

## APPLICATION

The Quasar 1L is a compact and flexible electro-hydraulic long hole drilling jumbo for production drilling in underground mines. The Quasar 1L, designed for vertical and inclined plane rings and fans, is capable of drilling 51 - 64 mm holes up to 20 m.

The robust dedicated long-hole boom has 1.5 meters parallel drilling coverage. The 360° rotation in full parallel coverage area and wide angle ranges forward and backwards make the boom suitable to various drilling applications.

The jumbo layout is designed for good visibility and balance, this and the powerful four-wheel-drive articulated carrier ensure fast and safe manoeuvring in small drifts.

The high performance drilling system allows high drilling performance with good drill steel economy and high machine reliability.

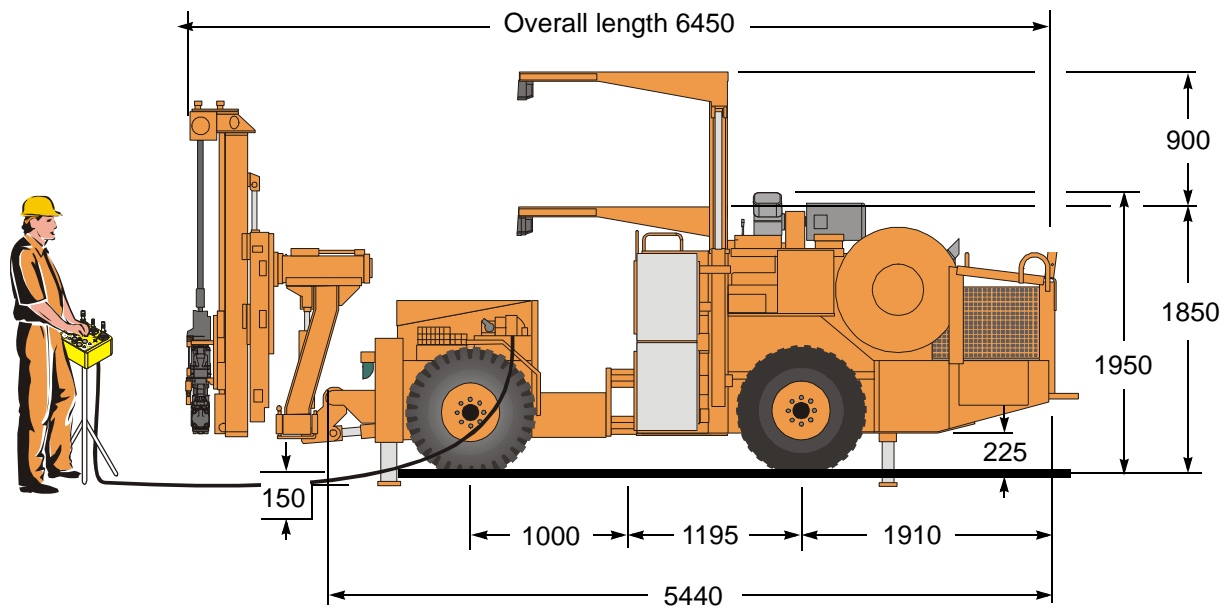
The operator environment and added automatic functions allow the operator to concentrate on safe, fast and accurate drilling.

All the service points are well protected but easy to access.

## MAIN SPECIFICATIONS

Carrier	1 x Quasar
Safety canopy	1 x FOPS
Rock drill	1 x HL 510 LH
Feed	1 x LHF 2005-5
Boom	1 x BSL 360
Control system	1 x IBCL
Portable remote control	1 x ECRL
Power pack	1 x 45 kW
Length	6 450 mm
Width	1 290 mm
Height	1 850 / 2 750 mm
Weight	7 400 kg
Tramming speed horizontal	6.5 kph
13%=1:7=8°	4 kph
Gradeability, max	35 %
Noise level (EN791)	Free field condition
- Operator's platform	LpA = 102 dB
- Emitted	LwA = 124 dB

## GENERAL DIMENSIONS



All dimensions in mm

### HL 510 LH ROCK DRILL (Technical specification 2-1150)

Weight		130 kg
Length		1 024 mm
Profile height		76 mm
Percussion power		16 kW
Max working pressure	- Percussion	175 bar
	- Rotation	175 bar
Max torque (125 ccm motor)		625 Nm
Hole size		51 - 64 mm
Shank adapter		R38 / T38
Flushing water pressure		10 - 20 bar

### LHF 2000-5 FEED (Technical specification 3-305 S)

Extension rod	Round 32 / 39 / 46
Feed force	20 kN

	Optional	Optional	Standard
	LHF 2003	LHF 2004	LHF 2005
Total length (mm)	2570	2885	3200
Extension rod length (mm)	915	1220	1525
Mini operating dimension (mm)	2700	3000	3300
Net weight (kg)	745	760	775

### BSL 360 BOOM (Technical specification 4-400 S)

Type	Vertical parallel drilling
Weight (with hoses)	800 kg
Feed roll-over	360°
Feed tilt	30° forward, 70° backward
Feed extension	1 200 mm
Parallel drilling coverage	1 500 mm

### HYDRAULIC CONTROL SYSTEM

Type	IBCL
Control functions	Auto smooth collaring Precise anti-jamming Back pressure for gravity compensation Electro-valves for remote control implementation

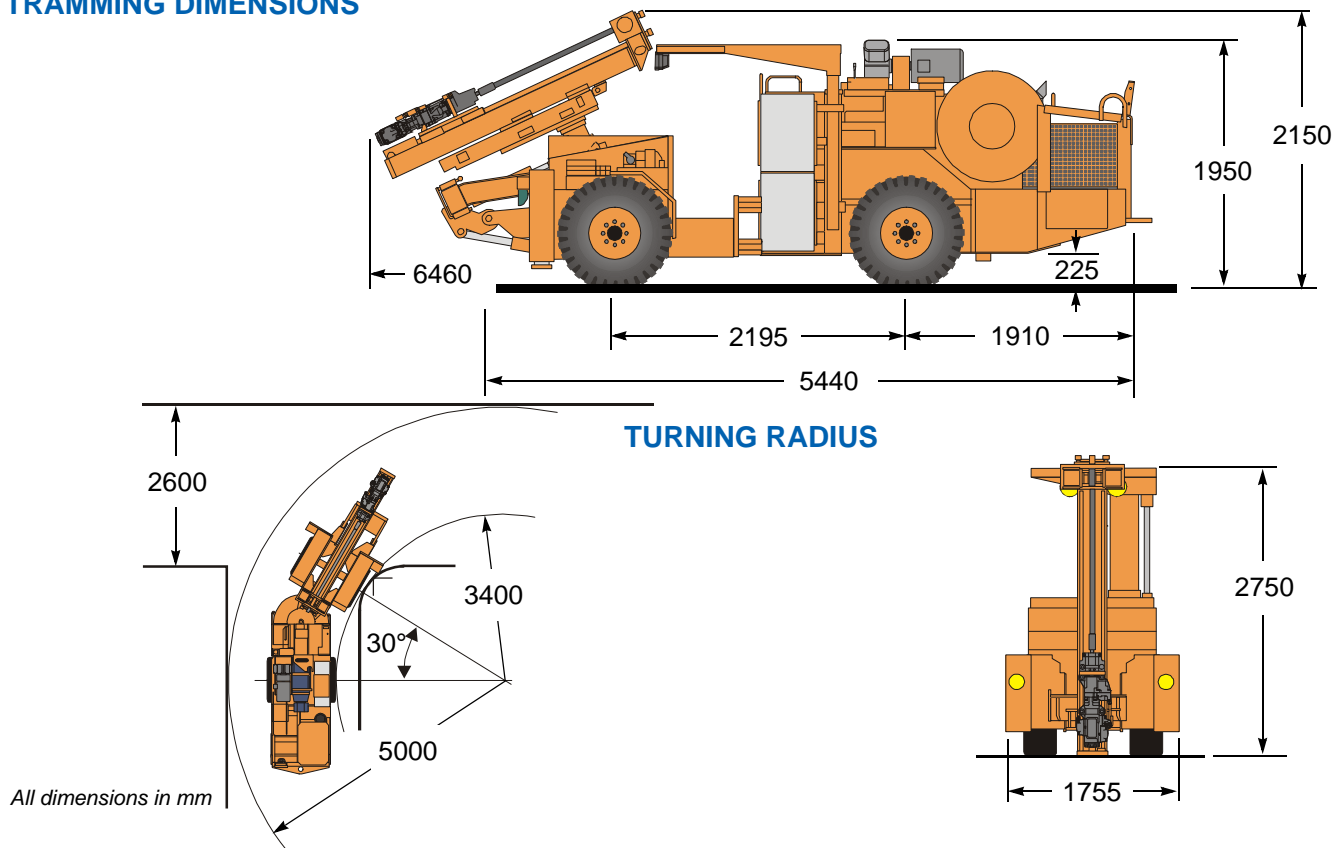
### PORTABLE ELECTRIC REMOTE CONTROL

Model	ECRL
Controls	Percussion, rotation, flushing Drill feed (thrust, screwing, rod clamp, stingers)

### ELECTRO HYDRAULIC POWER PACK

Electrical motor	45 kW (60hp)
Hydraulic pump type	Radial piston Fixed displacement

## TRAMMING DIMENSIONS



## QUASAR CARRIER

Diesel engine	Deutz F3L 912 W, 30 kW (41 hp)
- Exhaust	Catalyser
Hydrostatic transmission	Variable displacement
- One pump	Axial piston, 0-75 cm <sup>3</sup> /rev
- Four wheel-motor	Radial piston
Oscillation	Rear axle, 2 x 6°
Tires	10.00 x 15
Steering	Frame steering, 2 x 30°
Brakes - Service	Hydrostatic transmission
- Emergency & parking	Spring applied, hydraulically released fail safe type
	oil immersed multi disc brakes on each wheel
Stabilizers	2 hydraulic jacks, front 2 hydraulic jacks, rear
Safety telescopic canopy	Hydraulic, FOPS
- Lowering capability	900 mm
Fuel tank	60 litre
Hydraulic tank	130 litre

## AIR CIRCUIT

Compressor	Piston type
- Capacity	800 l/min.at 4 bar
Electric motor	5.5 kW (7.5 hp)

## WATER CIRCUIT

Water pump type	1 x WBP 2 (4.0 kW)
- Capacity	100 l/min (12 bar)
	With 2 bar inlet pressure
- Inlet pressure	2 - 7 bar (while drilling)
Inlet pressure control valve	1 x WP 70
Oil cooler	OC 25, water-actuated counterflow
- Cooling capacity	25 kW

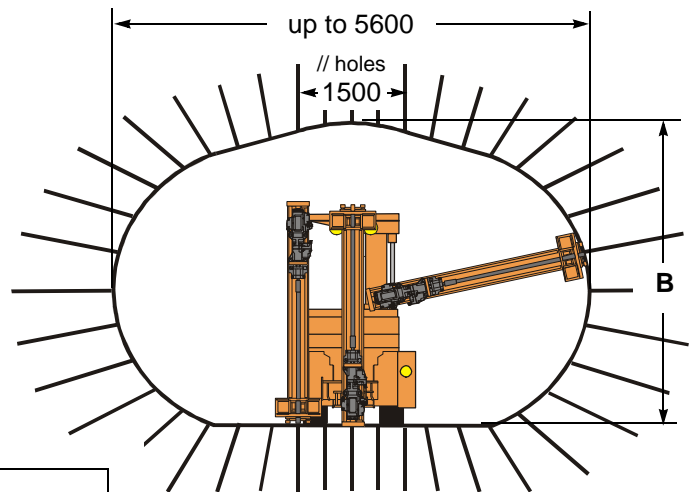
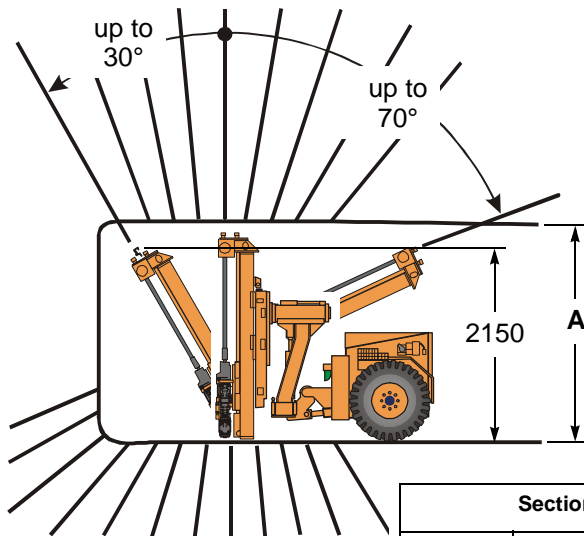
## ELECTRICAL SYSTEM

Total installed power	60 kW
Voltage	380 - 660 V
Phase sequence indicator	
Frequency	50 or 60 Hz
Starting method	Star / Delta
Thermal overload protection	
Cable reel capacity	80 m of cable 32 mm O.D
Lighting - Working lights	2 x 70 W, 24 V
- Tramming lights	3 x 70 W, 24 V
	(the 2 front lights are also used as working lights)
Batteries - Voltage - Rating	2 x 12 V - 120 Ah
Transformer rating	1.3 kVa

## FULL DIESEL VERSION AVAILABLE

Air-cooled engine	Deutz F6L 912 W
- Max. rating at 2300 rpm	54 kW (74 hp)
Fuel tank capacity	170 litre
Compressor & water pump driven by hydraulic motors	
Total machine weight	8 200 kg

## COVERAGE AREA



Sections Height			
Feed	Rod	Mini A	Maxi* B
LHF 2003	915	2700	3800
LHF 2004	1220	3000	4100
LHF 2005	1525	3200	4400

All dimensions in mm

## OPTIONAL EQUIPMENT

### DRILLING SYSTEM

Drill angle measuring instrument TMS D1.  
Auto air flushing on rock drill return.  
Air cleaner IP5 plus auxiliary connection for mine air network.  
\*) Air mist flushing kit for auxiliary water/air connection.  
Cuttings collector.  
Front stinger.

### ELECTRICAL SYSTEM

\*) 1 000 V electric power supply.  
Ground fault detector  
- not applicable to 1 000 V  
Electric cable (*Technical specification 5-4100*).  
\*) Allen Bradley electrics.  
\*) 2 x 150 W halogen working lights.

### HIGH ALTITUDE OPTIONS

\*) F4L 912W Diesel engine (1000 m < altitude < 2400 m).  
Altitude compensator for D4 engine (altitude > 2400m)  
Altitude compensator for D6, full Diesel version.

### CARRIER

Fume diluter.  
Complete spare wheel.  
Hand pump for manual brake release.

## OTHER OPTIONAL EQUIPMENT

Fire suppression system ANSUL, 6 nozzles.  
Reverse alarm.  
\*) EU, UL, CSA, AUS norms package + local standards and regulations.  
Pressure cleaning system (10 bar) without reel.  
\*) Electric oil filling pump.  
Centralized greasing.  
Automatic lubrication system (Lincoln).  
Biodegradable oils.  
\*) Ni-Cr plated cylinder rods.  
Manuals other than French/English language.  
\*) replaces standard component

## CAGING DIMENSIONS AND WEIGHT

		Front Part	Rear Part
Length	(mm)	2 390	3 220
Width	(mm)	1 670	1 200
Height	(mm)	1 285	1 480
Weight (approximate)	(kg)	2 400	4 000

**Nota:** Caging and weight on primary dismantling, with wheels.