



RFD1X-4511

FACE DRILL





Maximum control for precise and consistent drilling

This Rhino RFD1X-4511 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 RFD119T / Deutz BF4M1013FC
Engine Power kW (HP) @ rpm	119 (160) @ 2300 / 110 (148) @ 2300
Emissions Certification (Tier / Stage)	Tier 3 / Stage IIIA
Transmission (Type / Model)	Dana Spicer Hydrodynamic
Chassis Type	Heavy-duty articulated
Steering & Articulation Angle (°)	± 40
Axles / Brakes	Dana / Multi-disc SAHR brakes
Maximum Speed km/h (mph)	14 (8.7)
Maximum Gradeability (%)	≥ 25 (14°)
Tyre Dimensions & Type	12.00 x R20 High flotation
Fuel Tank Capacity L (gal)	130 (34.3)
Exhaust Purification System	Gas purifier + Muffler
HYDRAULIC SYSTEM	
Hydraulic Pump Type	Rexroth piston pumps
Maximum System Pressure bar (psi)	250 (3,625)
Hydraulic Tank Capacity L (gal)	280 (74.0)
Filtration µm	10 high-efficiency return
Oil Cooling System	Large area water cooler
HYDRAULIC ROCK DRILL (DRIFTER)	
Impact Power kW (HP)	22 (29.5) [WoserId 2238]
Percussion Pressure bar (psi)	230 (3,335)
Percussion Frequency Hz (bpm)	73 (4,380)
Rotation Speed rpm	0 - 320
Rotation Torque Nm (lb-ft)	910 (671)
Drilling Diameter mm (in)	45 - 89 (1.8" - 3.5")
Shank Adapter	T45 / T38
Air Consumption for Lubrication L/s (cfm)	6.5 (13.7)
Anti-jamming System	Advanced RPCF (Electro-hydr.)
Total Operating Weight kg (lb)	21,000 (46,297)

POSITIONING BOOM

Number of Booms	1 high-load telescopic boom
Boom Extension mm (ft)	1600 (5.2)
Lift Angle (°)	-10 / +65
Lateral Swing (°)	± 45
Roll-over Rotation (°)	360 continuous
Automatic Parallelism	Yes, double tripod suspension
Anti-collision System	Active proximity sensor
Boom Weight kg (lb)	2,400 (5,291)

FEED (GUIDE SHELL)

Feed Beam Type	High-strength structural box
Feed Type	Hydraulic motor + double chain
Feed Beam Extension mm (ft)	2,000 (6.5)
Feed Force kN (lbf)	22 (4,945)
Maximum Rod Length mm (ft)	5,525 (18.1)
Effective Drilling Depth mm (ft)	5,200 (17.0)
Reverse Extraction System	Yes, integrated electro-hydraulic



Equipment specifications and images may change without notice from Rhino Equipment Group Inc.

DRILLING COVERAGE

Maximum Coverage Area m ² (ft ²)	90 (968)
Maximum Coverage (W × H) mm (ft)	12,500 × 10,500 (41.01 × 34.45)
Minimum Tunnel Section m (ft)	4.5 × 4.5 (14.76 × 14.76)
Max. tunnel section m (ft)	11.9 × 16.0 (39.04 × 52.49)
Inner Turning Radius mm (ft)	4,345 (14.3)
Outer Turning Radius mm (ft)	9,045 (29.7)

ELECTRICAL SYSTEM (OPERATION)

Main Electric Motor kW (HP)	95 (127.4)
Total Installed Power kW (HP)	105 (140.8)
Voltage / Frequency V (Hz)	440/660/1140 (50/60)
Starting Method	Electronic soft-starter
Cable Length (Reel) m (ft)	120(393) (Automatic hydraulic)
IP Protection Rating	IP65 / IP67 on sensors
Battery Electric Propulsion	Optional on premium series
Battery System	2 x 12 (140 Ah)

WATER & AIR SYSTEM

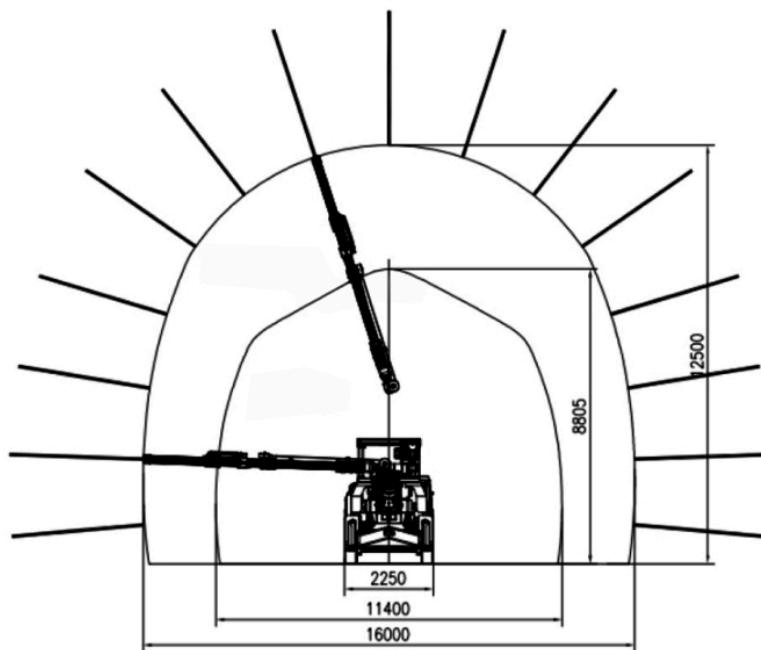
Compressor Type	Heavy-duty rotary screw
Compressor Brand	Sullair / Ingersoll Rand
Compressor Capacity m ³ /min (cfm)	1.2 (42.3)
Air Working Pressure bar (psi)	9 (130)
Air Pressure for Lubrication bar (psi)	3.5 (50.7)
Water Pump Type	High-flow piston pump
Water Pump Brand	Grundfos / Opt. Brinkmann
Water Flow L/min (gpm)	100 (26.4)
Maximum Water Pressure bar (psi)	15 (217)
Pump Motor Power kW (HP)	5.5 (7.4)

AUTOMATION, CONTROL & CONNECTIVITY

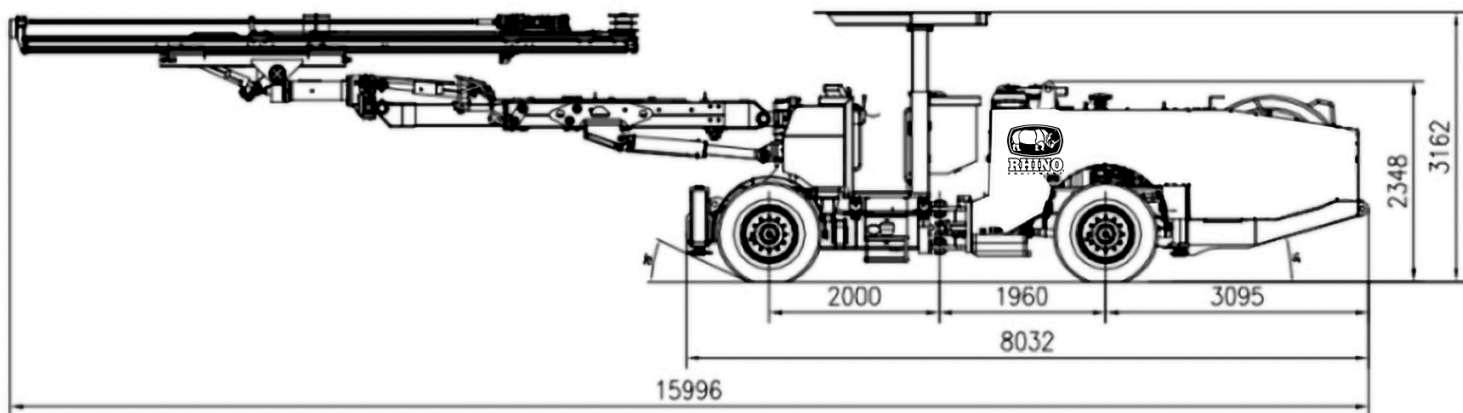
Control System	Control System (SCS) CanBus
Automation Level	Semi-automatic (Assisted drilling)
Anti-jamming System	Ultra-fast Electronic RPCF
Positioning Control	Digital screen with 3D guidance (Opt)
Remote Operation	Optional via wireless module
Remote Monitoring	IoT System (Real-time status)
Navigation / Drilling Plan	Plan upload via USB / Network (Opt)
MWD (Measure While Drilling)	Optional

CAB, ERGONOMICS & SAFETY

Structure Certification (FOPS / ROPS)	High-strength FOPS / ROPS
Cab Type	Enclosed climate-controlled cabin / Heavy canopy
In-cab Noise Level dB(A)	< 78 (Premium enclosed cabin)
A/C & HEPA Filtration System	Standard on enclosed version (HEPA F9)
Fire Suppression System (Manual / Auto / Brand)	Dual liquid/powder automatic Ansul
Centralized Lubrication System (Auto Grease)	Standard automatic for chassis/boom
Blind-spot Cameras & LED Lighting (Lumens)	360° camera system / 45,000 lm LED



Equipment specifications and images may change without notice from Rhino Equipment Group Inc.



DIMENSIONS & WEIGHT (TRANSPORT POSITION)

Total length mm (ft)	16,041 (52.6)
Transport width mm (ft)	2,295 (7.5)
Transport height mm (ft)	2,398 (7.87) / Canopy up: 3,207 (10.52)
Internal turning radius mm (ft)	4,345 (14.3)
External turning radius mm (ft)	9,045 (29.7)
Ground clearance mm (in)	395 (15.6)
Wheelbase mm (in)	3,545 (139.6)

