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AMECA ENGINEERING

Dasa-Rägister
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A25M Trolley

AMECA Engineering Via G. Di Vittorio,4 42025 CAVRIAGO (RE) ITALY
TEL. (+39) 0522-941117 / FAX (+39) 0522-941902
E mail : info@amecaengineering.com

GENERAL DESCRIPTION OF THE MACHINE

The machine of this book, named motorised trolley, is used for the transport of switch points or traits of rails for the construction and or maintenance of the railways, in addition to the transport of jacks both needle and core. Generally the machine functions together with other machines of the same type (trolleys system) and it forms some convoys for the transport of jacks and or the movement of rails or switch points, without causing flexions.

The machine is equipped with railway wheels for the positioning movements in the site through rail.
The work accessories are:

- telescopic hydraulic cylinders for the movement of the loading platform for the ascent and descent movements.
- Hydraulic cylinder for the movement of the loading platform for the movements to right and to left.
- Radio control for the movements management.

A diesel oil engine puts into motion an hydraulic circuit made of two main traction sections on rails and work.
The machine is also equipped with electrical and mechanical securities, luminous and sonorous signalling devices.

MACHINE USES DESCRIPTION

The hydraulic installation is made of two main sections:

- traction on rails
- work

TRACTION ON RAILS
Acting on the lever of the radio control, it is required oil from the pump which is transmitted to the hydraulic engine flanged on the axial support of the gear which, through cardan joints, put into motion two transmission groups which put into functioning the two back railway wheels; the railway wheels engage then with two keyed crowns, put on the same, whose transmission chains transmit the motion to the two front railway wheels.

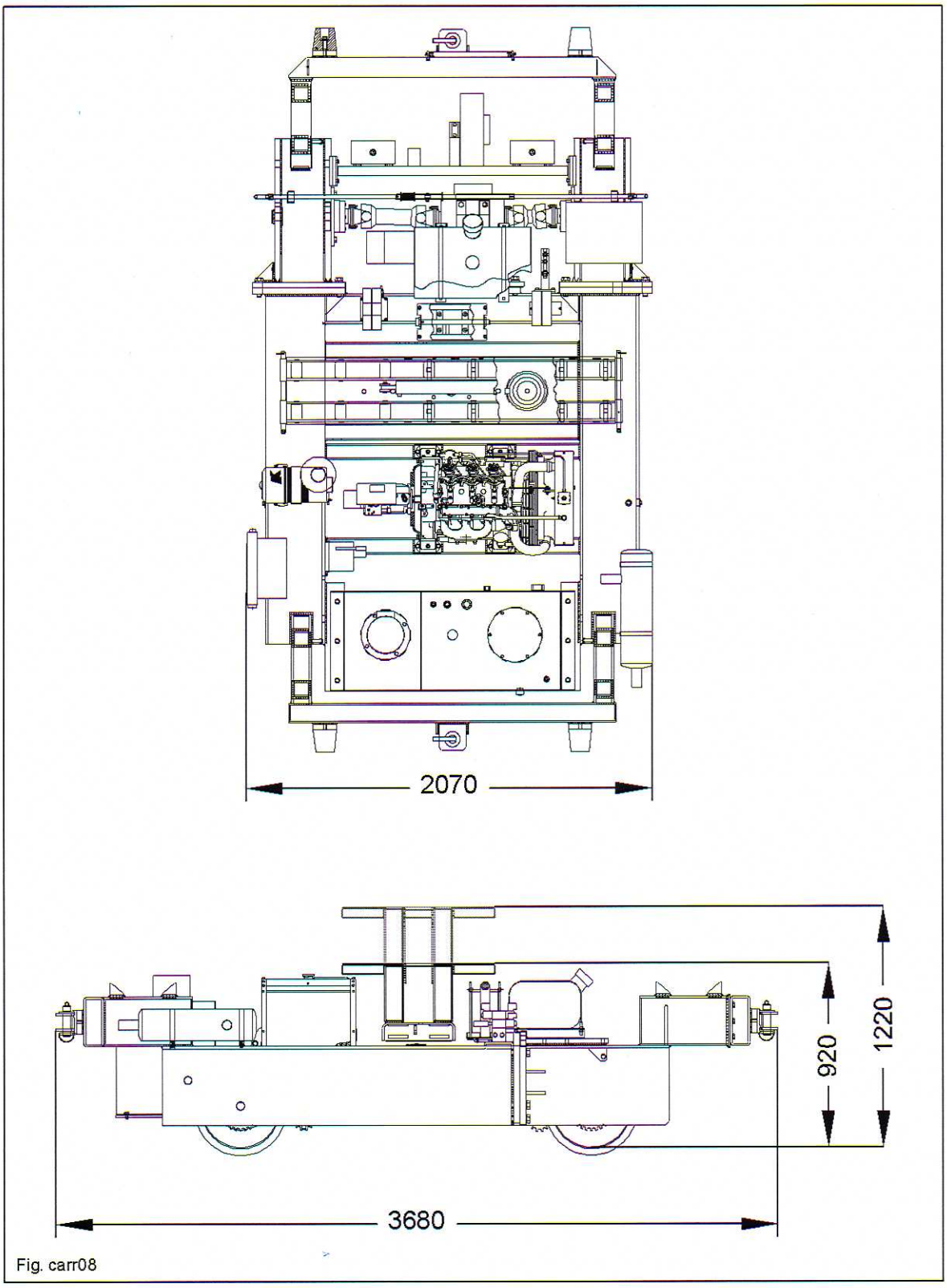
WORK

The working section is divided into three further branches: lifting of the loading platform, lateral movement of the loading platform and brakes.
In this case a pump, through a flow divisor, pumps the 65 % of the oil to the lifting of the loading platform and to the own lateral movement and for the 35% to the brakes.
On the main drive of the engine is placed a pump with axial pistons in open circuit, which brings, flanged to the breech, a gears pump.
The two pumps are feeded by the hydraulic tank through two exclusion cocks (one for each pump), mounted on the suctions.
The hydraulic oil tank (approximately capacity of 250 lt.) is equipped with a plug for the supplies on the filter, a device for the check of the oil level, a superior inspection oblò for the internal cleaning and an inferior plug for the emptying.
In addition, on the four railway wheels, four braking jaws are functioning; the braking commands management is done through radiocontrol.

TECHNICAL DATA

CONFIGURATION	maximum number of connecting trolleys	n.6 trolleys
DIMENSIONS OF THE STOPPED MACHINE	Widht	2070 mm
	Lenght	3680 mm
	Height	920 mm
	Total weight	3500 kg
CAPACITY (max.)	Weight maximum lifting and transporting capacity	25000 kg
VARIABLE ELEMENTS	Minimum Height	920 mm
	Maximum Height	1220 mm
	Lateral movement of the loading platform	± 300 mm
	Lifting of the loading platform	300 mm
MAIN BODIES	oil engine, hydraulic instalment, railcontrol , (receiver and transmitter).	
	Lifting bearing platform and with the possibility of translating through oleodynamic cylinder.	
	N.4 wheels for the transport on rail.	
	Cylinders for lifting, moving the load on the platform and for the braking.	
RAILWAY WHEELS	Wheel Base	1780 mm
	Diameter of rolling of the wheels	Ø400
MAIN MOTORIZATION	Type diesel engine	D703LE
	Power at 2600 r.p.m.	33 KW
	N. cylinders	3
	Bore/stroke	94/100 mm
	Displacement	2100 cm^3
	Maximum rotation running	2600 r.p.m.
	Weight engine	190 kg
RAIL TRANSLATION HYDRAULIC INSTALMENT	Pump maximum capacity with variable capacity at open circuit	50 cc/giro
	Hydraulic distributor capacity LOAD-SENSING at open centre, with valve of maximum overpressure	130 L/min.
	Axial pistons hydraulic engine with double displacement	40 & 108 cc/giro

WORKING OLEODYNAMIC INSTALMENT	Gears pump for the drive of the cylinder	11,1 cc/giro
	Hydraulic oil tank:	250L
	Two telescopic plunger bore min/stroke max:	∅ 100 / 300 mm
	1 cylinder for the lateral movement of the loading platform bore min/stroke max:	∅ 55 / 300 mm
	Max pressure:	150 Bar
	4 braking cylinder:	∅ 30 / 10 mm
	Pressure accumulator for emergency/parking brake:	0,5lt
ELECTRICAL INSTALMENT	N.1 Battery:	12V - 100 Ah
NORMAL FUNCTIONS	The trolley is used for the lifting and the trasnsport of rails and switch points.	



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