APPLICATION

The Tamrock Quasar 1F is a compact and flexible single boom electro hydraulic jumbo for mining development in cross sections up to 24 m².

The robust universal boom have a large optimum shaped coverage, 360° rotation and full automatic parallelism for fast and easy face drilling. The boom can also be used for cross-cutting and bolt-hole drilling.

The jumbo layout is designed for good visibility and balance, this and the powerful four-wheel-drive articulated carrier ensure fast and safe manoeuvering 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier</td>
<td>1 x Quasar</td>
</tr>
<tr>
<td>Rock drill</td>
<td>1 x X 2 F</td>
</tr>
<tr>
<td>Boom</td>
<td>1 x B 14 F</td>
</tr>
<tr>
<td>Feed</td>
<td>1 x CC 2500</td>
</tr>
<tr>
<td>Length</td>
<td>9 090 mm</td>
</tr>
<tr>
<td>Width</td>
<td>1 200 mm</td>
</tr>
<tr>
<td>Height</td>
<td>1 850 mm</td>
</tr>
<tr>
<td></td>
<td>2 750 mm</td>
</tr>
<tr>
<td>Turning radius</td>
<td>5 100 / 3 400 mm</td>
</tr>
<tr>
<td>Tramming speed</td>
<td>6.5 kph</td>
</tr>
<tr>
<td></td>
<td>4 kph</td>
</tr>
<tr>
<td>Gradeability, maxi</td>
<td>35 %</td>
</tr>
<tr>
<td>Noise level</td>
<td>&lt; 98 dB(A)</td>
</tr>
<tr>
<td>Weight</td>
<td>9 100 kg</td>
</tr>
</tbody>
</table>
GENERAL DIMENSIONS

ROCK DRILL
Model: X 2 F
Standard male shank: R 38 - T 38
Weight: 135 kg
Impact frequency: 52 - 59 Hz
Percussion pressure: 160 - 210 bar
Impact power: 14 - 19 kW

FEED
Model: CC 2500
Drill steel: H 25 till H 35

<table>
<thead>
<tr>
<th>Model</th>
<th>CC 2508</th>
<th>CC 2510</th>
<th>CC 2512</th>
<th>CC 2514</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length (mm)</td>
<td>4055</td>
<td>4665</td>
<td>5275</td>
<td>5880</td>
</tr>
<tr>
<td>Drill steel length (mm)</td>
<td>2475</td>
<td>3090</td>
<td>3700</td>
<td>4305</td>
</tr>
<tr>
<td>Hole depth (mm)</td>
<td>2090</td>
<td>2700</td>
<td>3310</td>
<td>3910</td>
</tr>
<tr>
<td>Net weight (kg)</td>
<td>300</td>
<td>360</td>
<td>420</td>
<td>480</td>
</tr>
<tr>
<td>Feed force, max. (kN)</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

BOOM
Model: B 14 F
Type: Parallel holding
Weight (with hoses): 1 500 kg
Feed roll-over: 360°
Feed extension: 2 000 mm

HYDRAULIC CONTROL SYSTEM
Type: IBCQF
Control functions: Auto smooth collaring, Precise anti-jamming
Only 1 control lever for thrust/percussion (full & half)

ELECTRO HYDRAULIC POWER PACK
Electrical motor: 45 kW (60hp)
Hydraulic pump type: Radial piston
Fixed displacement

FEED ALTERNATIVE
Model: NVTF
Type: Telescopic
Steel length: 6/10 ft
Drill steel: H 25 till H 35

All dimensions in mm
Technical Specification
QUASAR 1F
6-110 S-C
2003-01-27

TRAMMING DIMENSIONS

Overall Length
- CC 2508: 9,090 mm
- CC 2510: 9,090 mm
- CC 2512: 9,530 mm
- CC 2514: 9,670 mm

TURNING RADIUS

MINI OPERATING SECTION

CARRIER

Model: Quasar
Diesel engine: Deutz F3L 912 W, 30 kW (41 hp)
- Exhaust: Catalyser
Hydrostatic transmission
- One pump: Variable displacement Axial piston, 0-75 cm³/rev
- Four wheel-motor: Radial piston
Oscillation: Rear axle, 2 x 6°
Tyres: 10.00 x 15
Steering: Frame steering, 2 x 30°
Brakes
- Service: Hydraulic transmission
- Emergency & parking: Hydraulic oil immersed multiple disc brakes on each wheel
Stabilizers: 2 hydraulic outriggers, front
- with 14 ft.or telescopic feed: 2 hydraulic jacks, rear
Safety canopy: Hydraulic, FOPS
- Lowering capability: 900 mm
Fuel tank: 60 litre
Hydraulic tank: 130 litre

AIR CIRCUIT

Compressor: C.T. 1, piston type
- Capacity: 400 l/min.at 4 bar
Electric motor: 3 kW (4 hp)

WATER CIRCUIT

Water booster pump: W.B.P. 2, centrifugal
- Capacity: 4000 l/h at 15 bar
- Electric motor: 4 kW (5.5 hp)
Oil cooler: OC 25, water-actuated counterflow
- Cooling capacity: 25 kW

ELECTRICAL SYSTEM

Total installed power: 60 kW
High / Low voltage: Separate cabinets
Voltage
- Standard: 380 - 660 V
- Alternative: 1 000 V
Frequency: 50 or 60 Hz
Starting method: Star / Delta
Cable reel: CRQ type
- 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)

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
$$\text{QUASAR 1F}$$

**COVERAGE AREA**

![Coverage Area Diagram](image)

**OPTIONAL EQUIPMENT**

**DRILLING SYSTEM**

- Drill angle measuring instrument TMS D2.
- Air flushing.
- Air mist flushing kit for auxiliary water/air connection.
- Front clamping head on drill feed.

**BRAKES**

- Hand pump for manual brake release.

**ELECTRICAL SYSTEM**

- 1 000 V electric power supply.
- Ground fault detector - not applicable to 1 000 V
- Electric cable
  - 380-575 V, 4 x 25 mm², ø 32 mm, 80 m length
  - 660-690 V, 4 x 25 mm², ø 32 mm, 80 m length, direct start
- Allen Bradley electrics.

**CARRIER**

- Front narrow outriggers for confined areas + 2 rear jacks.
- Extendable front jacks.
- Electric oil filling pump.
- Fume diluter.
- Hydraulic low oil level indicator and switch.
- Complete spare wheel.
- 4 Michelin X mine D2 instead of standard types.

**OTHER OPTIONAL EQUIPMENT**

- Fire suppression system ANSUL, 6 nozzles.
- Reverse alarm.
- EU, UL, CSA, AUS norms package + local standards and regulations.
- Automatic lubrication system (Lincoln) for both boom and carrier.
- Central lubrication system.
- Hook up for mine air network (IP5 air cleaner included).
- Ni-Cr plated cylinder rods.
- Manuals other than French/English language.
- Replaces standard component