

# AXERA T11 DATA-315



## APPLICATION

The Tamrock Axera T11 DATA-315 is a computer-controlled 3-boom electrohydraulic jumbo for fast and accurate drilling in tunneling and cavern excavation of 20 - 177 m<sup>2</sup> cross sections.

The TDATA is an automatic control system for all drilling functions and boom positioning under supervision of a rig operator. The user interface consists of an ergonomically designed operator panel with color display and integrated keyboard for data drilling operations. The computerized drilling of a preprogrammed drill plan enables continuous productivity, quality and economy. TDATA includes TLOG system for data collection and reporting. Extensive built-in diagnostics help to minimize maintenance time.

The TB 150 booms have a large optimum shaped coverage and electronic parallel holding in manual mode. The booms can also be used for cross-cutting, bolt hole drilling and extension drilling applications. An optional basket boom for bolting and utility works is available.

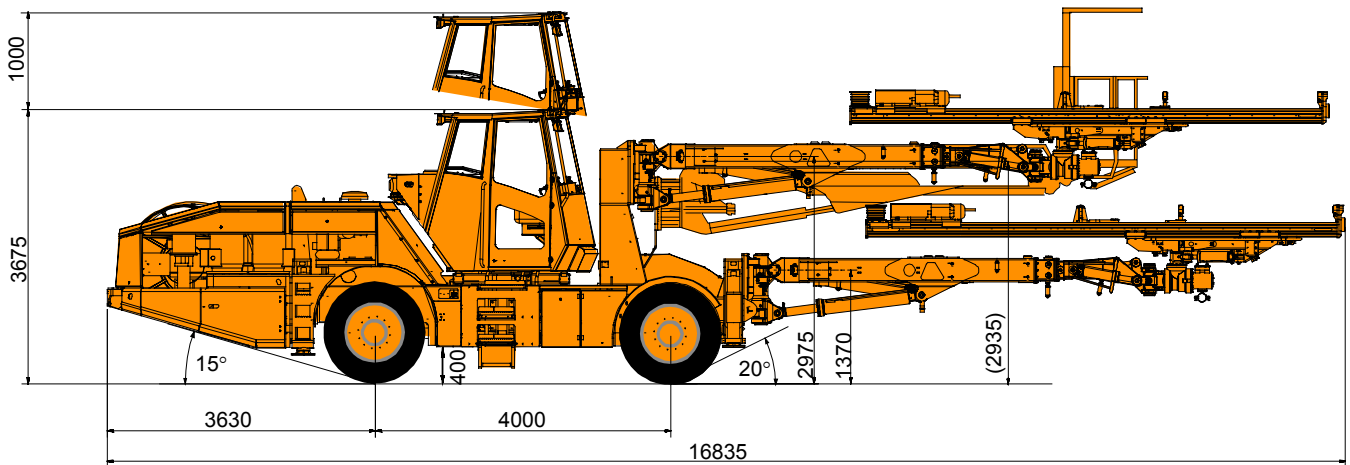
The powerful 4-wheel-drive wheel steered carrier ensures rapid and safe tramming with good balance.

The noise and vibration insulated safety cabin provides an ergonomic workplace with excellent visibility for both tramming and drilling.

## MAIN SPECIFICATIONS

Carrier	1 x TC 450
Safety cabin	1 x FOPS ISO 3449
	Elevating (1000 mm)
Rock drill	3 x HLX5T
Feed	3 x TF 500-16
Boom	3 x TB 150
Control system	1 x TPC 561 DATA
Powerpack	3 x HP 560 (55 kW)
Shank lubricating device	1 x SLU 3
Air compressor	1 x CT 28
Water pump	1 x WBP 3 HP
Main switch	1 x MSE 30
Cable reel	1 x TCR 5
Greasing reel with pump and nozzle	
Length	16 835 mm
Width	2 900 mm
Height	3 675 / 4 675 mm
Weight	40 500 kg
Tramming speed:	
- Horizontal	12 km/h
- 14% = 1:7 = 8°	3.5 km/h
Gradeability	28% = 1:3.5 = 15°
Noise level (EN791, free field condition)	
- In cabin	LpA = 80 dB
- Emitted	LwA = 128 dB

## GENERAL DIMENSIONS



### TC 450 CARRIER

Diesel engine	Deutz BF4M 1013 C, 112 kW
Transmission	Clark 20000 Hydrodynamic
Axles	Clark-Hurth
Brakes	
- Service	Hydraulically operated wet disc brakes
- Parking and emergency	SAHR type, fail safe dry disc brakes
Tyres	14.00 - 24 PR 28, double wheels in front
Steering	Axle steering in engine end, Orbitrol
Rear oscillation	± 8°
Ground clearance	400 mm
Fuel tank	150 l
Hydraulic jacks	2 x TJ 75 front 2 x TJ 75 rear
Safety cabin	FOPS ISO 3449 Elevating (1000 mm) Pressurized Cabin heating during drilling Operator's seat

### HLX5T ROCK DRILL

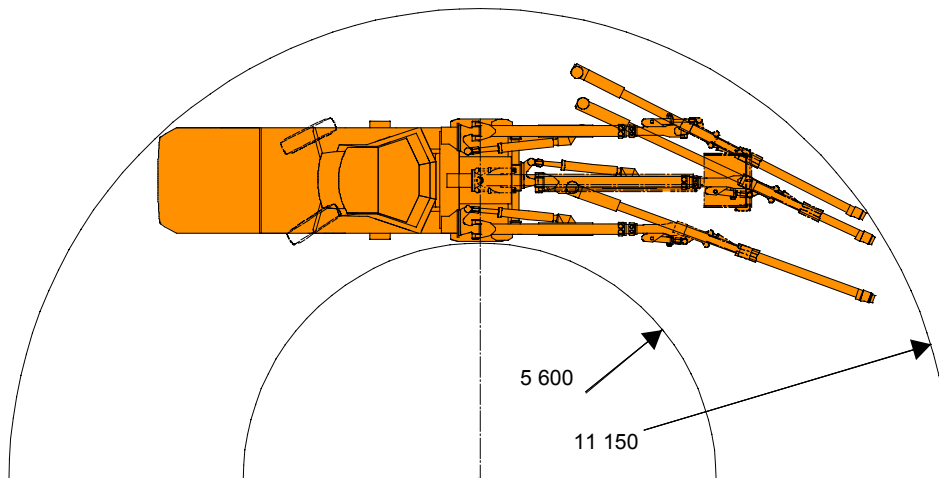
Weight	218 kg
Length	1020 mm
Profile height	87 mm
Power class	22 kW
Max working pressure	
- Percussion	245 bar
- Rotation	175 bar
Max torque (125 ccm motor)	625 Nm
Stabilizer	Hydraulic, 2-stage
Hole size	43 - 64 mm
Recommended steel	T38-H35-R32 T38-H35-alpha 330 T38-R39-R35
Shank adapter	7304-7585-01 (T38)
Flushing water pressure	10 - 20 bar

### TF 500 FEED

Feed type	Cylinder - wire rope
Feed force	25 kN

TF 500	Total length mm	Hole length mm	Rod length mm	Machine length mm
500 x 14	5 880	4 050	4 305	16 235
500 x 16	6 490	4 660	4 915	16 835
500 x 18	7 100	5 270	5 525	17 275
500 x 20	7 710	5 880	6 135	18 035
500 x 21	8 015	6 180	6 440	18 235

## TURNING RADIUS



### TB 150 BOOM

Parallel coverage	159 m <sup>2</sup>
Boom extension	3 200 mm
Feed extension, with TF-feed	1 650 mm
Boom weight, net	3 300 kg
Rotation angle	358°

### TPC 561 DATA CONTROL SYSTEM

Operational levels	AUTO for fully automatic operation MANIPULATOR for manual operation DIRECT for special operation and service
Power control	Adjustable full power Adjustable collaring power
Rotation control	Adjustable rotation speed
Automatic functions	Boom positioning with - Correct feature for feed alignment - Find rock feature Collaring with - Rock detect feature - Two ramps to full power Feed controlled percussion Adaptive drilling Anti-jamming Flushing with - Flow control - Hole cleaning with air Stop and return Reaming
Extension drilling controls	
Self-diagnostics	Real time fault finding System messages on screen Alarm logs Service mode for check-up and calibration

### HP 560 POWERPACK

Electric motor	1 x 55 kW 3-phase motor
Pump types:	
- Percussion, feed and boom	1 x 135 l/min variable displacement axial piston pump
- Rotation	1 x 64 l/min variable displacement axial piston pump
- Basket boom (option)	1 x 45 l/min gear pump
Filtration:	
- Pressure	1 x 20 micron
- Return	1 x 10 micron
Oil tank volume	Max 470 l, min 270 l
Tank filling	1 x manual pump
Oil cooling	1 x OW 30

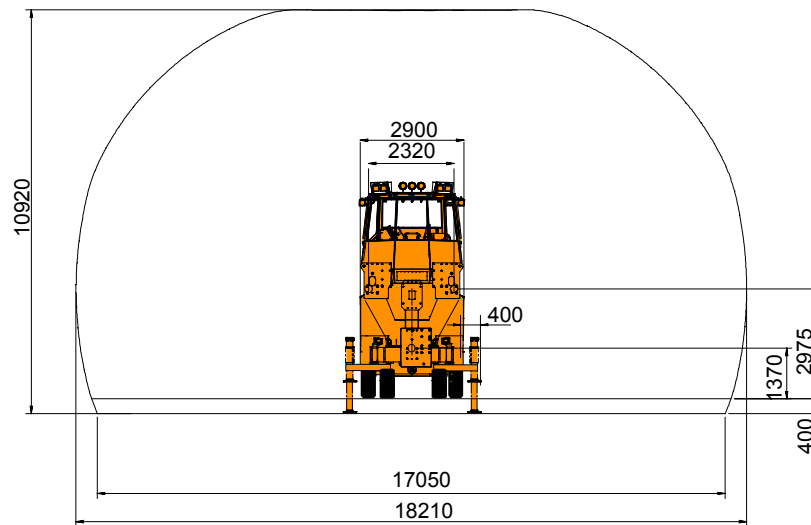
### AIR AND WATER CIRCUIT

Compressor type:	1 x CT 28 (18.5 kW)
- Capacity	2.8 m <sup>3</sup> /min (7 bar)
Shank lubricating device:	1 x SLU 3
- Air consumption	250-350 l/min/rock drill
- Oil consumption	180-250 g/h/rock drill
Water pump type:	1 x WBP 3 HP (11 kW)
- Capacity	250 l/min (15 bar)
- Inlet pressure	2 - 10 bar
Water pressure valve:	1 x WP 70 HP

### ELECTRICAL SYSTEM

Total input power	205 kW
Main switch	1 x MSE 30
Standard voltages	380...690 V
Voltage fluctuation	max. ± 10%
Lighting:	
- Working lights	2 x 1 500 W, 220 V 2 x 500 W, 220 V
- Driving lights	8 x 70 W, 24 V
Automatic cable reel:	1 x TCR 5

## PARALLEL COVERAGE AREA



## OPTIONAL EQUIPMENT

### DRILLING SYSTEM

- \* 3 x HFX5T High frequency rock drills
- \* Feed length 14 ft, 18 ft, 20 ft, 21 ft
- Rod retainer TRR1 for one feed
- TRS two rod system for one boom (includes TRR1)
- Air mist flushing kit for auxiliary water/air connection
- \* TB 90 middle boom instead of TB 150

### ELECTRICAL SYSTEM

- Electric cable rubber or PUR
- Ground fault and overcurrent unit VYK
- Portable ground fault and overcurrent unit VYK P (max. 415 V)
- \* 1000 V electric system
- Star-Delta starting (380 ... 690 V only)
- Spot light (70 W) for basket boom TBB 5E

### CARRIER

- \* Carrier TC 500 (165 kW), transmission Clark 32000
- Air conditioning for cabin
- Cabin heating during tramming
- 12 V electric outlet and radio/CD-player readiness in cabin
- CD player/radio in cabin
- Exhaust scrubber
- Exhaust catalyzer

### OTHER OPTIONAL EQUIPMENT

- Fire extinguisher (bottle only)
- Manual fire suppression system ANSUL, 8 nozzles
- Pressure cleaning system (15 bar) with reel
- High pressure cleaning system with reel and handset
- Automatic water hose reel THR 5
- Water hose 2" (60 m)
- \* Electric filling pump for hydraulic oil
- Automatic greasing system (Lincoln)
- Biodegradeable oils
- Basket boom TBB 5E (Note: Change in weight)
- FOPS safety canopy for basket boom TBB 5E
- PC computer with factory installed software
- \* EU, UL, CSA, AUS norms package

\*) replaces standard component