



## APPLICATION

The Tamrock Axera T11 DATA-315 is a computer controlled 3-boom electro-hydraulic 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 HFX5T high frequency rock drills deliver superior performance with high consumable life.

The TB 150 universal booms have a large optimum shaped coverage and full automatic parallelism. 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.

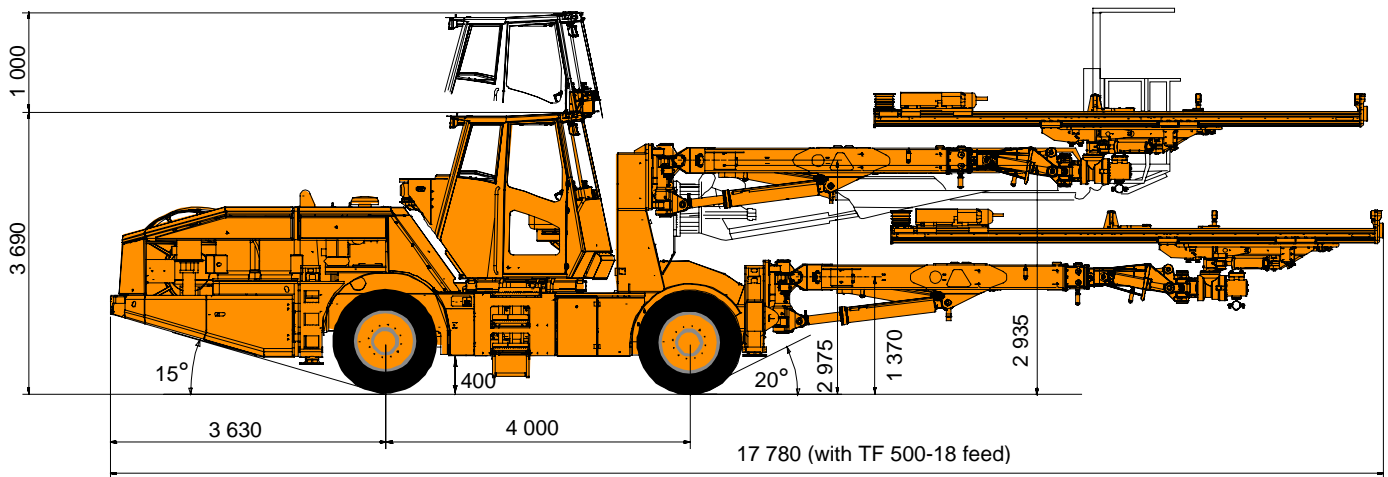
The powerful 4-wheel-drive wheel steered carrier ensures rapid and safe tramping with good balance.

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

## MAIN SPECIFICATIONS

Carrier	1 x TC 11
Safety cabin	1 x FOPS (ISO 3449) Elevating (1 000 mm)
Rock drill	3 x HFX5T
Feed	3 x TF 500-18
Boom	3 x TB 150
Control system	1 x TPC 561 DATA
Powerpack	3 x HP 575 (75,0 kW)
Air compressor	1 x CT 28 (18,5 kW)
Shank lubricating device	1 x SLU 3
Water pump	1 x WBP 3 HP (11,0 kW)
Main switch	1 x MSE 30
Cable reel	1 x TCR 6 E
Greasing reel	1 x reel With pump and nozzle
Length	17 780 mm
Width	2 900 mm
Height	
Cabin down	3 690 mm
Cabin up	4 690 mm
Weight	40 500 kg
Tramping speed	
Horizontal	12,0 km/h
14 % = 1:7 = 8°	3,5 km/h
Gradeability	28 % = 1:3,5 = 15°
Noise level (EN 791, free field condition)	
In cabin	LpA = 80 dB
Emitted	LwA = 128 dB

## GENERAL DIMENSIONS



### TC 11 CARRIER

Diesel engine	MB OM 904 LA 110 kW (148 hp)
Transmission	Clark 20 000 Hydrodynamic
Axles	Clark-Hurth
Brakes	
Service	Hydraulically operated wet disc brakes
Parking and emergency	SAHR type fail-safe Front: dry disc brakes Rear: wet 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	
Front	2 x TJ 60 Telescopic
Rear	2 x TJ 75
Safety cabin	FOPS (ISO 3449) Elevating (1 000 mm) Pressurized Cabin heating (drilling) Operator seat

### HFX5T ROCK DRILL

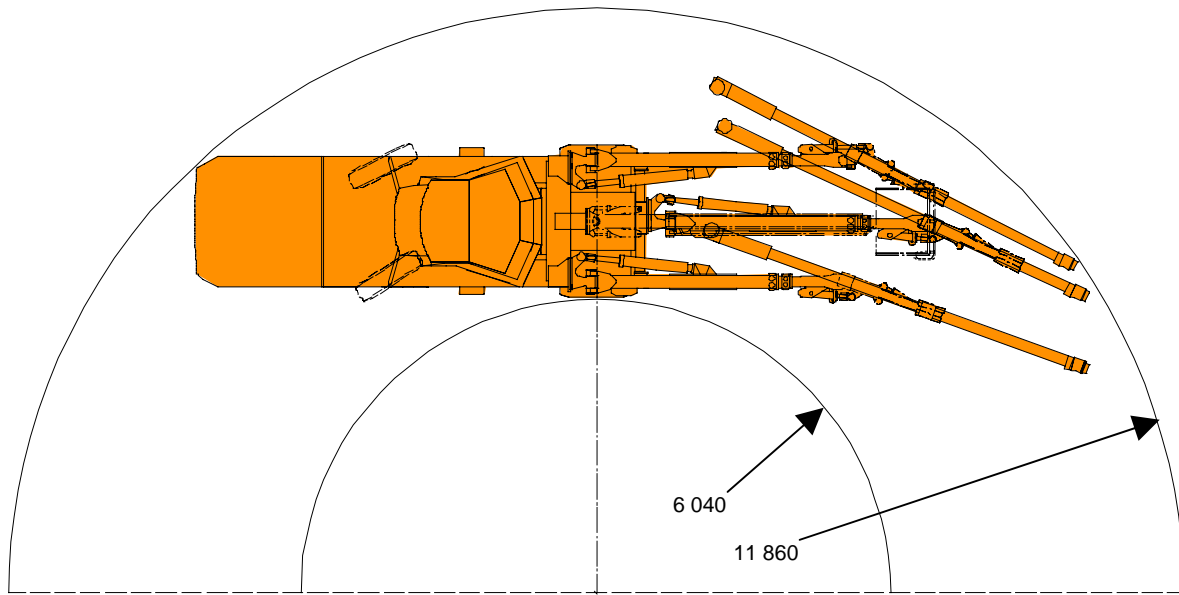
Weight	218 kg
Length	1 020 mm
Profile height	87 mm
Power class	24,5 kW
Max working pressure	
Percussion	245 bar
Rotation	175 bar
Max torque	
125 cm <sup>3</sup> motor	625 Nm
Stabilizer	Hydraulic, 2-stage
Hole size	45 – 64 mm
Recommended steel	T38-H35-R32 T38-H35-alpha 330 T38-R39-R35
Shank adapter	7304-7585-01 (T38)
Flushing water pressure	10 – 20 bar

### TF 500 FEED

Feed type	Cylinder – wire rope
Feed force	25 kN

FEED TF 500–	Total length (mm)	Hole length (mm)	Rod length (mm)	Machine length (mm)
14'	5 880	4 050	4 305	16 740
16'	6 490	4 660	4 915	17 340
18'	7 100	5 270	5 525	17 780
20'	7 710	5 880	6 135	18 540
21'	8 015	6 180	6 440	18 740

## 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	Fully automatic operation
MANIPULATOR	Manual operation
DIRECT	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 575 POWERPACK

Electric motor	1 x 75 kW
	3-phase motor
Pump types	
Percussion, feed and boom	1 x 148 l/min variable displacement axial piston pump
Rotation	1 x 81 l/min variable displacement axial piston pump
	1 x 45 l/min gear pump
Basket boom (option)	
Filtration	
Pressure	1 x 20 micron
Return	1 x 10 micron
Oil tank volume	Max. 470 l, min. 270 l
Tank filling	1 x electric pump
Oil cooling	1 x OW 30 water cooler

### AIR 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

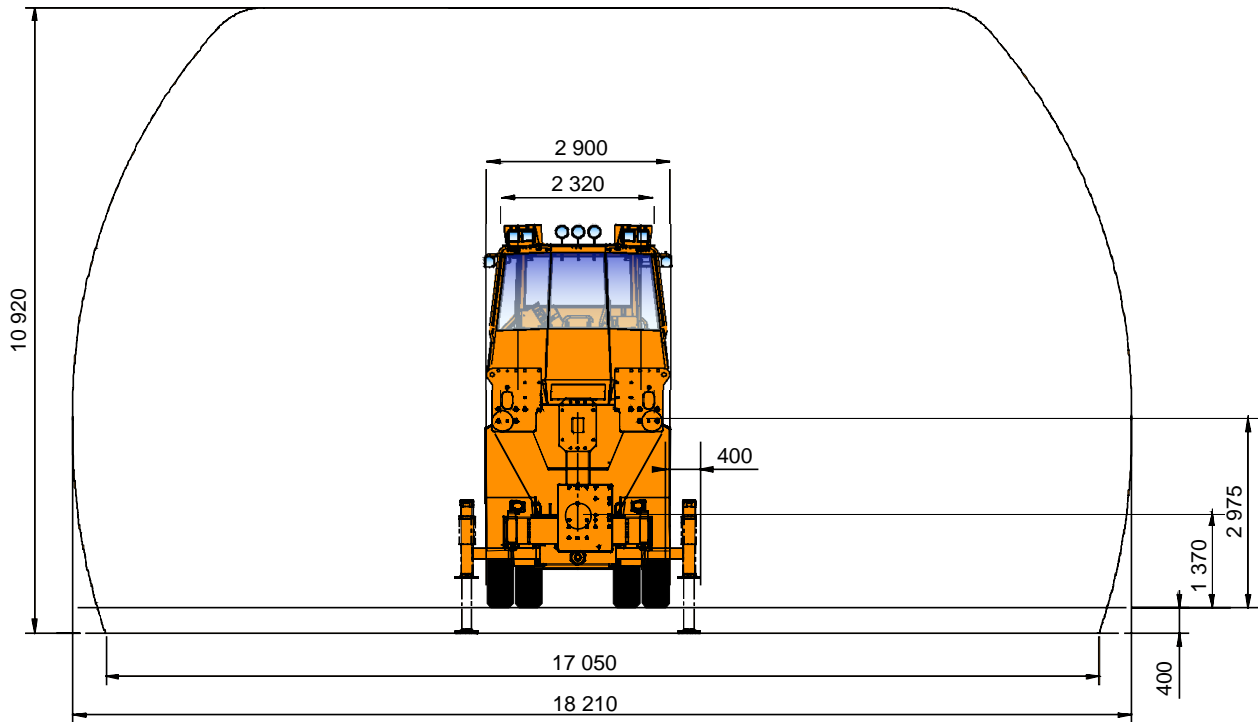
### WATER CIRCUIT

Water pump type	1 x WBP 3 HP (11,0 kW)
Capacity	375 l/min (15 bar)
	With 5 bar inlet pressure
Inlet pressure	2 – 7 bar (while drilling)
Outlet pressure control valve	1 x WP 100 HP

### ELECTRICAL SYSTEM

Total input power	255 kW
Main switch	1 x MSE 30
Standard voltages	380 – 690 VAC
Voltage fluctuation	Max. ± 10 %
Lighting	
Combined working and driving lights (24 VDC)	12 x 35 W (HID) front
Working lights	2 x 35 W (HID) rear
Driving lights	2 x 35 W (HID) rear
Automatic cable reel	1 x TCR 6 E

## COVERAGE AREA



## OPTIONAL EQUIPMENT

### DRILLING SYSTEM

- \*) 3 x 55 kW powerpacks and 3 x HLX5T rock drills
- \*) Feed length 14', 16', 20' or 21'
- \*) TB 90 middle boom
- Rod retainer TRR1 for one feed
- TRS two-rod system for one boom (includes TRR1)
- Air mist flushing kit for auxiliary water/air connection

### ELECTRICAL SYSTEM

- Electric cable rubber or PUR
- Ground fault and overcurrent unit VYK
- \*) 1 000 VAC electric system
- Star-Delta starting (380 – 690 VAC only)
- Spotlight 70 W (24 VDC) for basket boom TBB 5i

### CARRIER

- \*) Carrier TC 12 (170 kW) with transmission Clark 32000
- Air conditioning for cabin
- Cabin heating (tramping)
- 12 VAC electric outlet and CD-player / radio readiness
- CD-player / radio in cabin
- Exhaust scrubber
- Exhaust catalyzer
- Complete spare wheel

### 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 E
- Water hose 2" (60 m)
- Automatic greasing system (Lincoln)
- Biodegradable oils
- Basket boom TBB 5i (Note: Change in weight)
- FOPS safety canopy for basket boom TBB 5i
- PC computer with factory installed software
- \*) EU, UL, CSA, AUS norms package

\*) = Replaces standard component

Sandvik Mining and Construction reserves the right to change this specification without further notice.