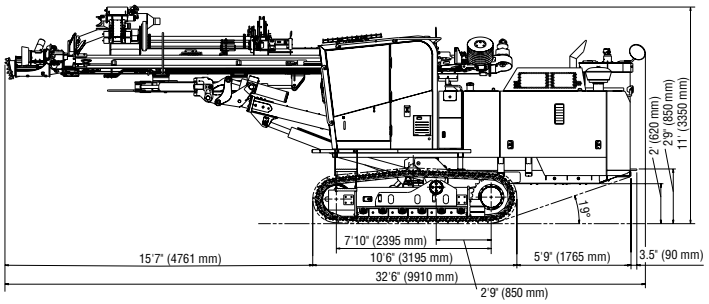
- Easy access to fluid level, gauges and engine maintenance points.

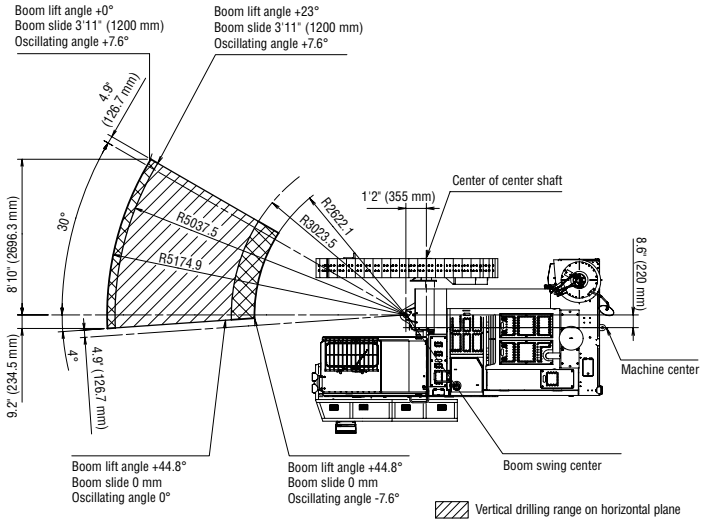
Rear panel

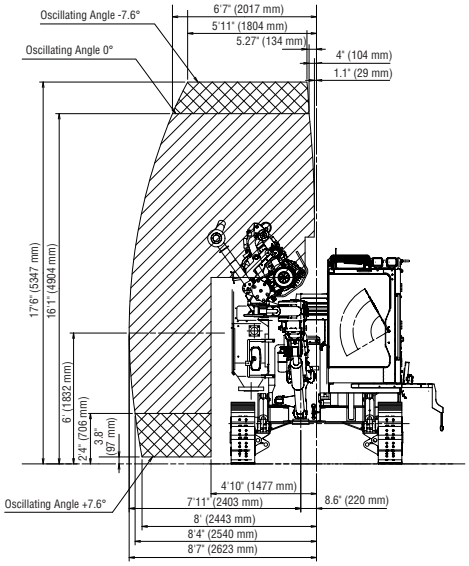
- Cooling systems located in the rear, providing quieter work environment for the operator.

Enhanced undercarriage design

- Increases traction up to 19,700 16-force.







HCR1100		ED	
		US Standard	Metric
Dimensions and Weight	Overall Weight (A) *1	28,991 lb	13,150 kg
	Overall Weight (B) *2	29,784 lb	13,510 kg
	Overall Length	32'6"	9,910 mm
	Shipping Length	31'4"	9,545 mm
	Overall Width	10'6"	3,200 mm
	Shipping Width	7'10"	2,400 mm
	Overall Height	10'12"	3,350 mm
	Shipping Height	10'2"	3,100 mm
Drifter	Model	HD818	
	Weight	445 lb	202 kg
	Length	3'7"	1,100 mm
	Width	1'2"	352 mm
	Height	0'11"	275 mm
	Number of Blows	2,800 ~ 3,400 bpm	
	Rotating Speed	0 - 200 rpm	0 - 200 min^{-1}
Undercarriage	Track Length	10'4"	3,159 mm
	Track Length on Ground	7'10"	2,395 mm
	Track Width	1'1"	330 mm
	Ground Contact Pressure *3	11.8 psi	81.6 kPa
	Ground Clearance	1'11"	585 mm
	Frame Oscillation Angle	±7.6°	
	Tramming Speed	0 - 2.2 mph	0 - 3.5 km/h
	Gradeability	57.7% (30°)	
	Maximum Traction Force	19,783 lb-force	88 kN
Engine	Make & Model	Cummins® QSB6.7 (Tier4 Final, Stage IV)	
	Type	Diesel, Water-Cooled, 6 Cylinders	
	Piston Displacement	408.9 cu in	6.7 L
	Power Output	225 hp / 2,200 rpm	168 kW / 2,200 min^{-1}
	Fuel Capacity	84 gal	320 L
	DEF Capacity	5.0 gal	19 L
Hydraulic Equipment	Variable Displacement Pump	PV Pump x2	
	Fixed Displacement Pump	Gear Pump x3	
	Drive Motor	Hydraulic Motor with Reduction Gear	
	Hydraulic Oil Reservoir Capacity	45 gal	170 L
Boom	Model	JF326	
	Type	Extension	
	Boom Lift Angle (Up / Down)	45° / 15°	
	Boom Swing Angle (Right / Left)	30° / 4°	
	Boom Slide Length	3'11"	1,200 mm
Guide Shell	Model	GH831	
	Overall Length	25'7"	7,845 mm
	Feed Length	15'5"	4,704 mm
	Feed Type	Hydraulic Motor Driven Chain	
	Guide Slide Length	3'11"	1,200 mm
	Guide Swing Angle (Right / Left)	30° / 90°	
	Guide Tilt Angle	180°	
	Maximum Pulling Force	5,508 lb-force	24.5 kN
Compressor	Make & Model	AIRMAN PDS265-S37B	
	Type	1-Stage Screw Compressor	
	Discharge Airflow	215 cfm	6.1 m^3/min
	Discharge Pressure	149 psi	1.03 MPa
Dust Collector	Model	A884-221	
	Suction Capacity	706 cfm	20 m^3/min
	Number of Filter Elements	4	
	Dust Removal System	Automatic Air Pulse Jet	
	Suction Cap	Slide Type	
Rod Changer	Model	GR801	
	Number of Rods	5	
	Rod Diameter	1.3", 1.5", 1.8"	32 mm, 38 mm, 45 mm
	Number of Control Levers	1	
Bit and Rod	Bit Range	2.5" - 3.5"	64 mm - 89 mm
	Rod Type	32H, 38R, 45R, (38H)	
	Rod Length	10' or 12'	3,050 mm or 3,660 mm
	Starter Rod Length	13'	4,000 mm
Electrics	Battery	12V; 108Ah/5hr	
	Light	24V; 70W x4	
	Voltage	DC 24V	
Operating Environment	Working Temperature	5° - 113° F	-15° - 45° C
	Maximum Altitude	9,842'	3,000 m

Note:
*1 "Overall Weight (A)" includes weights of fuel and oils (full).
*2 "Overall Weight (B)" includes weight of "Overall Weight (A)", operator, rod and bit.
*3 "Ground Contact Pressure" is calculated based on "Overall Weight (A)".

Furukawa's policy is one of continual improvement. Specifications may change between printing.

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