

# DBC S 15

Fully hydraulic core drill



**TOTAL CORE DRILLING TECHNOLOGY**

[www.dbcmakina.com](http://www.dbcmakina.com)



## DBC Drill Rig Product Range

- Surface and underground drill rigs
- Fully hydraulic with rod handling synchronization.
- CE certified
- The most advanced robot arm and rod elevator system



# S 15 Benefits to Improve your Drilling Performance

- **Safe and fast rod handling** Patented rod elevator provides very efficient and safe operation.

- **A rotation unit with optimal torque and speed.**

Easy to adapt for different diameters geological conditions.

-**Simple and reliable chuck.** Very few moving parts, widely adjustable gripping force, easy to service.



- **Direct acting feed cylinder.** For quick rod handling at all depths.

- **Crawler carriage.** Powered from the same diesel engine with drilling operations.

- **Simple, robust power unit with a triple hydraulic pump.** Triple pump permits independent regulation of feed and rotation. Equipped with a power take-off for driving a flush pump. Easy access for maintenance.

- **Efficient filtration** protects the hydraulic circuit and control console from contamination that can enter the circuit when hydraulic hoses are disconnected. Return filters are mounted on the power unit

- **Water Flow Meters and RPM gauges** (optional equipment) provide additional information for the driller.

- **DDP– Digital Drilling Package .** Including digital levelling gauge, boom angle display, penetration rate display ( cm/min), ultrasonic flush water flow meter, fuel level in tank, all parameters for engine operation



## Capacities

Drill rod size	Approx. drilling depth
B wireline	1540 m
N wireline	1200 m
H wireline	800 m
P wireline	475 m

“The above capacity values only serve as a guideline, and refer to vertical, downward drilling in homogeneous rock

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## Rotation unit

### Rotation unit and spindle speeds

Power: hydraulic motor – variable speed/  
reversible

Final drive: 6 in chain driven in oil bath – 2,  
ratio

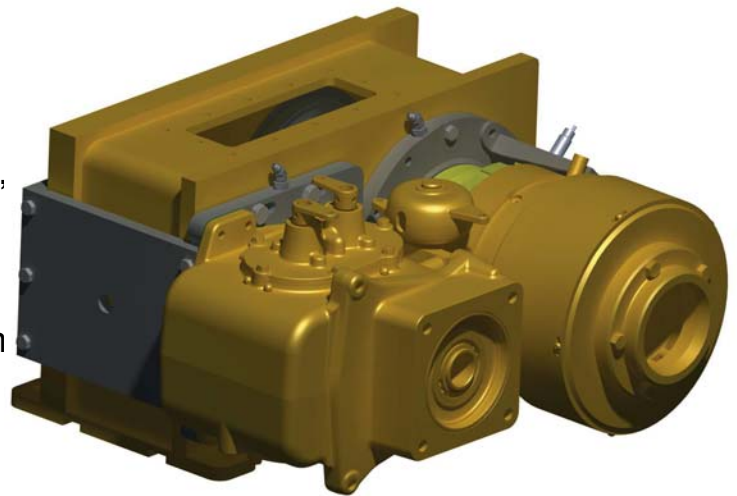
Spindle (inner diameter): 117 mm

Spindle speeds:

Speed,	Max. rpm	Max. torque, Nm
1st	200	5200
2nd	420	2500
3rd	770	1350
4th	1300	780

Range selection: manual control from operator’s station

Hydraulic off- hole shift



The critical part of S 15 is the strong rotation unit operating with very low noise level. A special bearing system prevents the entering of the cuttings into the rotation unit and separate cover makes the servicing an easy job.

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## Chuck assembly

Type: hydraulic open, spring closed

Maximum inside diameter: 117 mm

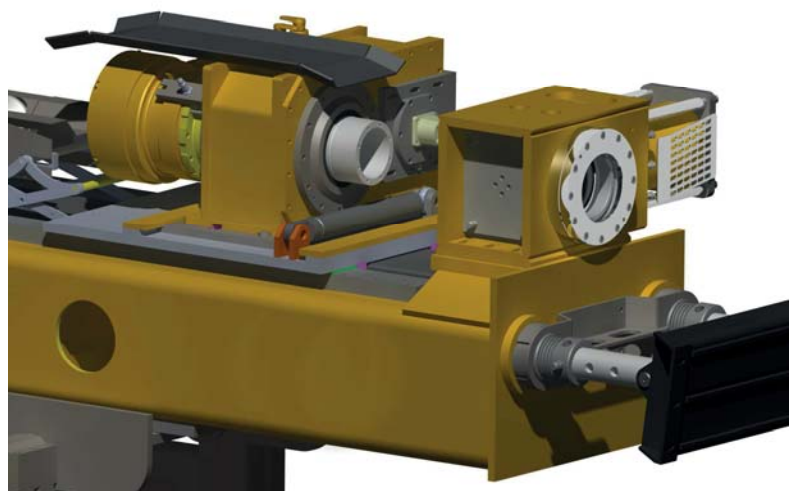
Holding capacity: 18000 kg

## Rod Holder

Type: hydraulic open, gas spring  
closed

Maximum inside diameter: 210 mm

Holding capacity: 13 000 kg



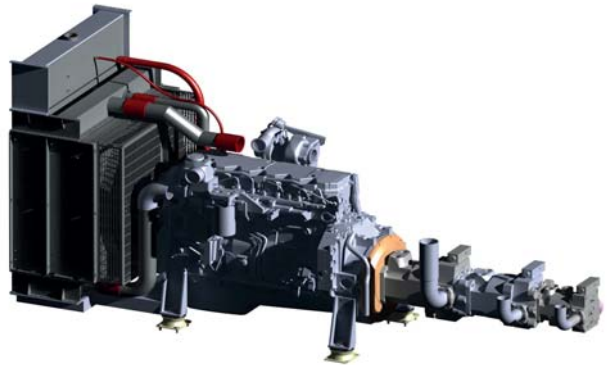
### **Mast and feed system**

Telescopic mast  
Feed travel: 3,5 m  
Feed speeds: fast and slow with variable control  
Feed force: 60 kN  
Retract force : 140 kN  
Drilling angle: 40 to 90 degrees  
Rod pull length: 6,10 m



### **Power unit**

Manufacture: Cummins  
Model: QSB6,7 Tier III  
Volume: 6,7 liter 6 cyl.  
Power: 153 kW (208 hp)  
RPM: 1800  
Engine type: Diesel turbocharged/after cooled  
Cooling: Water



### **Hydraulic system**

Main pump: 310 bar – 250 l/min  
Service pump: 250 bar – 130 l/min  
Auxiliary pump: 220 bar – 50 l/min  
Hydraulic oil cooling: Air

### **Main hoist**

Single line capacity: Bare drum 80 kN  
Line speed: Bare drum 40 m/min  
Cable size: 35 m x 16 mm



### **Wireline Hoist**

Capacity: 1800 m of 4,76 mm  
950 m of 6,35 mm  
Line pull: bare drum: 12 kN  
full drum: 3,0 kN  
Line speed: bare drum 120 m/min  
full drum 460 m/min  
Optional: self levelling system



### Drill base supports

Support: 4 hydraulic jacks  
Pad diameter: 200 / 230 mm  
Travel length: 550 mm

### Weight

S15 with crawler : 9500 kg

### Dimensions (L – W – H)

Transport on drill site (top mast not extended):  
6370 mm -2550 mm- 2340 mm



### Flush pump

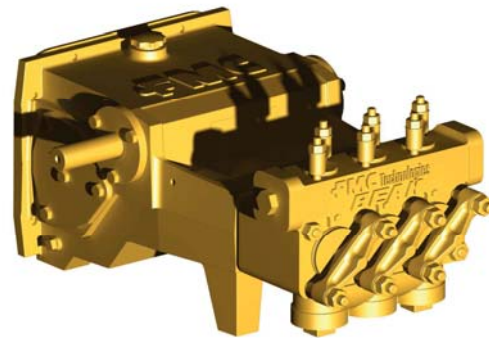
DBC flush pumps are designed for both mud and water flushing. The distribution block is prepared for mounting of accumulator, adjustable steady flow valve and other optional equipment.

DBC 140H

Flow 140 l/min

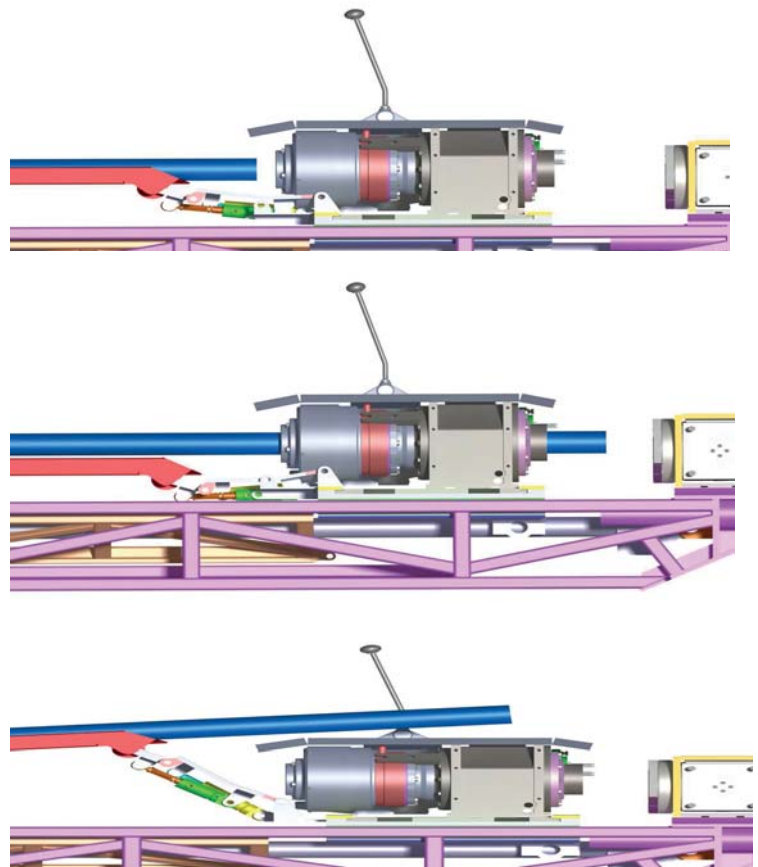
Pressure 70 bar

Weight 210 kg



### Patented rod elevator

The rod elevator has 3 positions; drilling, rod adding and rod lifting and eliminates the need of an additional helper in the mast



## All you need for core drilling

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- \* FASTDRILL drill bits
  - \* Heat treated wireline rods
  - \* Friction welded rods
  - \* Wireline core barrels
  - \* Adapters, fishing tools
  - \* Plastic core boxes
  - \* Full grip wrenches

**“ total core  
drilling technology”**



TOTAL CORE DRILLING TECHNOLOGY

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