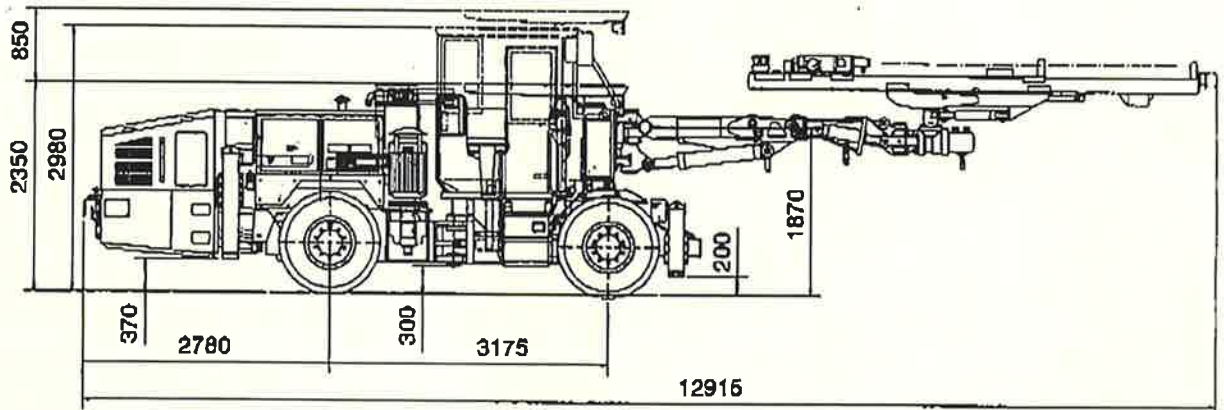


**TAMROCK****MINIMATIC 205-40**

6-3100-A

1998-06-05

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## Technical description

The Minimatic 205-40 is a Power Class two boom electrohydraulic jumbo for rapid drifting and tunnelling in 8 - 49 m<sup>2</sup> cross sections.

The robust universal booms have a large optimum shaped coverage, 358° 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 center articulated carrier guarantees fast and safe tramming.

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

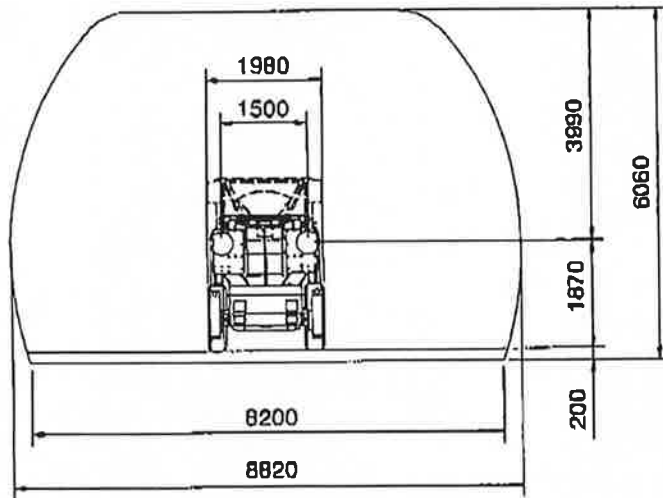
The operator environment and added automatic functions allow the operator to concentrate on safe, fast and accurate drilling.

All service points are well protected but easy to access. The hydraulic pilot operated control system is equipped with quick coupling measuring points for faster troubleshooting and minimized maintenance time.

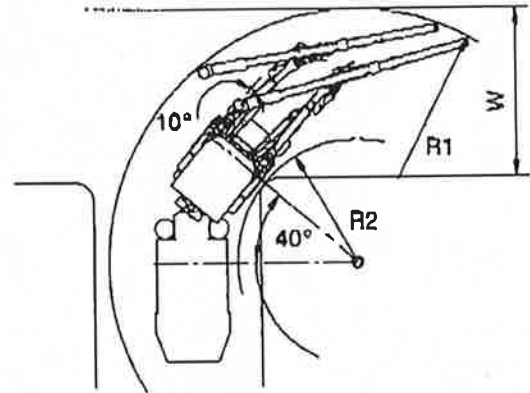
## Components in basic model

1. Carrier	1 x TC 200
2. Rock drill	2 x HL 500 S
3. Feed	2 x CF 145x12
4. Boom	2 x TB 40
5. Control panel	2 x THC 500
6. Powerpack	2 x HP 545, 45 kW
7. Oil cooler	2 x OW 30
8. Main switch	1 x MSE 20
9. Hydraulic jack	2 x HM 40
	2 x HM 75
10. Water pressure valve	1 x WP 70
11. Water booster pump	1 x WBP 2, 4 kW
12. Automatic cable reel	1 x AK 2
13. Shank lubricating device	1 x KVL 10-2
14. Compressor	1 x C 1000
15. Lighting:	4 x 500 W, 220 V
	6 x 70 W, 24 V
16. Safety canopy	1 x Hydraulic

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Parallel coverage (0° lookout angle)



FEED TF500-X	R1	R2	W
10'	6200	3200	4050
12'	6300	3200	4150
14'	6450	3200	4250
16'	6600	3200	4400

## Main weights, dimensions and performance

Length with CF 145x12	12 915 mm
Width	1980 mm
Height, min	2350 mm
max	3200 mm
Weight	19000 kg
Tramming speed	
horizontal	10 km/h
14 % = 1:7 = 8 degrees	4 km/h
Gradeability	28 % = 1:3,5 = 15°
Noise level	
operator platform	105 dB(A) ISO 6394-1985
emitted noise level	103 dB(A) ISO/DIS 11201-1993

## HL 500 S rock drill

Weight	130 kg
Length	1000 mm
Profile height	76 mm
Power class	16 kW
Max. working pressure	
- Percussion	175 bar
- Rotation	175 bar
Max. torque	400 Nm
Hole size	45 - 87 mm
Recommended steel	R38-H35-R32 R36-H32-R32
Shank adapter	7804-7531-01
Flushing water pressure	10 - 20 bar

## CF 145 hydraulic feed

The CF feeds are made from heavy duty steel box construction profile using steel wear pieces. CF 145 hydraulic feed is powered by gerator type hydraulic motor and the feed force is transmitted with chain from feed gear box to rock drill.

CF 145	Total length mm	Hole length mm	Rod length mm	Net Weight kg	Machine length mm
145x12	5 385	3 295	3 700	460	12 920
145x14	5 995	3 905	4 305	490	13 150
145x16	6 605	4 515	4 915	510	13 400

## TB 40 universal boom

The TB 40 is a hydraulic universal roll over boom with telescopic extension and automatic parallelism in both vertical and horizontal planes. It can also be used for bolt hole drilling and cross cutting.

Parallel coverage	44,5 m <sup>2</sup>
Telescopic extension	1050 mm
Boom weight, net	1850 kg
Rotation angle	358 degrees

## Control and hydraulic system

### THC 500 Hydraulic control system

The THC 500 is a hydraulic pilot control system for drilling functions. It consists of an ergonomically designed panel with hydraulic joy-sticks and a hydraulic control unit for advanced automatic functions. It has been designed to increase productivity and operator motivation and to enable high performance drilling with low drill steel costs.

Feed controlled percussion system optimizes the drilling parameters and improves drill steel life. Load sensing boom controls enable fast and accurate boom movements. Quik coupling measuring points in control panel enable fast and easy checking and troubleshooting.

#### CONTROL FUNCTIONS

Power control	adjustable full power adjustable collaring power
Rotation control	adjustable rotation speed reversible rotation
Flushing control	water flushing

#### AUTOMATIC FUNCTIONS

Collaring automatics  
Stop-and-return automatics  
Anti-jamming automatics  
Flushing automatics

## Hydraulic powerpack

### HP 545 MOTOR/PUMP UNIT

Electric motor	1 x 45 kW 3-phase motor
Pump types	- Percussion, feed and boom 1 x 130 l/min variable displacement axial piston pump - Rotation 1 x 45 l/min gear pump
Filtration	- Pressure 1 x 25 micron

### OIL TANK UNIT

Oil tank volume	max 200 l, min 115 l
Tank filling	1 x manual pump
Oil cooling	2 x OW 30 water cooler
Filtration	- Return 1 x 12 micron

## Air and water circuit

The C 1000 compressor is used for shank lubrication. The high pressure water pump ensures efficient cutting; removal also at high drilling speeds.

Compressor type	1 x C 1000
Capacity	1.1 m <sup>3</sup> /min at 7 bar
Shank lubricating device	1 x KVL 10-2
Air consumption	200-300 l/min/rock drill
Oil consumption	200-300 g/h/rock drill
Water pump type	1 x WBP 2, 4 kW
Capacity	120 l/min, 10 bar
Water pressure valve	1 x WP 70
Max intake pressure	42 bar
Max volume	200 l/min with 1 bar pressure drop

## ELECTRICAL SYSTEM

Total input power	108 kW
Main switch	1 x MSE 20
Standard voltages	380...660 V 1000 V on request
Voltage fluctuation	Max. ± 10 %
Lighting	
Working lights	4 x 500 W, 220 V
Driving lights	6 x 70 W, 24 V
Automatic cable reel	1 x AK 2

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## TC 200 CARRIER

The TC 200 is a robust heavy-duty four wheel drive diesel powered jumbo carrier with center articulation and powershift transmission.

Diesel engine	Deutz F6L 912W, 66 kW (90 hp)
Transmission	Clark 18000 Hydrodynamic
Axles	Clark-Hurth
Brakes	Service brake: hydraulically operated wet disc brakes for all four wheels. Parking and emergency brake: spring applied, hydraulically released fail safe type wet disc brake for all four wheels.
Tyres	12.00 - 20 PR 20
Steering	Frame steering, Orbitrol
Articulation	± 40 degrees
Rear oscillation	± 10/8 degrees
Fuel tank	150 l
Water tank	75 l (only with water scrubber)
Hydraulic jacks	2 x HM 40 front 2 x HM 75 rear
Safety canopy	Hydraulic, FOPS ISO 3449
Ground clearance	300 mm

## OPTIONS

FOPS safety cabin  
Exhaust scrubber  
Exhaust catalyzer  
Water hose (1 1/2")  
Water hose reel AL 2  
Double flushing (air/water) with compressor CD 2000  
Electric supply cable  
Ground fault and overcurrent unit VYK 150  
Portable ground and overcurrent unit VYK 250 P (max. 415 V)  
Fire extinguisher (bottle only)  
Manual fire suppression system (Ansul), 6 nozzles  
Drill angle and depth measuring instrument TMS  
Drill position and angle measuring instrument TCAD  
Electric filling pump for hydraulic oil  
1000 V electric system  
TRR1 rod retainer  
Cylinder-rope feed TF 500  
TTF 500 (Note changes in turning radius and tramming figures) \*  
Automatic greasing system (Lincoln) for boom and carrier  
Greasing reel with pump and nozzle  
Fast filling and evacuation system (Wiggins); for fuel only  
Fast filling and evacuation system (Wiggins); (fuel, transmission, engine and hydraulic oil)  
Air conditioning for cabin  
Air mist flushing kit for auxiliary water/air connection

\*) replaces standard component