



# RFD2X-4070

FACE DRILL





# Maximum control for precise and consistent drilling

This Rhino RFD2X-4070 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

Engine Make - Model	RHINO RFD97T / Weichai WP4G120E310
Engine power kW (HP) @ rpm	97 (130) @ 2300 / 89 (119.3) @ 2300
Emissions certification (Tier / Stage)	Tier 3 / Stage IIIA
Transmission (Type / Model)	Hydrostatic transmission
Chassis type	Heavy-duty articulated
Steering and articulation angle (°)	Hydrostatic power steering, $\pm 42$
Axles / Brakes	Fanyi front and rear axles (Optional: DANA) / Spring-applied, hydraulic-release wet service brake
Maximum speed km/h (mph)	16 (10)
Maximum gradeability (%)	$\geq 25$ (14°)
Tire dimensions and type	14.00 x R20 High flotation
Fuel tank capacity L (gal)	95 (25.1)
Exhaust gas purification system	Exhaust catalytic converter / muffler

## HYDRAULIC SYSTEM

Hydraulic pump type	Hydraulic pumps for impact, positioning and propulsion; Hydraulic pump for rotation
Maximum system pressure bar (psi)	230 (3,335)
Hydraulic tank capacity L (gal)	300 (79.2)
Filtration $\mu\text{m}$	10
Oil cooling system	Stainless steel water cooler for hydraulic oil

## POSITIONING BOOM

Number of booms	2 independent heavy L-design booms
Boom extension mm (ft)	Telescopic: 1,500 (4.9)
Lift angle (°)	-10 / +65
Swing angle (°)	$\pm 45$
Roll-over angle (°)	Feed rollover: 160
Automatic parallelism	Parallel holding in all directions
Anti-collision system	Active proximity sensor
Boom weight kg (lb)	2,150 (4,740) [Per each boom]

## HYDRAULIC DRIFTER

Impact power kW (HP)	18 (24.1)
Percussion pressure bar (psi)	230 (3,335)
Percussion frequency Hz (bpm)	60 (3,600)
Rotation speed rpm	0 - 215
Rotation torque Nm (lb-ft)	1,000 (738)
Drilling diameter mm (in)	33 - 76 (1.3" - 3.0")
Shank adapter	T38
Lubrication air consumption L/s (cfm)	5 (10.6)
Anti-jamming system	Anti-jam drill
Drifter safety systems	2 sets of independent grid systems
Total operating weight kg (lb)	23,000 (50,706)

## FEED BEAM

Feed beam type	TF1838-12 / TF1838-14 / TF1838-16 models
Feed type	Hydraulic cylinder + high-strength steel cable
Feed extension mm (ft)	Feed compensation: 1,250 (4.1)
Feed force kN (lbf)	15 (3,372)
Maximum rod length mm (ft)	3,700 (12.1)
Hole depth mm (ft)	3,400 (11.1)
Reverse extraction system	Mech-hydraulic via active flow reversal



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## DRILLING COVERAGE

Maximum coverage area m <sup>2</sup> (ft <sup>2</sup> )	58.5 (629.7)
Maximum coverage (Width × Height) mm (ft)	8,530 × 6,860 (28.0 × 22.5)
Minimum tunnel section m (ft)	4.0 × 4.0 (13.1 × 13.1)
Maximum tunnel section m (ft)	7.0 × 6.7 (22.9 × 21.9)
Inside turning radius mm (ft)	3,380 (11.1)
Outside turning radius mm (ft)	6,000 (19.7)

## ELECTRICAL SYSTEM (OPERATION)

Main electric motor kW (HP)	2 x 55 (2 x 73.7)
Total installed power kW (HP)	122 (163.6) [2x55 + 7.5 + 4.5]
Voltage / Frequency V (Hz)	380 / 50
Starting method	Star / Delta
Cable reel length m (ft)	Drum capacity: 90 (295)
IP protection rating	IP65
Battery electric tramming	Optional
Battery system	24V (2 x 12V 80Ah)

## WATER AND AIR SYSTEM

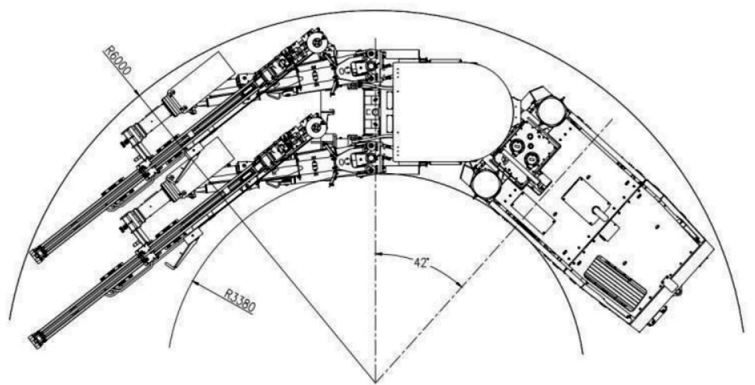
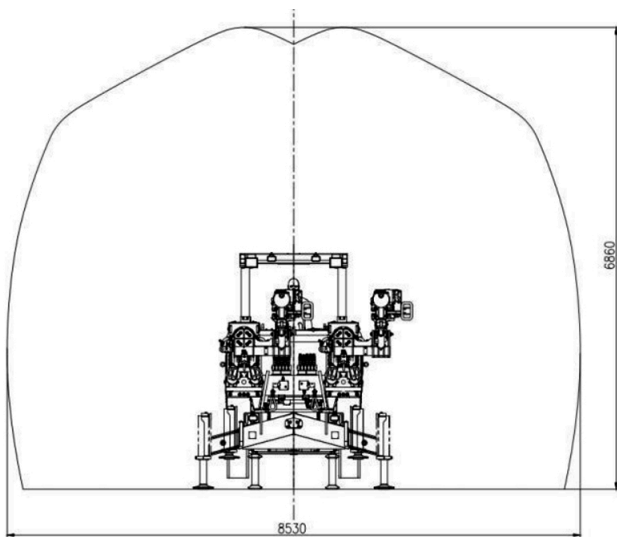
Compressor type	Screw type (Kompressoren)
Compressor capacity m <sup>3</sup> /min (cfm)	0.9 (31.8)
Working air pressure bar (psi)	9 (130)
Lubrication air pressure bar (psi)	3.0 (43.5)
Water pump type	Water pump for the system
Water flow L/min (gpm)	160 (42.3)
Maximum water pressure bar (psi)	6 - 12 (87 - 174)
Pump motor power kW (HP)	4.5 (6.0)

## AUTOMATION, CONTROL AND CONNECTIVITY

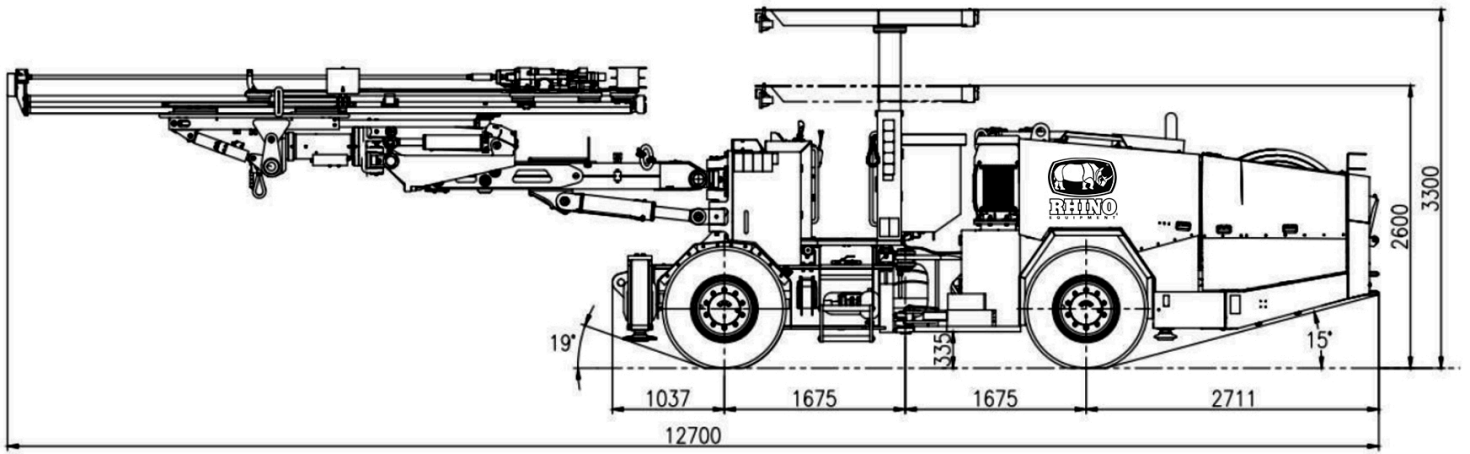
Control system	Direct hydraulic control system
Automation level	Digital operating status display
Anti-jamming system	Mechanical/hydraulic Anti-jam drill function
Positioning control	Integrated angle ruler
Teleremote operation	Optional
Remote monitoring	Digital on-screen monitoring (lubrication failure, oil levels and temperature)
Navigation / Drill plan	Plan upload via USB / Network (Opt)
MWD (Measure While Drilling)	Optional

## CABIN, ERGONOMICS AND SAFETY

Structure certification (FOPS / ROPS)	FOPS certified safety canopy
Cabin type (Enclosed climate-controlled / Safety canopy)	Safety canopy / Optional: Enclosed cabin, Fixed seat with safety belt
Internal noise level in cabin dB(A)	< 78 (Optional enclosed cabin)
Air conditioning and HEPA filtration system	Optional (HEPA F9)
Fire suppression system (Manual / Automatic / Brand)	Fire extinguisher / Optional: Centralized lubrication system
Centralized lubrication system (Automatic greasing)	Automatic (Includes greasing machine and grease reel)
Blind-spot assist cameras and LED lighting (Lumens)	Tramming lights: 8x55W, brake light, position light, horn and backup alarms



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### DIMENSIONS AND WEIGHT (TRAMMING POSITION)

Total length mm (ft)	12,700 (41.7)
Transport width mm (ft)	2,000 (6.6)
Transport height mm (ft)	2,500 / Canopy up: 3,300 (8.2 / 10.8)
Inside turning radius mm (ft)	3,380 (11.1)
Outside turning radius mm (ft)	6,000 (19.7)
Ground clearance mm (in)	335 (13.2)
Wheelbase mm (in)	1,675 (65.9) [between main axles]
Approach angle (°)	19
Departure angle (°)	15



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