

# **MORELLO**

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**INNER TRANSPORTATION TECHNOLOGY**

**N. 30 INDUSTRIAL PLATFORM-TOWS ROLLTRAILER**

## **INSTRUCTION MANUAL**

<b>SERIES</b>	<b>SR</b>
<b>SERIAL NUMBER</b>	<b>1590/1..../30</b>
<b>YEAR OF CONSTRUCTION</b>	<b>2009</b>
<b>DOCUMENT</b>	<b>1590 15/05/2009</b>
<b>CUSTOMER</b>	<b>INARME</b>
<b>USER</b>	<b>Industria Armamento Meridionale S.p.A.</b>
<b>PAYLOAD</b>	<b>60 Ton</b>
<b>DEAD LOAD</b>	<b>4.2 Ton</b>

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## INDEX

1. DECLARATION OF CONFORMITY
2. GENERAL DESCRIPTION
3. MAIN COMMERCIAL COMPONENT LIST
4. GENERAL INSTRUCTIONS FOR USE AND WARNING INFORMATION
5. MAINTENANCE
6. REFERENCE STANDARDS
7. USER – COMPETENT PERSON



## 2 – GENERAL DESCRIPTION

**N. 30 industrial platform-tows rolltrailers series SR 20' 60 t**, having each one the following characteristics:

- Load capacity: 60 t uniformly distributed
- Loading deck measurement: length 6200 mm, width 2540 mm approx.
- Loading deck height: about 830 mm approx. from the ground
- Loading deck in streaked sheet steel (thickness 4 mm + streak)
- Frame largely manufactured, at two bearing members, realized with oversize steel sections and assembled through solid welding to the electrical arc. The resulting structure is calculated to resist to bending and twist stress with hypothesis of suitable loading for size and distribution.

The four corners of the frame are rounded

- N° 2 hunting axles disposed on an axis section; on each axle are assembled n° 2 wheels series "GRAN CARICO" Ø 700 x 400 mm, rolling on adjustables conical roller bearing of main international brand
- In all are assembled n. 4 wheels
- Wheels hubs cover is foreseen in steel caps/cover powder
- Front space for platform-tows handling with gooseneck



- N. 2 safety hooks for coupling with gooseneck
- N. 2 opening, including tubular steel sections, for handing trailer elevator forks. On both sides, the opening are contouring with yellow painting colour RAL 1018
- N. 14 points for etching-handing cables/chains (“D” rings) disposed in a central single row as follows:
  - n. 5 for each long side
  - n. 2 front head
  - n. 2 rear head
- N. 4 twist lock foldaway for clamping containers of 20’ positioned on the four corner of the rolltrailers
- N. 4 hooks points to handle the platform-truck by crane
- Bolts and nuts plated in galvanic way
- Painting, upon sandblasting, with two hands of primer and two coats of nitro-synthetic enamel painting with colour HEMPEL 5225 (Rusty) – RAL 3009.
- Max loading indication on the front / back side of the frame
- Careful, strong manufacture, suitable to work in sea place
- CE certification and conformity declaration



### 3 - LIST OF MAIN COMMERCIAL COMPONENTS

COMPONENT	DESCRIPTION	Q.ty
Wheels	Ø 700x400 series "GRAN CARICO"	4
Engine wheels bearing	Conical rulls 32022X	4
	Conical rulls 30218	4
Hunting axle	120 C45	2
Ring nut axle	KM 18	4
Bushing axle	60/65x60	4
Bolt axle	Ø 60 - 38NiCrMo4	4

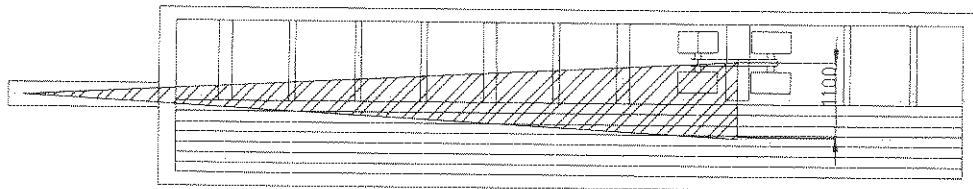


## 4 - USE AND WARNING INFORMATIONS

To handle industrial platform-tows rolltrailers SR 1590/1../30 it is necessary operating as follows:

- To hitch, in safety, the engine goosneck to the tow drawbar
- Lay down the goods carefully on loading platform, avoiding knocks that could create additional stresses both to the frame and the mechanical groups of which the trailer is manufactured
- The maximum admitted load has to be intended as load uniformly distributed on the whole platform surface
- The maximum admitted speed considered during the design of trailer is **6 Km/h** at maximum load, running on industrial pavement, well leveled and well compacted
- Be sure about the braking capability of tractor; it must be adequate for the trailer needs at maximum load (dead load plus its load capacity)
- In the event the trailer has to be uncoupled from the tractor and parked on a slope road it is advisable to use some hood stop, to post before the separation from the tractor
- Points that allow to unload the payload at ground are three: the two back hold and the middle of the motorized bearing

- For this reason it exists a “**balance triangle**” done by the jointing of these three points: to not have capsizing risks, it is necessary that the load barycenter should be positioned inside of this triangle



**The hunting axles system assures an average subsidence and uneven surface absorption: the trailer is however projected and realized for internal use and for 6 km/h maximum speed also in absence of load.**



## 5 – MAINTENANCE

Due to the trailer concept design, scheduled replacement for worn-out parts, or extraordinary repair aren't needed.

In any case to assure a long working life and to maintain a good reliability of its performances it is advisable to carry out a routine maintenance consisting of visual checks and simple mechanical adjustment.

Every two months, make a global visual check of trailer, verify the condition of the front bay for the handling with goosneck.

Verify as well the correct tightening of axles, bearing and bushing and the status and the wear of rubber coat covering the wheels.

**(It is necessary to execute this operation more frequently in case of large use of the trailer)**

With the same **bimonthly** cadence, verify the wheels covering situation and the presence of possible tears.





## 6 – STANDARDS REFERENCE

We indicate the standards that MORELLO S.a.s uses for their equipments design and building.

### 6.1 LAWS AND ORDERS

98/37/CEE Machine Rule  
(and following integrations and modifies)

Law 46 of 05/03/90	Standard for plants safety and relative rule
DPR 447 of 06/12/91	Implementation regulation of the law 46/90
D LGS 81 of 09/04/08	Implementation of the art. 1 law 3 august 2007, n. 123, on the subject of health and safety care in the work places

### 6.2 RULES

UNI EN 12100-1	Machinery safety – Main concepts, project general rules – Part 1: Foundation language, technique
UNI EN 12100-2	Machinery safety – Main concepts, project general rules- Part 2: Technical rules
UNI EN ISO 13857	Trademark safety – Safety distances to bar the attainment of dangerous areas with higher and lower limbs
UNI EN 349: 1994	Trademark safety – minimum areas to avoid the body parts deflection
UNI EN 953: 2000	Safety trademark – Protections – General requirements for the construction of fixed and mobile protections



UNI EN 1088: 2007	Safety trademark – Interblock devices integrated to the protections – Choice and project rules
UNI 5132	Covered electrodes for the arc welding of the steels not alloyed and sickly alloyed to the manganese. General technical conditions, symbols and test procedures
UNI EN 10021: 2007	General technical conditions of steel products supply
UNI EN 10025-1: 2005	Steels hot-rolled products for structural employments – Part 1: General technical conditions of supply
UNI EN 10083-1: 2006	Steels for temperating – Part 1: General technical conditions of supply
UNI EN 10083-2: 2006	Steels for temperating – Part 2: Technical conditions of supply for not alloyed steels
UNI EN 10083-3: 2006	Steels for temperating – Part 3: Technical conditions of supply for alloyed steels
UNI EN ISO9001:2000	Quality system management

## OTHER RULES

CNR UNI 10011-88- Steel constructions; calculation instructions

UNI 1307 and 1309 Welding process



## **7 – USER / COMPETENT PERSON**

### **USER**

People that use industrial platform-tows rolltrailers SR 1590/1../30 must be older than 18. These people will have to be charged from the Company to use it only after they have been trained by a Company responsible and read carefully this manual.

Rules between user and competent person have to be distinguished.

### **COMPETENT PERSON**

Installation, maintenance, repairs and check must be done only by competent person.

European laws said: competent person is who has experience, know-how and culture in this subject and is able to manage the tools to permit to the machine to work.

**OUR POST-SALES SERVICE IS AT YOUR DISPOSAL FOR ANY QUESTION YOU MAY REQUIRE.**