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 Takasaki, Yonohi Works  
 Central Management System  
  
 HCR1500ED II E1003-F2  
 Printed in Japan



## Hydraulic Crawler Drill

### HCR1500-ED II

Tier3 / Euro Stage-3



**FRD FURUKAWA ROCK DRILL**



## Drilling Performer HCR1500-ED II

High-productivity & Durability

**The Ultimate Combination of Performance and Economy**

**With the field proven HD700 series drifter and IDS, it's easier than ever before to drill FAST & STRAIGHT.**

**The key for market leading drilling performance**

**IDS : Integrated Drilling System**

**DDS : Dual-Damper System**

Integrated Drilling System

**IDS** All hydraulic drilling controls allow for automatic adjustment of impact force and feed force to match changing of rock formations. IDS-2 as optional devise, is monitoring rock conditions and automatically adjust feed speed. Dual-Damper System provides maximum impact energy transfer, and minimizes energy of return shock wave. Working together, these integrated systems are the keys to highest-possible drilling performance at low running cost.



### Advanced drifter system

HD715 Dual-Damper System



Dual-Damper System DDS

FRD has developed the Dual-Damper System, a first in the industry. For maximum energy transfer, active DDS minimizes return of shock waves by keeping the bit firmly against the rock at all times during drilling. Active DDS minimizes percussion energy loss and by optimizing the overall feed force, greatly improved the life of drilling accessories. An additional benefit is greatly improved life of drilling accessories.  
(U.S. Patent No. 5,896,937)

Compact valve design

A compact shuttle valve minimizes loss of oil pressure and maintains total power output of the drifter.

Reverse Percussion System

The Reverse Percussion System (RPS) makes it easier to free a stuck rod. A substantial increase in extraction force allows the field proven RPS (optional) to remove stuck rods quickly.



HCR1500ED II ©2009



**ECO-friendly**

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



**HCR 1500-ED3**



**Low-emission engine**

Powerful CAT engine is fully compliant with Tier3 / Euro stage-3 emission control.




**Advanced hydraulic & Pneumatic system**

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

**Extension boom**

Extension boom increases pattern flexibility.



**Power-saving selector**

By using power-saving selector, fuel consumption rate is reduced during light work condition.

Standard : 2,200 min<sup>-1</sup>  
Power-saving: 2,000 min<sup>-1</sup>

**High capacity output compressor & Dust collector**

High-output AIRMAN compressor increases flushing air, provides faster drilling and decrease wear of drilling accessories. It also reduces re-drilling of cuttings, and improves drilling speed. Large suction capacity of the dust collector maintains environment.




**Easy handling rod changer**

Joystick operated rod changer assures fast rod changing.




**Heavy duty undercarriage**

Stable chassis—combining a low center of gravity, high ground clearance and protected undercarriage—enhances stability and confidence when tramming and drilling on rough terrain. Heavy-duty undercarriage—featuring a pentagonal section design to reduce dirt build-up and track wear—ensures strength and durability.



**Sliding suction cap**

Sliding suction cap be raised to allow a fast visual check of operation.



**Centralizer**



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**ECO-friendly**

## Maneuverability, Safety & Visibility



**HCR 1500-ED3**



**Comfortable cab**

1100 mm wide cab provides large windows at the front and on the right side maximize operator visibility. Cab is air conditioned and pressurized with filter air to keep out dust.

**Control panel for air conditioner**




**AM/FM radio**



**Right side control box**



- ① Joystick drilling lever
- ② Backup alarm
- ③ Engine throttle control
- ④ Feed speed adjusting control dial
- ⑤ Feed pressure adjusting control dial
- ⑥ Push switch for boom control
- ⑦ Air conditioner
- ⑧ Pressure control adjusting dial
- ⑨ 2 boom speed
- ⑩ Boom control ON/OFF switch

**Left side control box**



- ① Joystick rod changer
- ② Air flushing
- ③ Remote grease
- ④ Centralizer open/close
- ⑤ High-speed rotation
- ⑥ Anti-jamming
- ⑦ 2 speed traveling
- ⑧ Lights
- ⑨ Compressor starting
- ⑩ Wipers
- ⑪ Safety lever
- ⑫ Emergency stop

**Meter panel**



- ① Starter switch
- ② Temp. gauge, compressor
- ③ Temp. gauge, hydraulic oil
- ④ Fuel gauge
- ⑤ Temp. gauge, engine
- ⑥ Tachometer, engine
- ⑦ Warning lights

**Right operation**

A single multi-function lever controls all the drilling functions. Single-lever drilling controls allow easy operation of the drifter.



**Intelligent Monitoring System (IMS)**

IMS is always monitoring machine conditions and supports trouble shoots for operator and mechanics. IMS support to reduce daily maintenance time and down time. (optional equipment)



**Pillar mounted gauges**

- ① Drilling position indicator
- ② Impact pressure
- ③ Feed force pressure
- ④ Rotation pressure
- ⑤ Flushing air pressure



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