



RFD1X-2050

FACE DRILL





Precision drilling with effortless control

This Rhino RFD1X-2050 face drill is loaded with enhancements that not only increase productivity and uptime, but lower daily operating costs too. A high-efficiency hydraulic system, advanced digital control interface, and specific drilling modes to allow you to choose your penetration profile headline the long list of advances.



1. Level climate-control system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.

2. Advanced LCD monitor provides intuitive access to a wealth of operational and drilling data and functions.

3. Ergonomically correct short-throw pilot levers provide smooth, predictable fingertip control with less movement or effort.

ENGINE AND POWERTRAIN	
Diesel Engine Brand – Model	RHINO RFD65T / Cummins B3.3T
Engine Power kW (HP) @ rpm	65 (87) @ 2000 / 50 (67) @ 2000
Emissions Certification (Tier / Stage)	Euro Stage III
Transmission (Type / Model)	Hydrostatic Transmission (4WD)
Chassis Type	Ultra-Articulated, extra-narrow chassis
Steering & Articulation Angle (°)	Hydrostatic, ±40°
Axles / Brakes	SAHR
Maximum Speed km/h (mph)	10 (6.2)
Maximum Gradeability (%)	14° (≈25%)
Tyre Dimensions & Type	300 R15 NHS GLR07
Fuel Tank Capacity L (gal)	50 (13.2)
Exhaust Purification System	Catalyst + muffler
HYDRAULIC SYSTEM	
Hydraulic Pump Type	Independent pumps for impact, positioning, feed, and rotation
Maximum System Pressure bar (psi)	230 (3,335)
Hydraulic Tank Capacity L (gal)	165 (43.6)
Filtration µm	10
Oil Cooling System	Stainless steel water-oil heat exchanger
HYDRAULIC ROCK DRILL (DRIFTER)	
Impact Power kW (HP)	18.9 (25.3)
Percussion Pressure bar (psi)	242 (3,510)
Percussion Frequency Hz (bpm)	62 (3,720)
Rotation Speed rpm	0–215
Rotation Torque Nm (lb-ft)	1,000 (737.5)
Drilling Diameter mm (in)	33–76 (1.3 – 3.0)
Shank Adapter	T38
Air Consumption for Lubrication L/s (cfm)	5 (10.6)
Anti-jamming System	Direct Hydraulic (Anti-jamming)
Total Operating Weight kg (lb)	8600 (18,960)

POSITIONING BOOM

Number of Booms	1
Boom Extension mm (ft)	1,200 (3.9)
Lift Angle (°)	+55° / -20° (relative to horizontal)
Lateral Swing (°)	±50° to ±60°
Roll-over Rotation (°)	±180°
Automatic Parallelism	Yes (Full-directional)
Anti-collision System	Not applicable (single-boom equipment)
Boom Weight kg (lb)	575 (1,268)

FEED (GUIDE SHELL)

Feed Beam Type	High-strength light alloy
Feed Type	Continuous hydraulic cylinder with thrust compensation
Feed Beam Extension mm (ft)	1,710 (5.6)
Feed Force kN (lbf)	15 (3,372)
Maximum Rod Length mm (ft)	3,700 (12.1)
Effective Drilling Depth mm (ft)	3,400 (11.1)
Reverse Extraction System	Yes



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DRILLING COVERAGE

Maximum Coverage Area m ² (ft ²)	16.5 (177.6)
Maximum Coverage (W × H) mm (ft)	5,500 × 4,500 (18.0 × 14.8)
Minimum Tunnel Section m (ft)	2.3 × 2.3 (7.5 × 7.5)
Max. tunnel section m (ft)	5.5 × 4.5 (18.0 × 14.8)
Inner Turning Radius mm (ft)	2,500 (8.2)
Outer Turning Radius mm (ft)	4,800 (15.7)

ELECTRICAL SYSTEM (OPERATION)

Main Electric Motor kW (HP)	55 (73.7)
Total Installed Power kW (HP)	63.5 (85.1)
Voltage / Frequency V (Hz)	380 (50)
Starting Method	Star-Delta
Cable Length (Reel) m (ft)	60 (196)
IP Protection Rating	IP54
Battery Electric Propulsion	No
Battery System	12 V / 120 Ah (300W Charger)

WATER & AIR SYSTEM

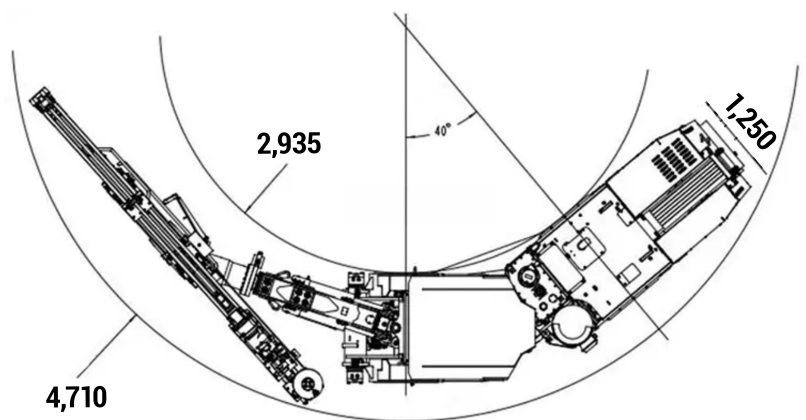
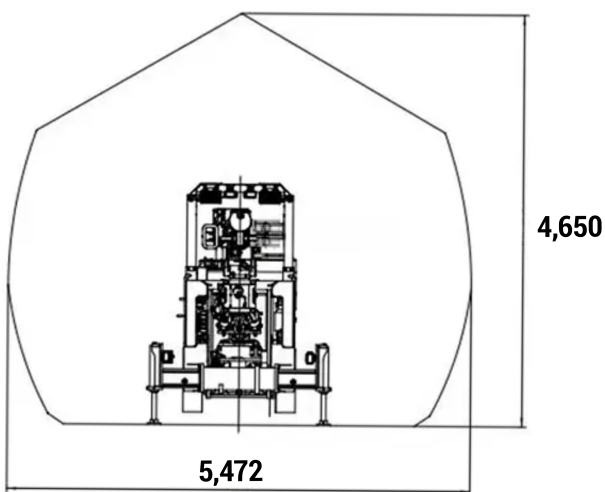
Compressor Type	Rotary Screw / 5.5 kW
Compressor Brand	Jaguar
Compressor Capacity m ³ /min (cfm)	0.7 (24.7)
Air Working Pressure bar (psi)	8 (116)
Air Pressure for Lubrication bar (psi)	8 (116)
Water Pump Type	Centrifugal / 3 kW
Water Pump Brand	Nanfeng Pump Industry
Water Flow L/min (gpm)	70 (18.5)
Maximum Water Pressure bar (psi)	@ 25 (362)
Pump Motor Power kW (HP)	5.5 (7.4)

AUTOMATION, CONTROL & CONNECTIVITY

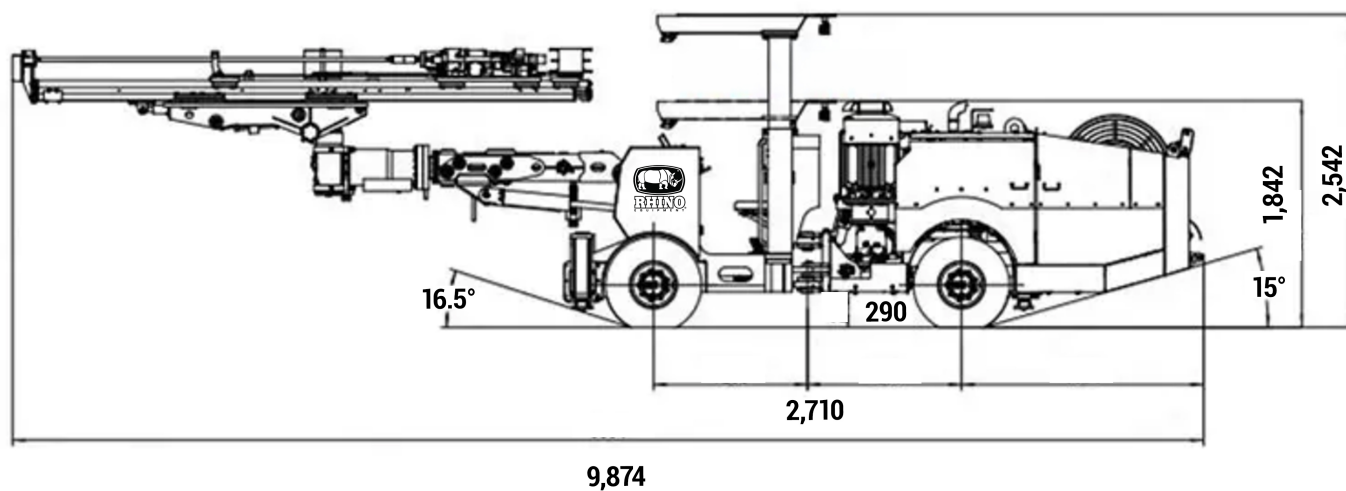
Control System	Electronic controls via two proportional joysticks
Automation Level	Semi-automated
Anti-jamming System	Electronic
Positioning Control	Electronic
Remote Operation	Optional via wireless remote control
Remote Monitoring	Optional
Navigation / Drilling Plan	No
MWD (Measure While Drilling)	No

CAB, ERGONOMICS & SAFETY

Structure Certification (FOPS / ROPS)	FOPS ISO 3449 Level II / ROPS ISO 3471
Cab Type	FOPS/ROPS certified enclosed cabin with air conditioning (premium equipment) or FOPS Canopy (compact equipment)
In-cab Noise Level dB(A)	72–80
A/C & HEPA Filtration System	Air conditioning and heating as standard
Fire Suppression System (Manual / Auto / Brand)	Automatic ANSUL, Fogmaker or Dafo; manual extinguisher as backup
Centralized Lubrication System (Auto Grease)	Automatic Lincoln, SKF, Groeneveld or Bijur Delimon
Blind-spot Cameras & LED Lighting (Lumens)	Rear camera; optional 360°, high-intensity LED 2,500–5,000 lumens per lamp, 8–16 LED lamps



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DIMENSIONS & WEIGHT (TRANSPORT POSITION)

Total Length mm (ft)	9,915 (32.53)
Transport Width mm (ft)	1,335 (4.38)
Transport Height mm (ft)	1,910 (6.27) / Extended roof: 2,615 (8.58)
Ground Clearance mm (in)	328 (12.91)
Wheelbase mm (in)	2,710 (106.7)
Approach Angle (°)	18°
Departure Angle (°)	17°