



FURUKAWA ROCK DRILL EUROPE B.V.

DCR20

Down-the-Hole Drill

DCR20 Equipped
with Tier III EPA Compliant Engines.



DCR20 Down-the-Hole-Drill

The DCR20 has established itself as a reliable, productive resource for drilling operations around the world. These drills have been tested in soft, medium and hard rock conditions with multiple end-users and applications providing deep holes from 3.5" to 6.5" at fast drilling rates with low maintenance.

Servicing the DCR20 is easy with access to all key components such as the engine, fluid levels and compressor through large panel doors located at ground level for maintenance when needed.

The cabs have been redesigned to provide operators maximum comfort with single-lever drilling controls, large gauges, and superior views of drilling operation.

Walk-around ground level maintenance provides fast, easy upkeep or repair.



Maximize operator performance with the ultimate in ergonomic cab design.

When it comes to ergonomically-friendly cabs, Furukawa offers various options to minimize operator fatigue. Cabs are 51" wide (1,300 mm) with ROPS/FOPS. In addition, all cabs are air-conditioned and continuously pressurized with filtered air to maintain a comfortable operating environment. Other features include:

- Single-lever drilling control for easy operation.
- Large windows maximize operator visibility.
- High-visibility gauges allow operator to monitor machine functions while remaining focused on the drilling.
- Walk-around ground level maintenance provides fast, easy upkeep or repair.
- Rubber-mounted engine frame isolates cab from engine vibrations.
- AM/FM radio is standard.

Combining performance and economy.

- Angle indicator for quick and easy drilling alignment.
- Drill hole diameter 3.5" - 6.5".
- Reliable dust control system increases suction capacity and provides effective pre-cleaner to reduce the escape of drilling dust. An optional dust suppression system is available for difficult drilling conditions.
- Advanced rotary pipe changer allows easy drill pipe changes.
- High-output compressor increases flushing air, provides faster drilling and decreases bit wear.

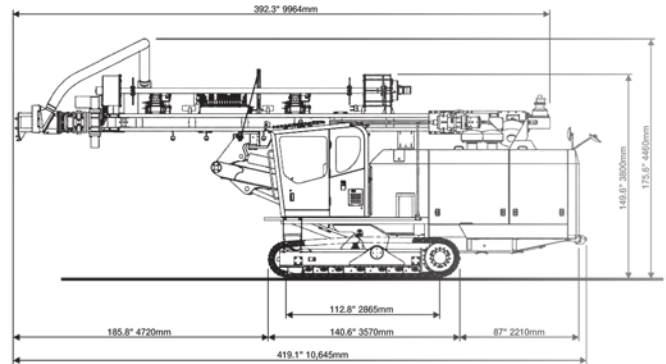
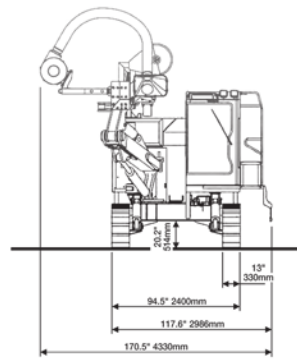
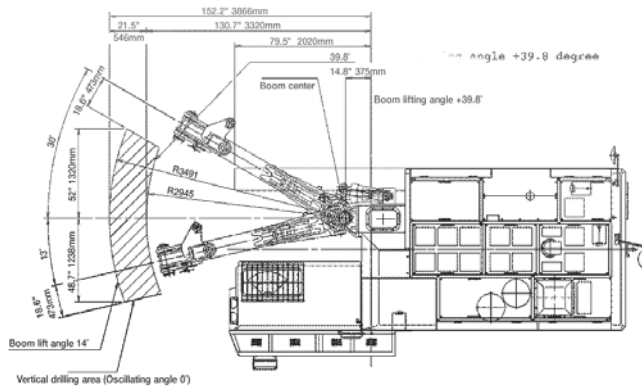
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- Low-emission, Tier III Caterpillar® engine offers low fuel consumption at 440hp and meets US exhaust emissions regulations.
- All compressor hoses are Teflon® for strength and durability. Hoses and wiring are placed in a compact and efficient routing design for more protection, less wear and easy replacement.
- Drill pipe changer equipped with electronic sensors speeds pipe addition and extraction.
- Heavy-duty undercarriage with low center of gravity – featuring a pentagonal section design to reduce dirt build-up and track wear – ensures strength, durability and stability.



Drilling Pattern for DCR20



DCR20		US Standard	Metric
General	Overall Weight*	46,200lb	21,000kg
Track Unit	Track Length	11' 9"	3,570mm
	Length of Ground Contact	9' 5"	2,865mm
	Track Width	1' 1"	330mm
	Ground Contact Pressure*	15.8psi	10.9N/cm ²
	Min. Ground Height	1' 8"	502mm
	Oscillating Angle	+7.5 degrees	
	Max. Trimming Speed	1.9mile/h	3.0km/h
	Gradeability	25 deg.	
	Trimming Motor	Hydraulic Motor	
	Max. Traction Force	23,604lb-force	105kN
Engine	Model	CAT C13 Tier III	
	Type	Diesel Engine	
	Rated Output	440hp/2,100rpm	328kW/2,100min ⁻¹
	Fuel Tank Capacity	185gal	700L

DCR20		US Standard	Metric
Hydraulic Pump (For Main)	Variable Displacement Pump	Variable Displacement PV Pump x 2	
	Model	KSV80DT	
	Capacity	11.6in ³ x 2	75cm ³ x 2
	Working Pressure	3,000psi	20.6MPa
Compressor	Model	PDSK900	
	Type	Screw Rotation Type 2 Step Compression, Oil-Cooled	
	Manufacturer	Airman	
	Discharge Pressure	363psi	2.5MPa
Boom	Free Air Delivery (at 140F)	847ft ³ /min	24m ³ /min
	Boom Swing Angle	35 ~10 deg.	
	Guide Lift Angle	40 ~25 deg.	
	Model	DOWMAX / ME350	
Drill Motor	Reduction Gear Rate	3.071	
	Max. Torque	2,397lb-ft	3.25kNm
	Max. Number of Rotation	120rpm	120min ⁻¹
	Drill Hole Diameter (Bit Diameter)	3.5"- 6.5"	89 - 165mm

Suggested Hammer Option

DCR20		US Standard	Metric
Hammer	Manufacturer	MINCON	
	Model (Example)	MP55	
	Bit Range	3.5"- 6.5"	89 - 165mm

DCR20		US Standard	Metric
Guide Shell	Overall Length	31' 2"	9,500mm
	Feed Length	18' 7"	5,678mm
	Guide Slide Length	3' 11"	1,200mm
	Hood Slide Length	12"	300mm
	Swing Angle	30 ~30 deg.	
	Max. Drawing Force	6,744lb-force	30kN
Pipe Carousel	Feed Type	Hyd. Motor Drive	
	Number of Pipes	8 (16' 5" Pipe)	8 (5,000mm Pipe)
	Pipe Weight	176lb (16' 5")	80kg (5,000mm)
	Pipe Length	16' 5"	5,000mm
	Pipe Diameter	3", 3.5" and 4"	76, 89 and 102mm
	Pipe Thread API	3" (2-3/8") 3.5" (2-3/8") 4" (2-7/8")	
Dust Collector	Auto Grease	Automatic	
	Suction Capacity	2,472ft ³ /min	70m ³ /min
	Number of Filter Element	s/n 3211062 & lower: 20 s/n 3212063 & higher: 10	
	Pre-Cleaner	Automatic Pulse Air Jet	
	Suction Cap	Open-Close Type	
	Suction Hose Diameter	6"	150mm

Note:

*1 "Overall Weight (A)" includes weights of fuel and oils (full).

*2 "Ground Contact Pressure" is calculated based on "Overall Weight (A)".

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