

## ABI TRAILERS MBT 45T



### TECHNICAL FEATURES:

- Capacity	Tons	45
- Trailer overall length	mm.	10.902
- Trailer ext. width - MAX	mm.	4.620
- Trailer ext. width – MIN	mm.	3.920
- Tyres inner width - MAX	mm.	2.700
- Tyres innes width – MIN	mm.	2.000
- Trailer min. height	mm.	1.076
- Trailer max. height	mm.	1.396
- Max lifting stroke	mm.	320
- Translation speed (empty)	Km/h	up to 2
- Exceedable slope with full load		3%
- Independent front and rear steering system,		35°
- Independent front and rear lifting system, Independent right and left rear lifting system Front self-levelling wheels,		
- Rear Anti-torsion system		
- N. 4 driving wheels,		
- N. 4 steering gear cylinders,		
- Double control system: by remote control and by fixed control station,		
- Two groups of cut-off solenoid valves, controlled by two gear pumps for lifting and balancing the front and rear load,		

## STRUCTURE

It is constituted by highly resistant steel tubes, type S 355 JR, assembled in such a way as to form a "U" structure which enables the take and/or release of boats without exceeding the width of the latter.

The connection bar (closed side) is flanged to the two wheel-carrying side members, which contain the Diesel oil and the hydraulic oil tanks.

## HYDRAULIC VARIABLE WIDTH (INCLUDED)

The variable width is compound of a double portant beam (male/female). The opening is driven by an double effect hydraulic piston. the sliding of the two beams is facilitated by the presence of antifriction plates.

The control of the opening can be driven by the remote-control and fix board panel.



## MOTORIZATION

The trailer propeller is an environmental-friendly Diesel engine provided with water-cooling system, YANMAR POWER PACK, with 35,5 kW maximum power, placed on the left front side of the trailer in optimum position in order not to interfere with the handled boats bow. On such engine the gear pumps for steering and lifting the trailer (independent front and rear pumps) as well as the variable-delivery translating pump are installed. Four blinking indicators positioned at the four angles of the trailer and a horn are operated when the trailer is in motion.

Main Features of the engine:

- Manufacturer: YANMAR Model 4TNV88C
- Version sound-proof: 488EP-12V
- Max power: 35,5kw @3000
- Max torque: 139,9Nm @1800
- Emission: Stage 5



## WHEEL UNITS – STEERING SYSTEM

The wheel units are built with carrying block in welded sheet metal hosting the wheel hubs welded to the said block as well as the reduction gear couplings for the front units and the lifting cylinder housings which make the wheel units horizontally pivoted. The traction occurs on the front wheel units, the tyres are totally eight, superlastic 28.12,515 type with 9.75–15" rims specially made in reinforced high-thickness steel.

## SELF-LEVELLING/ANTI-TORSION SYSTEM

This system is standard on all our trailers. The system is a combination of two (2) different behaviours of the trailer during a movement with boat on it. In any case this combination is possible by a simple hydraulic connection among the Lifting Pistons – no sensors are present on the trailer.

### FRONT SIDE (SELF-LEVELLING)

If the front side (left or right) faces to a deformation of the soil the relevant opposite side (left or right) compensate the drop in order to maintain the front (of the trailer) always horizontal.

### REAR SIDE (ANTI-TORSION)

If the rear side (left or right) faces to a deformation of the soil the relevant front side (left or right) follows it. It means that the trailer gets inclined (for while usually) in order to avoid any torsions could affect on the boat. Of course, all wheels of the rear side (right or left) must face into the same deformation in order to make that the system works as just described. If only a wheel (group) face the deformation, the rest of wheels belonging to the same rear side (right or left) compensate the drop and the system is not required to work.

## LIFTING SYSTEM

The lifting cylinders are built as a single piece and in such a way as to support a 40 tons vertical load each, and made up of two liners in order to obtain a guiding/vertical lifting and rotation around itself double effect. This special solution enables to obtain an extremely solid cylinder, which is determinant to withstand transversal and longitudinal stresses owing to soil depressions and/or obstacles on the distance covered when the trailer is in lifted position with maximum load.

The four lifting cylinders acting on the twin wheel units are self-levelling: this means that, in the event of soil depressions (holes, etc...) on the site, these cylinders are controlled by an oil-pressure device which enables the chassis, and, therefore, the boat, to remain on a plane level without any dangers, etc...

## HYDRAULIC SYSTEM

The oil-pressure components delivered are of first quality and the system as a whole is built in order to ensure maximum reliability and safety in compliance with the modern construction standards. The pump units include a variable-delivery pump with axial cylinders and electronic proportional control, whereas the service pumps are of a fixed-delivery gear type; on the lifting function two solenoid valves blocks and two crossed pumps are used in order to obtain a balanced lifting both on the front and on the rear side.

The trailer traction is obtained by installing two hydraulic gear-reduction units complete with negative parking brake, properly dimensioned and splined to the two front wheel units. The system is completed with tank suction filters in order to ensure cleanness of the system itself, of the control solenoid valves, of the flow dividers, of the check valves, etc...



In order to grant oil cleanness when this is fully replaced, a removable cap complete with gasket is provided which enables to thoroughly clean the tank before filling it with new oil. A level indicator is also provided.

### ELECTRICAL SYSTEM

The electrical and electronic components have been conceived in order to grant maximum functional results as well as maximum efficiency using hi-tech and very reliable products. All of the electrical connections are contained in the control panel aboard the machine, which also comprises the Diesel engine ignition and control board, including the radio control couplings.

On the fixed control panel the following devices are installed: ignition key, control joystick, control board with starter key, control lights, etc...; from this control panel, placed opposite the engine, all the lifting, steering and translating manoeuvres can be carried out, also in the event of a radio control failure.



The trailer is remotely operated by means of a radiofrequency-approved radio control which enables to control all of the functions as from the control panel, the emergency mushroom pushbutton cutting off the engine power voltage and the diesel engine on-off switch of the trailer itself, as well as the descent and rise of the wheel units, the front and rear independent steering system and the forward and backward motion control system.

The trailer is provided with an instruction and maintenance manual complying with the EC standards.

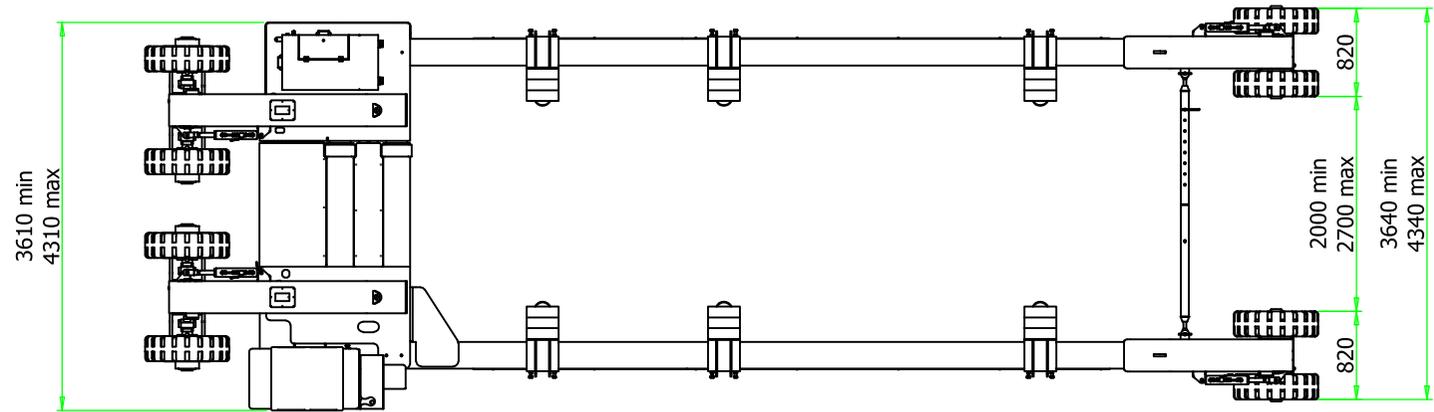
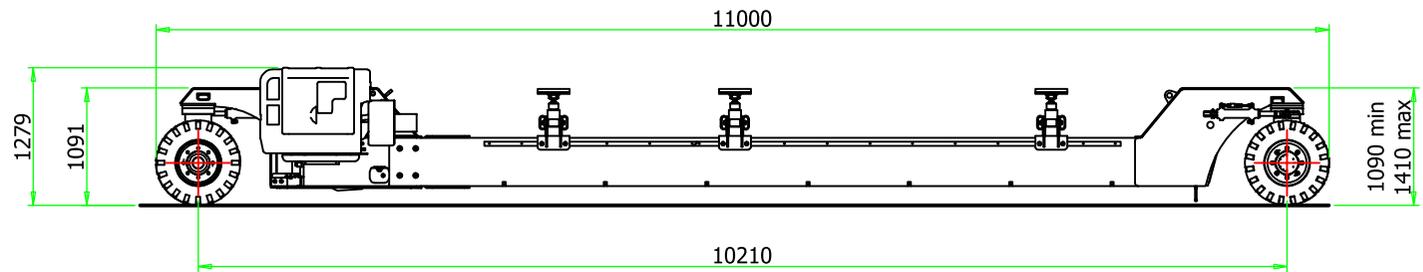
### ANTI-CORROSION PROTECTION

Once the trailer structural work has been completed, this shall undergo the following treatment: SA 2.5 degree sandblasting of all the structural works upon work completion. Application of an epoxy anti-rust primer with 120 micron thickness, Application of two coats of epoxy enamel paint Blu Mare [Sea Blue] (RAL. 5017) with 80 micron thickness,

This complete treatment will ensure a minimum dry film thickness of 180 micron.

Boat Transporter model MBT 45, having a configuration as follows:

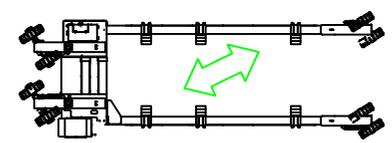
- |                                   |   |
|-----------------------------------|---|
| - Pairs of manual telescopic pads | 3 |
| - Hydraulic variable width        | √ |
| - Yanmar diesel engine            | √ |
| - Remote control + control panel  | √ |



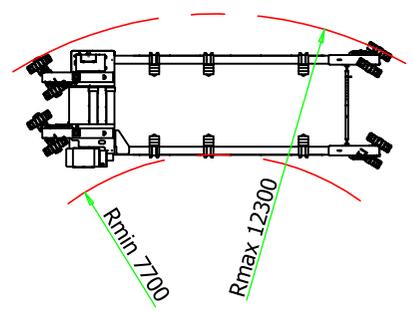
- .TIRES TYPE: SUPERELASTIC 300-15
- .FOOT PRINT 656 cmq
- .7000 Kg at WHEELS
- .SPECIFIC PRESSURE ON THE GROUND 10,6 Kg/cm<sup>2</sup>



CRAB STEERING



NORMAL STEERING



	Descrizione: <b>MBT45 BOAT TRAILER</b>		
	Disegno Nr.:		
Trattamento:		Peso:	
Scala:	Data:	Disegnatore:	
Smussi non quotati:		Raggi non quotati:	