

TECHNICAL SPECIFICATION Maxtruck 2T/2015-12-02/CL

Technical data

Forklift	Type	Maxtruck 2T
Lifting capacity	kg	2000
Load centre on forks	mm	500
Lifting capacity on maximum reach	kg	500
Lifting height	mm	4200
Maximum reach in front of forklift	mm	2800
Free lift	mm	1110
Transport speed	km/h	16
Maximum lifting and lowering speed	m/s	0,4
Maximum climbing with load	%	10
Weight of complete forklift	kg	3600
Total length with 1150 forks	mm	3390
Total width	mm	1190
Total height	mm	1975
 Wheels		
Number of wheels	pcs	4
Number of driving wheels	pcs	2
Number of steering wheels	pcs	4
Wheel diameter	mm	450
Standard wheel tire	Material	PUR 85 shore
Optional wheel tire	Material	Rubber 75 shore
Numbers of fixing bolts in hub	pcs	6 (M14)
 Traction motors		
Numbers of traction motors	pcs	2
Traction motor nominal capacity totally	kW	12
Traction motor peak capacity totally	kW	26
AC three phase motor type	-	Brushless synchronous
Motor controllers	make	Inmotion
 Hydraulic pump motors		
Motors AC 3-ph for lift and extension of boom	pcs/type	2/ synchronous
Motor AC 3-ph for tilt and fork handling	pce/type	1/ synchronous
Lift and extension motor capacity	kW	6
Boom head hydraulic motor capacity	kW	3.2
Motor controllers	Make	Inmotion
 Hydraulic pumps and system		
Boom lifting pump	make/size	Casappa/11.2 cc
Boom extension pump	make/size	Casappa/8 cc
Hydraulic system design and patent		Max Truck AB

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Hydraulic valve control	type	Electric
Hydraulic oil volume totally	l	19
Hydraulic main supply tank volume	l	9.3
Hydraulic tank volume boom head	l	5
Hydraulic oil cooler	type	not needed
Maximum hydraulic pressure	Bar	250

Standards	The Maxtruck 2T fulfil European standards where following can be mentioned.
EN 1175-1	Safety of industrial trucks
EN 1726-1	Safety of industrial trucks- Self-propelled trucks up to 10000 kg Part 1: General requirements
EN 1126-2	Safety of industrial trucks- Self-propelled trucks up to 10000 kg Part 2: Requirements with elevated operator position
EN 12895:2000	Industrial truck - Electromagnetic compatibility
EN 13849-1:2008	Standard for safety related control systems
EC directives	Maxtruck 2T is manufactured in conformity with stated requirements of the European Council Directives. The forklift are clearly CE marked and delivered with EC declaration of conformity.
Testing	The Maxtruck 2T is fully tested before delivery. The following tests are done before delivery: <ul style="list-style-type: none">- Mechanical and electrical check- Electrical function control- Lifting test with 500 and 2000 kg- Drive test for wheel calibration and control A full test report is delivered with the forklift.

TECHNICAL SPECIFICATION Maxtruck 2T/2015-12-02/CL**Construction of
Maxtruck 2T**

The Maxtruck is built up with rigid chassis welded together with 8 to 25 mm steel plates conforming a strong and durable unit. The wheel support is based on cast iron design with strong wheel shafts and bearings. All four wheels is steered controlled by an advanced micro-processor giving steering commands from a steering wheel on left control panel. The rear wheels is mounted in a pendulum box configuration so Maxtruck 2T can be driven over uneven floors. Two battery boxes with batteries is mounted in the forklift so they conform a part of the total counter balance weight.

On right side of the forklift chassis is the telescopic boom mounted. The boom position is controlled by two hydraulic cylinders, one for lifting and one for extension of the boom.

In the boom front is the boom head mounted with its hydraulic system to control the tilting of the forks when lifting or lowering the boom. The tilt angel of the forks is fully controlled by the software in the micro-processor controller with information coming from sensors and the joystick operated by the driver.

A safety system in the Maxtruck 2T controls the actual behaviour of the forklift to avoid dangerous situation when lifting or driving the forklift. Information and alarms is given to the driver if situation reach critical levels and if necessary the control system stops the lift or movement if it comes into critical levels.

Tools for Maxtruck 2T

Different tools can be used on the Maxtruck 2T for different job tasks to optimise the use of the truck. The change of tools is done via the quick connector with hydraulic locking and electrical controlled interlock for maximum safety. If this safety system detect that the tool not is locked the control system will prohibit operation in same cases depending on type of tool. Alarm is given via the display to the driver.

The safety system in the Maxtruck 2T supervise the tool weight to avoid any overload of the system so no stability problems can occur when changing tools.

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Control system Maxtruck 2T is controlled by the driver but the driver behaviour is supervised by the safety system in the truck to avoid overload or other driver mistake and will therefore help the driver to optimise the operation.

The control system in Maxtruck “T consists of following main units.

- Left control panel for steering
- Right control panel for hydraulic system
- Display panel with start key and light switch
- Microprocessor controller
- Electronic main connection board
- Steering encoders CAN type
- Steering wheel encoder CAN SIL 2 type
- Inclination sensor
- Angle sensors
- Pressure sensors
- Electric valves for hydraulic system
- Motor controllers for all motors
- Length sensor in telescopic boom

These parts form the total control system together with the driver so accurate control can be performed in all situations.

All parts in the control system is based on off the shelf parts for easier service of the Maxtruck 2T.

The software inside the microprocessor is made in house and can be upgraded via connection of an USB or via the internet communication gateway with WiFi placed on the electronic connection board.

Labels All labels in English on set and control panels.

Manuals One maintenance and operation manuals are delivered with the Maxtruck 2T
The manual include the following information:

- 1- Safety instructions
- 1- Technical data
- 1- Operating instructions
- 1- Service instructions
- 1- Trouble shooting tables.