



RTB 14 UTILITY VEHICLE

General description:

RTB 14 is the utility vehicle designed and made for fix mounting and carrying the emulsion-type explosive mixing & charging system. It is a heavy duty, sturdy and compact utility vehicle based upon the RT14 series carrier, of the total height of 1,4m (55"). The RT14 is also the base for the wide range of underground applications like:

- Personnel carrier RTP
- Cargo carrier RTC
- Oil & lubricants carrier RTO
- Service workshop carrier RTS
- Emergency vehicle RTE
- Medical vehicle RTM
- Rescue vehicle RTR
- Fire-fighting vehicle RTF

aimed at non-methane underground mines of min. 1,6 m gallery height.

Main dimensions, weights and capacities:

Total length	8 300 mm (327")
Total width	2 400 mm (95")
Maximum width incl. operator's canopy (cabin)	2 980 mm (117")
Total height	1 400 mm (55")
Total weight (without the explosive mixing & charging module)	17 800 kg (39 242 lb)
Ground clearance	320 mm (13")
Turning angle	± 48°
Oscillation on the main hinge	± 11°
Gradeability	12°
Tramming capacity	5 000 kg (11 023 lb)

Diesel engine:

Manufacturer and type	VM D706 IE2
	Euro Stage II / Tier II
Power output (SAE)	95 kW (127 hp) / 2300 rpm
Max. torque and rotation speed	480 / 1300 [Nm/rpm]
Number of cylinders	6 in line
Displacement/stroke	4200 cm ³
Type of cooling system	water-cooled
Combustion principle	4 stroke/ turbo, intercooler
Electric system	24 V
Air filtering	Donaldson
Exhaust system	Catalytic purifier with muffler

Driving speeds:

Tramming speed forward and reverse	
1 st gear	5 km/h (3 mph)
2 nd gear	13 km/h (8 mph)
3 rd gear	20 km/h (12,5 mph)

Frame:

Rear and front frame	Welded steel structure
Central hinge	Adjustable central hinge with 2 degrees of freedom

Standard canopies:

FOPS (60KJ) certified operator's canopy and personnel (2 persons) compartment canopy.

Power line:

Axles	Heavy Duty Industrial HURTH 176 HD
Transmission	Power shift transmission CLARK 20 000
Torque converter	Heavy duty industrial CLARK C 270

Braking system:

SAFIM

Multidisc wet brakes on all wheels acting as both service and emergency/parking brakes. Service brakes activated hydraulically – two separate circuits for the front and rear axle. Emergency/parking brakes are spring – applied and released hydraulically. ABA – automatic brake activation in case of hydraulic oil supply failure. Mechanically driven pump for brake releasing.

Standard tyres:

Size and type 12.00 R24

Steering system:

Hydraulically operated, centre-point articulation, power steering with two double-acting cylinders. Steering controlled by electric joystick.

Fire suppression system:

ANSUL fire suppression system with two tanks and 8 nozzles

Electric systems:

Specially designed for underground mining conditions.

Voltage System	24 V, IP65
Batteries	2 x 12 V, 125 Ah
Alternator	24 V, 55 A
Starter motor	2,8 kW
Driving lights	2 pcs 75/70 W (front) 2 pcs 75/70 W (rear) 3 pcs 70 W (additional)
Working lights	2 pcs 35 W (rear)
Parking lights (option)	2 pcs (LED lights) front 2 pcs (LED lights) rear
Emergency Stop Switches	1 pc in operator's cabin 1 pc in personnel compartment
Sensors (switches)	2 pcs on the unit (front, rear) Insulated return optoisolation
Cable wires	-50°C to +180°C

External electric power supply	500 VAC, 3ph 50 Hz, 30 kW, IP54
Additional power outlet	0,37 kW
Cable reel capacity	80 m (3150") of 26 mm OD cable
Electric motor	22 kW, 1455 rpm
Ground	Fault detector, negative ground cable

Control system

6,5" color display (IP67) with additional control modules (2 pcs as standard). DSP technology and CAN-bus communication assuring intelligent control performance. Inbuilt diagnostic system with user - friendly interactive menu. The display is integrated with front and rear heavy-duty cameras (102° wide field vision).

Standard lubrication system:

Groeneveld TWIN dual-line central automatic greasing system. The TWIN 2-grease system is a fully monitored greasing system, consisting of a plunger pump, a main line network to the blocks with metering units and a secondary lines network to the 17 greasing points.

Others:

Decal language Polish / English / EU-languages

Standard manuals:

Operation and maintenance manual Polish / English / EU-languages
Spare part manual Polish / English
CD-Rom manuals available

Main options:

- **CHECKFIRE System**, provide automatic fire detection throughout the hazard area(s). It can be used in conjunction with Ansul's fire suppression system requiring pneumatic input as a mean of actuation
- **Air conditioned cabin**, FOPS certified operator's cabin may be equipped with heating and air conditioning system.
- **Spare wheel**
- **External electric power supply** 380 - 660 V, 50 or 60Hz



TECHNICAL SPECIFICATION
RTB 14/01/2007

