

FRD
FURUKAWA

DOWN THE HOLE DRILL

DCR 20



DURABLE AND RELIABLE

WHERE **EXPERIENCE COUNTS**

DOWN THE HOLE DRILL

DURABLE AND RELIABLE

THE ULTIMATE COMBINATION
OF PERFORMANCE AND ECONOMY



DCR 20 SPECIFICATION:

- **HIGH-OUTPUT COMPRESSOR**
High-output compressor increases flushing air volume, provides faster drilling and decreases bit wear. It also prevents redrilling of cutting, and improves drilling speed.
- **LOW-EMISSION ENGINE**
Quiet, powerful engine meets major exhaust-emissions regulations for the European Union, the United States, and Japan. In addition to being clean, it is also economical and offering low fuel consumption. Thanks to an engine frame that sits on rubber mounts, the operator's cab isolated from engine vibrations. In cold weather, an intake air heater ensures quick starting.
- **ROTARY HEAD**
Furukawa has a newly increased powerful rotaryhead, which provide a smooth and accurate drilling performance
- **SINGLE ACTION ROD CHANGER**
The hydro-mechanical "single action" rod changer is an updated model of the conventional Furukawa In-Line rod changer. Rod change time is reduced.



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STANDARD SPECIFICATION:



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 locations.

HEAVY-DUTY UNDER CARRIAGE

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.

BUILT FOR

WHERE EXPERI

**SMOOTH OPERATING IN COMFORTABLE CABIN
DRILLING ON ANY KIND OF ROCK**

- Air conditioned ROPS / FOPS cab.
- Economically engineered machine and drill controls.
- High pressure and large capacity compressor.
- Large dust collector.
- Accurate positioning with boom swing like crawler drill.
- Good visibility of bit with sliding suction cap.
- Fast traveling with tough track.
- Easy maintenance with large access door.
- Tier 3 low emission engine.



RODUCTION

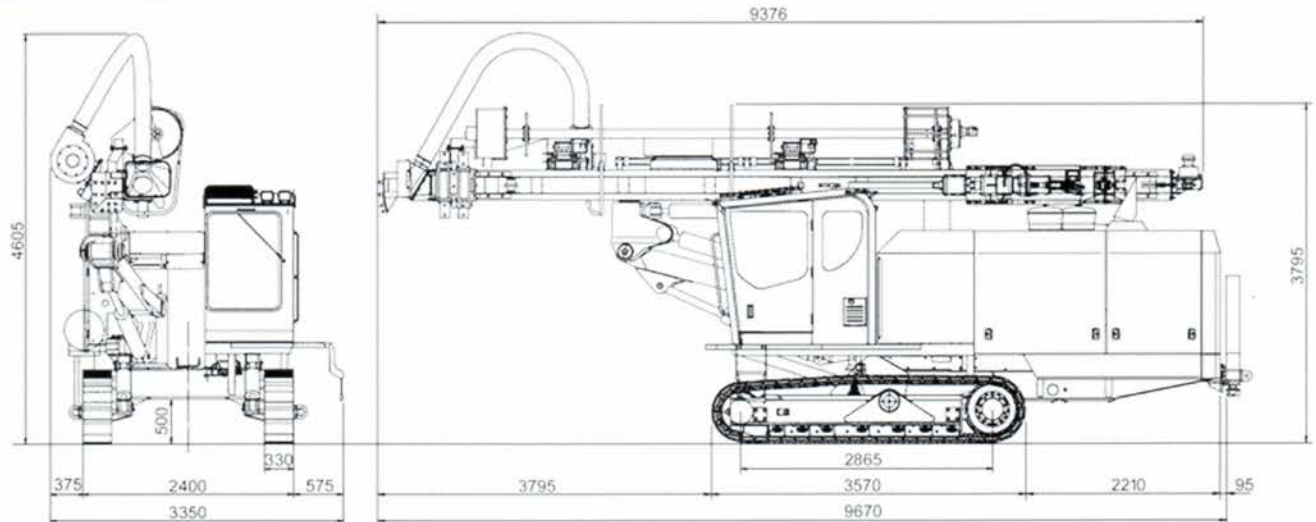
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MOBILE MANEUVERABLE DURABLE AND PERFORMING
MIDDLE CLASS DOWN THE HOLE DRILL DCR 20



"You want the job done professionally without problems. FRD offers you high quality equipment and excellent service and support from a real professional partner."

SPECIFICATIONS



Model	DCR 20	
Overall dimension		
Mass	kg	21.000
Overall length	mm	10.645
Overall width	mm	4.330
Overall width for transportation	mm	2.400
Overall height	mm	3.800
Traveling unit		
Track length	mm	3.570
Ground contact length	mm	2.865
Track width	mm	330
Ground clearance	mm	502
Oscillating angle	deg	±7.5°
Traveling speed	km/h	3.6
Grade ability	deg	25
Max. traction force	Kn	105
Drill motor	deg	
Max. Rotation torque	kN-m	3.25
Max. rotation speed	min-1	120
Drilling bit range	mm	89 - 165
Engine		
Model	CAT C-13 Tier 3	
Type	Turbo-charged & air to air after cooled diesel, direct fuel injection, electronic governor	
Output	kW/min-1	328 / 2.100
Fuel tank capacity	Liter	700
Hydraulic pump		
Main pump	Tandem variable displacement pump	
Dust collector pump	Gear pump	
Boom/Fan/Pilot line pump	Gear pump	

Model	DCR 20	
Model	Airman PDSK 900	
Type	Screw, double stage, oil-cooled	
Max. Air delivery	MPa	2.5
Max. Free Air Delivery	m³/min	24
Boom		
Boom swing angle	deg	30° R - 13° L
Boom lift angle	deg	49° UP - 14° Down
Guide shell		
Length	mm	9.964
Feed distance	mm	5.678
Guide slide distance	mm	1.200
Guide swing angle	deg	L77°- R16°
Max. pulling force	kN	30
Feed system	Hydraulic motor	
Rod changer		
Rod length	mm	5.000
Rod size	mm	76, 89 and 102
Greasing	Automatic	
Rod capacity	8pcs. (100kg / pc.)	
Dust collector		
Suction air volume	m³/min	70
Air filter	20 pcs.	
Dust removal system	Air pulse jet	
Suction cap	Sliding	
Inner diameter of dust hose	mm	D150
Pre-cleaner	standard	

The contents of these specifications are subject to change without notice.

ERGONOMIC FEATURES CAB

Control sticks are placed at both sides of the operator's seat and are pilot operated. Visibility during drilling is greatly improved. Pressurized air conditioning keeps the cab climate controlled and clean.

STANDARD SPECIFICATION:

- **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 commonsense 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 locations.
- **HEAVY-DUTY UNDER CARRIAGE**
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. 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.
- **SINGLE JOY-STICK OPERATION**
A single multi-function lever controls rotary head. One "each finger" operated joystick controls air and rod changer.
- **IMS SYSTEM**
Intelligent monitoring system allows the operator the individual control about all electrical solenoids and sensors of the machine. At engine start IMS works selfcontrolled.

WHERE **EXPERIENCE COUNTS**



OUTSTANDING DEALER NETWORK



WHERE EXPERIENCE COUNTS

"What we mean by service to our clients includes same day repair and part delivery, fast repair on location in the event of a rare break down or immediate replacement machine. We have a great name to uphold. We intend to keep it that way."

LOCAL SERVICE AND SUPPORT

FRD seeks firstly to supply a product of undoubted integrity. Then back this up with a support network of dedicated dealers to ensure whatever support, wherever and whenever needed. The FRD-dealer combination has been made unbeatable.

FRD dealers have been selected for their professional competence, their market coverage, their dedication to quality and their willingness to work. They receive intense training on all machines and systems and every support that a committed manufacturer can give them. They actively exchange experience between each other to ensure their clients get the latest lessons from the market. They are a skilled and fast team of professionals.

"For a professional problem-free job FRD offers the best combination of quality equipment and instant service and support. The dealer network is outstanding."

VALUE FOR MONEY

Buying FRD products is a smart investment. A reasonable price for top quality, long lifetime, low maintenance and no break-down-time products in the long term makes financially good sense.

Next steps? FRD Europe and its dealers have a vast resource of information beyond what can be mentioned here. Do not hesitate to get in touch for more detail and an unbeatable quote.



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