



FURUKAWA ROCK DRILL USA
Rock Drill Division

HCR1100-ER



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

Better penetration with i

The HCR1100-ER drill incorporates innovative features for higher output, capable of drilling at larger diameters. Utilizing a Cummins® Tier-IV EPA compliant engine, the HCR1100-ER combines higher performance with fuel efficiency.

Higher output with the HD822 drifter.

The Furukawa HD822 drifter (patent applied for) is designed to minimize drill noise and vibration, while increasing performance. With 55% more impact and 28% more air flow than its predecessor, this drill has the ability to perform in harder rock at a larger diameter.

- New design increases percussion frequency by 20% versus the HD709 drifter.
- Dual 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.



Improved operator control station complies with industry regulations.

The relocated control station keeps the operator away from drill rotation and dust from drilling.

- The improved electro-hydraulics allows easier operation.
- 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 next to the drilling station, allowing the operator a quick visual of engine temperature, hydraulic oil temperature and fluid levels.



Automatic Rod Changer.

Incorporates an automatic rod changer to eliminate the need for operators to manually install drill steel, resulting in increased production and enhanced operator safety.



Upgraded Compressor.

- 275 cfm increases free air delivery by nearly 28% to accommodate larger diameter drilling.

Increased impact

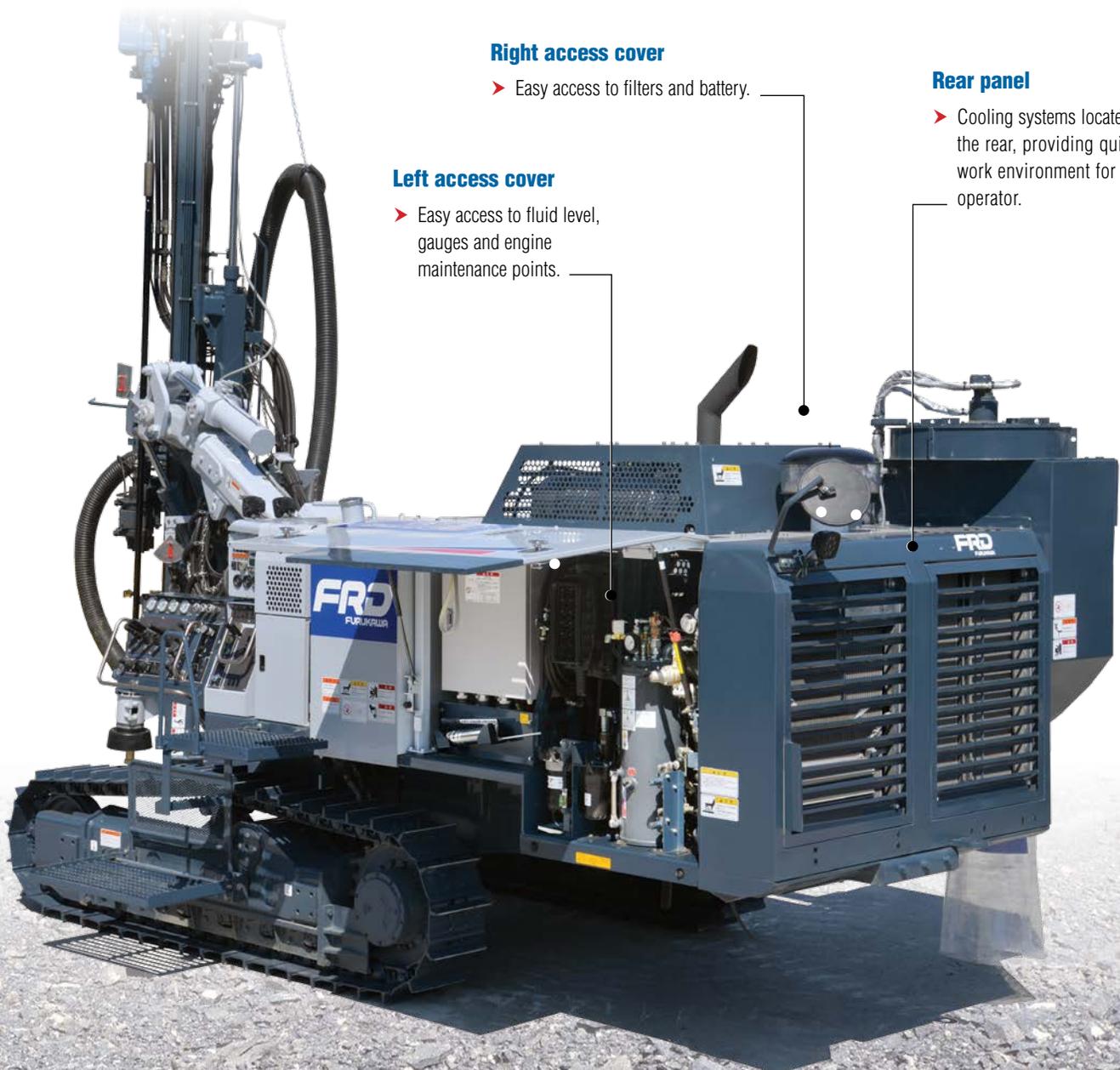
HCR 1100-ER



Winch-ready frame.

Innovative features for higher performance.

- 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 starter rod.
 - Winch-ready frame adds application versatility.
 - Optional wireless remote allows tramming and drilling from a secondary location.
- Also increases:
 - Impact rates up to 3,300 blows per minute.
 - Drifter power up to 29.5 HP.
 - Free air delivery up to 275 cfm.
 - Traction up to 19,700 lb-force.
 - Shoe width up to 13" (330 mm).
 - Dust collector capacity up to 918 cfm (26m³/min.).
 - Suction hose size up to 5" (125 mm).



Right access cover

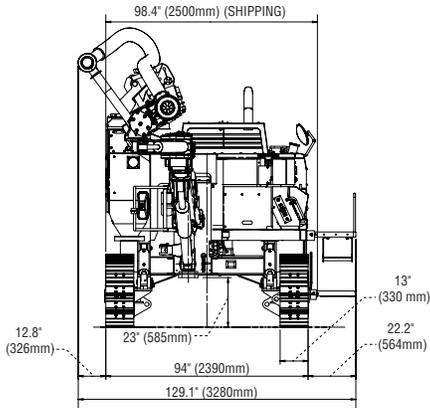
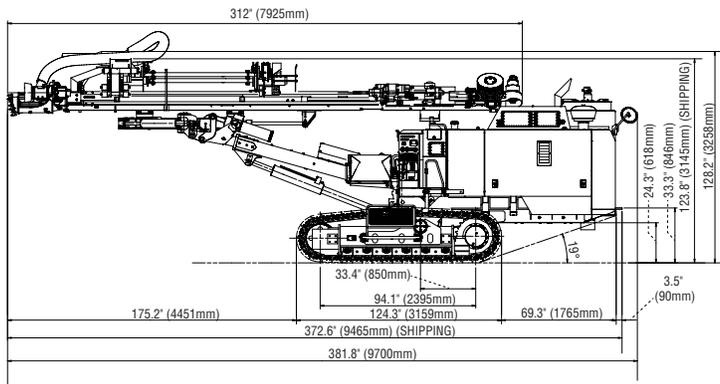
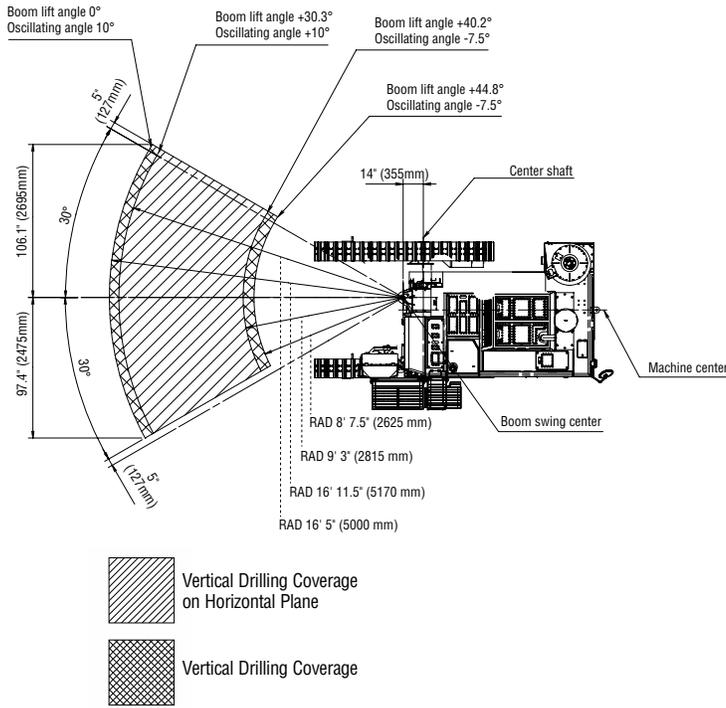
- Easy access to filters and battery.

Rear panel

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

Left access cover

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



FURUKAWA ROCK DRILL USA

Rock Drill Division

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| HCR1100 | | ER | |
|----------------------|-------------------------------|--|-------------------------------|
| | | US Standard | Metric |
| General | Overall Weight (A) *1 | 27,500 lbs. | 12,460 kg. |
| | Overall Weight (B) *2 | 28,000 lbs. | 12,690 kg. |
| | Travel Speed | 0 to 2 mph | 0 to 3.2 km/h |
| | Maximum Traction Force | 19,700 lb-force | 88 kN |
| | Maximum Grade of Hill Climb | 57.7% (30°) | |
| | Oscillating Angle | ±7.6° | |
| Drifter | Ground Clearance | 23" | 585 mm |
| | Ground Contact Pressure *3 | 11.2 psi | 77.3 kPa |
| | Model | HD 822 | |
| | Operating Weight | 533 lbs. | 242 kg. |
| | Power | 29.5 HP | 22 kw |
| | Overall Length | 44.5' | 1,130 mm |
| | Overall Width | 14.7' | 373 mm |
| Engine | Overall Depth | 12.9' | 328 mm |
| | Number of Blows | 2,700 to 3,300 bpm | |
| | Number of Revolutions | 190 rpm | 190 min ⁻¹ |
| Hydraulic Equipment | Make & Model | Cummins® QSB6.7 | |
| | Type | Water Cooled, 6-Cylinder Diesel Engine | |
| | Rated Output | 226 HP/2200 rpm | 168 Kw/2200 min ⁻¹ |
| Boom | Emission Control | Tier-IV Final | |
| | Variable Displacement Pump | Axial Piston Pump X2 | |
| | Fixed Displacement Pump | Gear Pump X3 | |
| | Drive Motor | Hydraulic Motor with Reduction Gear | |
| Guide Shell | Model | JE326 | |
| | Type | Extension Boom | |
| | Boom Lifting Angle: Up/Down | 45°/15° | |
| | Boom Swing Angle: Right/Left | 30°/30° | |
| Compressor | Boom Slide Length | 3' 11" | 1,200 mm |
| | Model | GH831 | |
| | Overall Length | 26' 0" | 7,925 mm |
| | Feed Length | 15' 8" | 4,781 mm |
| | Guide Slide Length | 3' 11" | 1,200 mm |
| | Guide Swing Angle: Right/Left | 30°/90° | |
| Dust Collector | Guide Tilt Angle | 180° | |
| | Maximum Pulling Force | 7,060 lb-force | 31.4 kN |
| | Feed System | Motor Chain | |
| Rod Changer | Make & Model | AIRMAN PDS265-S37C | |
| | Type | Screw 1-Stage | |
| | Discharge Airflow | 275 cfm | 7.8 m ³ /min |
| Electrical Equipment | Discharge Pressure | 149 psi | 1.03 Mpa |
| | Model | A844 | |
| | Airflow | 918 cfm | 26 m ³ /min |
| Fuel/Oil Capacity | Number of Elements | 5 | |
| | Dust Removal System | Automatic Pulse Air Jet | |
| | Suction Cap | Slide Type | |
| Bit and Rod | Number of Rods | 5 | |
| | Rod Length T38 - T45 | 10' / 12' | 3.05mm / 3.66mm |
| | Battery | 12 Volt; 108Ah/5Hr | |
| Temperature | Voltage | DC 24V | |
| | Fuel Tank | 84 US Gal | 320 L |
| | Hydraulic Tank | 45 US Gal | 170 L |
| | DEF Tank *4 | 5 US Gal | 19L |
| Bit and Rod | Bit Diameter | 2.5" to 4" | 64 mm to 102 mm |
| | Rod Size | T38 T45 | |
| | Rod Length | 10' or 12' | 3,050 or 3,660 mm |
| Temperature | First Rod Length Maximum | 13' | 4,000 mm |
| | Operating Temperature | 5° to 113° F | -15° to +45° C |

Note:

- *1 "Overall Weight (A)" includes weights of Fuel and Oils (full).
- *2 "Overall Weight (B)" includes weights of Overall Weight (A), Operator and Full Rod Rock with Starter Rod.
- *3 "Ground Contact Pressure" is calculated based on Overall Weight (A).
- *4 DEF is an acronym for Diesel Exhaust Fuel (UREA Solution).

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