

# MENEGOTTI TECHNICAL MANUAL

## MANUAL PALLET STACKER

### MEM 0.5 TON X 1600

### MEM 1.0 TON X 1600

### MEM 1.5 TON X 1600

QR-Code:



Point your mobile phone camera to access **Technical Manuals** and Parts **Catalogs** online.

[www.sites.google.com/view/menegotti-engenharia-docs](http://www.sites.google.com/view/menegotti-engenharia-docs)

Attention:

Before operate **Menegotti** equipment, read this **technical manual**, itself will inform and instruct the operator about the operation.  
By the way, you avoid possible working accidents and early maintenance on the machine.



# MGT

Congratulations, you have just purchased a MGT product!

With the highest quality, projected and built especially to serve your needs.

This manual was elaborated to provide the informations and key instructions to use and maintain our product, in addition presents their technical characteristics.

Before use the product for the first time, read and pay attention at the informations in this manual.

The product durability, only depends the way you treat it in service (operation), and the satisfactory working, is consequence of your regular and carefull work, done regularly.

Menegotti is prepared to offer you all technical assistance, and attend all your needs about replacement parts.

Welcome, you are part of the huge MGT “customers familiy”.

After sales Departament  
and Technical Assistance MGT.

**Attention:** For better comodity, store and keep this manual in a properly spot so it can be easily checked.

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## The Company

We want to BUILD good business with you.

Reference of quality in civil construction, present in more than 40 countries and national leader in concrete mixers sales, Menegotti Metallurgical Ltda., is recognized by developing a complete mix of products, at Prime and Pro lines, that provide higher productivity at work and profitability in business.

We are the Menegotti Machines for Civil Construction, company of Menegotti's group, and we want offer to you the best we have.

PRIME line - Work of economy: With products made to fulfill economic works, with great performance and low maintenance.

PRO line - Professional works: Machines projected for professional use, at small and large works, that demands high productivity, safety and profitability.



## The Product

The Manual Pallet Stacker is an equipment with a great elevation course, used for products on pallets or industrial shelves. It has as feature a stable raising and lowering through hydraulic system, easy to operation and safe. As it does not generate sparks nor electromagnetic field, the usage of this equipment is recommended to handle and transport of inflammable and explosive products to load and unload of trucks, workshops, storages, warehouses and so on. It also has stable elevation features, light yoke for maneuvers, simple operation, safe and reliable performance, because it has brakes attached to the wheels. This Pallet Stacker is an ideal tool to reduce physical strength, increasing the operator's productivity and efficiency. For a good performance of the equipment, is necessary to work on flat and firm surfaces.

The Manual Pallet Stacker is composed of an hydraulic system, which raise weights through an manual hydraulic system and load loads using manual efforts. The hydraulic system is equipped with a relief valve, which does not allow overload lifts. The structure is welded. The back wheels are equipped with sheaves which have brakes and spins free. The back and front sheaves are attached to a shaft of wheels with spherical bearings. The sheaves are made with resistant materials, which does not wear and also does not damage the work surface.

• **With the aim of constantly improving of our equipments, Menegotti reserves the right to change the features of the product without notice. In case of some information in this manual is not according to physical product, consider the current one and the manual only as a reference.**

## Safety Information

This machine, if the safety recommendation is not carefully followed, offers risks like: smashing, electrical shocks, tipping over, explosions and burns due to gases or the acid from the battery.

This manual contains notes, cares and warnings which must be followed, in order to avoid every possibility of misuse, damages to the machine or personal damages.

**NOTES:** Contains additional informations of important procedures.

**CARES:** Offers important information to avoid mistakes that might damage the machine or its components.

**WARNINGS:** Alerts about conditions or practices that outcomes in personal damages ou even death!

## Operational Safety

The workers involved in operation, maintenance, inspection and other machine intervention, must receive capacitation provided by the employer and in accordance with his functions, of which shows the risks they are exposed to, the existent and necessary protective measures, in order to avoid accidents and sicknesses. The machine, if misused or used by no authorized persons, offers risks to the operator's physical integrity.

- **NEVER** allow not trained persons operate the machine;
- **ALWAYS** read, understand and follow the procedures of the Intructions Manual before trying to operate the machine;
- **ALWAYS** certify that the operator is acqueinted to the properly safety measures and operational techniques before using the machine;
- **ALWAYS** prepare the working place, in order to avoid work accidents, following the orientations in this manual and the specifications of the current safety rules;
- **NEVER** operate the machine in aplications for purposes other than it was designed;
- **NEVER** remove or alter any safety device on the machine;
- **NEVER** use accessories not recommended by Menegotti for the machine. It might cause damages to the machine and/or to the operator;
- **WE WILL NOT** assume reponsability for any accidents due to modifications on the machine. This alterations results in loss of warranty;
- **ALWAYS** be carefull and have good sense when operating the machine;

- **ALWAYS** in case of damaged or missing parts, immediately contact the Menegotti by the phone 0800-727-8033 for replacing the same;
- **ALWAYS** with the machine turned off, take daily visual inspections on the parts of the machine. The machine must not be used if there are signs of damages. In case of problems, immediately get in contact with Menegotti's Authorized Services;
- **ALWAYS** make sure that all persons are in a safe distance from the machine;
- **ALWAYS** keep the machine out of children's range;
- **NEVER** operate the machine while under the influence of drugs or alcohol;
- **ALWAYS** use PPE while operating or performing maintenance on the machine (ear protector, non-slip shoes, glasses, dust mask and gloves);
- **ALWAYS** keep hands, feet, loose clothing and accessories away from the movable parts of the machine;
- **ALWAYS** avoid contact with the rotating parts of the machine;
- **NEVER** exceed the maximum load capacity of the machine;
- **ALWAYS** move and lift the loads uniformly distributed on the pallets, with the forks centered, otherwise, the forks will be damaged and the load might fall during the operation process;
- **NEVER** lift loads using only the edge of the forks;
- **NEVER** transport people on the forks;
- **NEVER** transport unstable or loosen loads;
- **NEVER** use the machine as a tow truck;
- **NEVER** let the loads on the forks for a long period of time;
- **NEVER** execute brusque maneuvers with the machine, or in high speed;
- **ALWAYS** work on flat, levelled and without holes floors;
- **ALWAYS** pull down the forks to lowest level when the machine is not been used;
- **NEVER** move the machine over than 2 meters while the forks are beyond 500 milimetres of high.

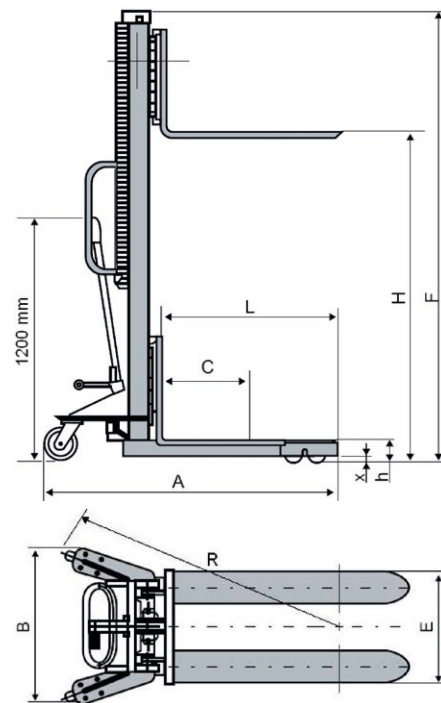
## Safety of the Services

Machines poorly maintained might become a danger to security! In order to keep the machine operating in a proper and safe way for a long period, the maintenance and occasional repairs are necessary.

- **DO NOT** try to clean or to fix the machine while it is working;
- **DO NOT** operate the machine without the safety devices, protections or in bad working conditions;
- **ALWAYS** make periodical maintenances according to the Instructions Manual;
- **ALWAYS** replace the worn out or damaged components, with replaceable parts recommended by Menegotti, for maintenance of this machine.

## Technical Specifications

|                      | MEM 0.5TON X 1600 | MEM 1.0TON X 1600 | MEM 1.5TON X 1600 |
|----------------------|-------------------|-------------------|-------------------|
| Load Capacity        | 500 Kg            | 1000 Kg           | 1500 Kg           |
| Total Height (H)     | 1600 mm           | 1600 mm           | 1600 mm           |
| Minimum Height (h)   | 90 mm             | 90 mm             | 90 mm             |
| Fork Lenght (L)      | 1150 mm           | 1150 mm           | 1150 mm           |
| Fork Width (E)       | 550 mm            | 550 mm            | 550 mm            |
| Drive Wheel          | Ø150 mm           | Ø150 mm           | Ø150 mm           |
| Fork Wheel           | Ø83 mm            | Ø83 mm            | Ø83 mm            |
| Load Center (C)      | 600 mm            | 600 mm            | 400 mm            |
| Ground clearance (x) | 25 mm             | 25 mm             | 25 mm             |
| Turning Radius (R)   | 1380 mm           | 1380 mm           | 1380 mm           |
| Aisle Width          | 2112 mm           | 2112 mm           | 2112 mm           |
| Dimensions (AxBxF)   | 1705x755x2080 mm  | 1705x755x2080 mm  | 1705x755x2080 mm  |
| Weight               | 145 Kg            | 230 Kg            | 239 Kg            |



## Pre-usage Inspection

**NOTE:** accomplish a pre-use inspection of the machine every beginning of work shift, change of operator and after maintenance. Always follow the Safety Information, contained in this manual.

### Before Operation

- 1) Check if the machine is in normal work conditions. Make sure there is not any blocking and the support wheels are in conditions to operate normally. Flaw machines must not be used;
- 2) Check if the actions of lifting and lowering of the forks are normal.

After verifications, if there is no failures on the machine it can operate. Otherwise, repair the failure immediately.  
Is strictly forbidden the usage of the machine with any irregularity.

## Operating the Machine

### WARNING:

- Before operating the machine, read carefully all safety informations contained in this manual;
- Do not conduct the Pallet Stacker empty with it's fork raised;
- During lifting or lowering the forks operation, do not move the Pallet Stacker.

- 1) When the trigger is downwards positioned, the forks are ready to raise. Move back and forth the yoke, and the fork will raise;

- 2) When the trigger is at the neutral position, the cylinder also is, and the truck will be ready to be moved. If you move the yoke back and forth, the forks will not raise nor low;

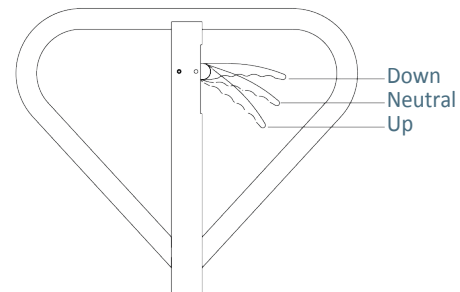
- 3) When the trigger is upwards positioned, the truck will automatically lowers the fork, this may be interrupted releasing the trigger;

- 4) Place the fork on the load, brake the back wheels if necessary to avoid that the equipment moves;

- 5) When the fork raised at the highest position, the pressure comes back to the oil tank through exhaust valve to avoid that the fork raise more and cause damages. Push or pull manually the Pallet Stacker to transport the load from a place to another;

- 6) For unloading, pull the trigger upwards smoothly and the forks will lower to the wanted position. This way, the double effect of raising and transporting are obtained.

### Trigger Positions



## Stacking Operation

- 1) Take the Pallet Stacker to the pile of loads;
- 2) Adjust the position of the machine, putting it in front of the pallet to be moved;
- 3) Slowly, move the machine and insert the arms of the forks in the pallet holes, as deep as possible;
- 4) Raise the forks until they reach 200 - 300 mm from the floor;
- 5) Move the Pallet Stacker to the wanted place, adjust the position of the machine, putting it in front of the rack, with the edge of the forks 300 mm away from the rack, adjust the elevation of the forks until they reach the appropriate height;
- 6) Lower the forks in order to carefully put the loads on the rack;
- 7) Move the Pallet Stacker until the forks left completely the holes of pallet (edge of the forks 300 mm away from the racks);
- 8) Lower the forks until they are 300 mm away from the floor and move the machine away from the rack.

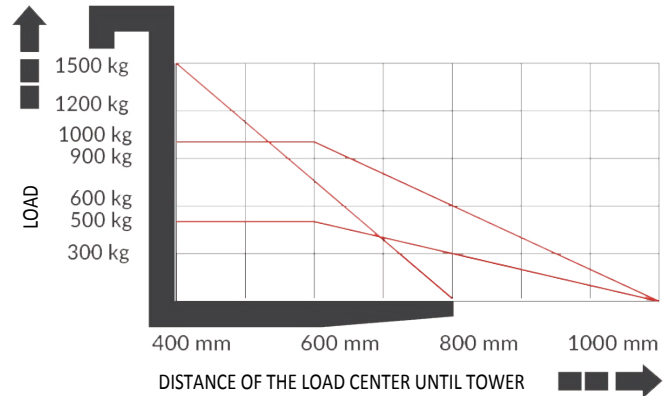
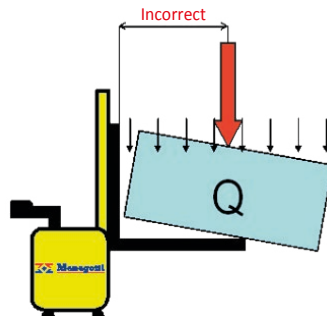
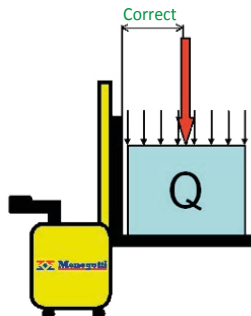
## Loads Withdraw Operation

- 1) Take the Pallet Stacker to the rack of loads;
- 2) Adjust the position of the machine, putting it in front of the rack, with the edge of the fork at a distance of 300 mm away from that;
- 3) Adjust the fork at an ideal height and put it into the pallet bottom;
- 4) Raise the forks to lift the loads until the inferior part of the pallet be 100 mm from the rack, and slowly move the Pallet Stacker until the edge of the forks be 300 mm from the rack;

- 5) Lower the forks until they reach 200 - 300 mm from the floor;
- 6) Move the Pallet Stacker until the wanted place and lower the forks until the pallet touches the floor;
- 7) Slowly move the machine away until the forks get out of the pallet completely (edges of the forks 300 mm from the pallet).

## Transporting the Loads

- Keep the limit of the loads and centralize the load according to the ideal treatment;
- The transport of overload loads are forbidden because it exceeds the capacity of the machine, therefore causes damages on the equipment and also severe accidents.



# Maintenance of the Machine

**NOTE:** The maintenance must be accomplished by trained personnel.

The satisfactory operation of the machine depends on the cares of an efficient maintenance. When the maintenance is ignored, the machine might represent a threat to the operators and also to the property.

To ensure the safety and to extend the useful life of the machine, never use in case of any abnormality.

For this machine, a routine of daily inspections is necessary in order to avoid troubles due to malfunctioning in the future. Do not use damaged truck, because it will reduce its useful life. Every joint must be lubricated every three months with engine oil and checked in there are not wires or other materials curled in the wheels or shafts. All the wheels must spin easily.

# Lubrication of the Machine

The oil must be used according to the standard of quality ISO supplied by the manufacturers. The recommended oils are as it follows:



| MANUFACTURER | DESCRIPTION   |
|--------------|---------------|
| CASTROL      | HYPIN AWS 32  |
| TEXACO       | RANDO HD32    |
| IPIRANGA     | IPITUR HST220 |
| BARDAHL      | MAX LUB MA10  |
| ESSO         | NUTO H32      |

# Environmental Protection

Do not discard the machine in an inappropriate trash, discard it in an appropriate one and contact the responsible body in order to make the correct discard. Preserving the environment is very important.

## Troubleshooting

| PROBLEM                         | CAUSE                                                                                                                                         | ACTION                                                                                                                                                |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insufficient lifting            | Hydraulic oil is not suitable.                                                                                                                | Replace with the recommended oil                                                                                                                      |
| Fork doesn't raise              | The oil is too viscous                                                                                                                        | Replace or refuel the working oil                                                                                                                     |
|                                 | There are impurities in the oil                                                                                                               | Remove the impurities or replace the working oil                                                                                                      |
|                                 | The exhaust valve, pedal spring or extension spring is either activated or not, in the highest closing position or is stuck by strange bodies | Check the extension spring, adjust the pedal to the highest closing position and remove impurities                                                    |
|                                 | The foot pedal for valve release has not been set in the correct position                                                                     | Release the spring and the pedal connector screw, adjust repeatedly until it is in the proper position, then tighten the screw and replace the spring |
| The raised fork doesn't go down | Oil release pedal has not been adjusted                                                                                                       | Adjust, repair or replace the piston rod or piston bearings according to the methods mentioned above                                                  |
|                                 | The load isn't centered                                                                                                                       |                                                                                                                                                       |
|                                 | The fork frame and roller teeth are stuck                                                                                                     |                                                                                                                                                       |
| Oil infiltration or leakage     | Insufficient or damaged gasket                                                                                                                | Replace gasket, tighten, repair or replace parts                                                                                                      |
|                                 | Small pores or cracks in some parts                                                                                                           |                                                                                                                                                       |
|                                 | Screw joint is loose or gasket is not tight                                                                                                   |                                                                                                                                                       |

## Product Warranty

The conditions and terms of this warranty are non transferable and go into effect on the date of purchase of this equipment, proven by presentation of the sales invoice issued to the first end user. At the time of delivery of the equipment, the customer must be provided with the information and technical orientations according to the contents of this manual.

Not, however, included in this warranty are defects arising from improper use, negligence, imprudence or malpractice, nor are repairs or alterations to any part and/or component of the equipment. Also not included are: the assembly of any sets of parts by technicians not from the Factory itself or from an Authorized Technical Assistant, application other than which it was specified, mechanical or electrical overloading as well as lack of phase, use in environments for which it was not designed, incorrect voltages and frequencies, incorrect lubrication, damage caused by accidents of any nature, such as floods, gales, fire, landslides or due to transportation.

Removal or any alteration to the series numbers originally placed on the product will render the warranty null, where the Sales invoice and Warranty Certificate must be presented in relation to the equipment in question.

This warranty is limited to the repair, replacement of parts or assembly of parts in which, through examination by a Menegotti Authorized Technical Assistant with prior authorization from the Factory, any manufacturing defect will be verified. This repair or replacement will be performed by the authorized Technical Assistant, where the purchaser will be responsible for risks and expenses arising from transport to and from the authorized Technical Assistant, and where labor and parts will not be charged according to the terms of this warranty.

This warranty replaces any other warranty, implicit or explicit, as well as all any obligation or responsibility on the part of our company in relation to the above mentioned product.

**MENEGOTTI Post Sales Department and Technical Assistance.**

## Term of Warranty

By the present CERTIFICATE provided from original purchaser, Menegotti guarantees this product against manufacturing defects, for a period of 6 (six) months, being: the first 3 (three) months of legal guarantee, and the last 3 (three) months a special warranty guaranteed by Menegotti, counted from the invoice issue date of the first end consumer. Not included in this equipment warranty are components subject to wear through use such as: bearings, steel cable, electrical plugs, gears and engine breaking.

This warranty includes the replacement of parts and repairs due to manufacturing defects duly noted by the factory or Authorized Technical Assistant. This warranty will be rendered null and void in the case of damages arising from accidents, acts of nature, application other than which it was designed, connection to improper electrical supply or subjected to extensive power fluctuations, or, if opened by persons or workshops not authorized by Menegotti.

The equipment that includes an electric motor and this warranty covers internal defects in the motor originating from its manufacture. Defects not covered in this warranty include: overloading due to lack of or excessive phase, use of voltage outside that specified, broken or crushed casing due to negligence during transporting /or storage, coupling or energizing outside specifications and general defects from improper use and/or incorrect installation.

In agreement with these terms,

**Customer:** \_\_\_\_\_  
**Model:** \_\_\_\_\_ **Number of Series:** \_\_\_\_\_  
**City:** \_\_\_\_\_ **Date:** \_\_\_\_\_

\_\_\_\_\_  
*Costumer* *Menegotti Authorized Service*



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