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INNER TRANSPORTATION TECHNOLOGY

INDUSTRIAL PLATFORM-TOWS ROLLTRAILER

INSTRUCTION MANUAL

SERIES	SRP2
SERIAL NUMBER	.
YEAR OF CONSTRUCTION	2012
DOCUMENT	1840
CUSTOMER	Industria Armamento Meridionale S.p.A.
PAYLOAD	120 Ton
DEAD LOAD	10,1 Ton

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2 – GENERAL DESCRIPTION

N. 25 industrial platform-tows rolltrailers series SRP2 40' 120 t, having each one the following characteristics:

- Load capacity: 120 t uniformly distributed
- Loading deck measurement: Length 12300 mm, width 2700 mm approx.
- Loading deck height: about 700 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 (I-beam european HEA 450 – S355) 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° 4 hunting axles disposed on two axis sections, hunting also in the platform longitudinal direction; on each axle are assembled n° 2 wheels series "GRAN CARICO" Ø 620 x 420 mm, rolling on adjustables conical roller bearing of main international brand
- In all are assembled n. 8 wheels (four for axis section); further, axles and swing wheel oscillate on greased bushings of sea type



- 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 handling trailer elevator forks. On both sides, the opening are contouring with yellow painting colour RAL 1018
- N. 16 pockets for steering columns of load containment:
 - n. 8 for each long side
- N. 30 points for etching-handling cables/chains (“D” rings) disposed in a central single row as follows:
 - n. 11 for each long side
 - n. 4 front head
 - n. 4 rear head
- N. 4 twist lock foldaway for clamping containers of 40’ positioned on the four rolltrailer corners
- 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 3011
- 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	SUPPLIER
Wheels	Ø 620x420 series "GRAN CARICO"	8	MORELLO
Engine wheels bearing	Conical rulls 32022X Conical rulls 30218	8 8	SKF
Hunting axle	120 C45	4	MORELLO
Bushing swing wheels	80/85x60	4	MORELLO
Bolt swing wheel	Ø 80 – 38NiCrMo4	2	MORELLO
Bushing axle	60/65x60	8	MORELLO
Bolt axle	Ø 60 - 38NiCrMo4	4	MORELLO
Wheels ring nut	KM 18 (M90x2)	8	SKF
Washer	MB 18	8	SKF

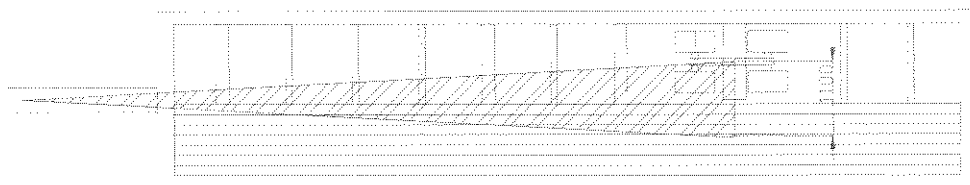


4 – GENERAL INSTRUCTIONS FOR USE

To handle industrial platform-tows rolltrailers series SRP2 1840/1../25 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 big 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.

Damages reparation:

Damages reparation must be made immediately to minimize the reparation extension.

After reparation make sure with visual check and with load test that the same should be made correctly.



The table below shows the tightening torques for each dimension of the screw.

Screw diameter	Screw pitch	Pretightening torque Kgm	Tightening torque Kgm
6	1	0,75	1
8	1,25	1,8	2,4
10	1,5	3,6	4,8
12	1,75	6,5	8,5
16	2	15	20,5
20	2,5	30	40
24	3	50	70
30	3,5	95	130

5.1 SPARE PARTS

On units 1840/1...25 are not presents components subjected to wear, for this reason it is not forecast a spare part list for a scheduled replacement.

6 – STANDARDS REFERENCE

We indicate below specific rules that MORELLO S.a.s uses for the design and building of the equipments, adhering strictly, in all its aspects, to the European laws and to the editions of the most relevant European standards and codes (EN): ISO/FEM/DIN/UNI/IEC/ASTM

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 – SAFETY WARNINGS

Units 1840/1...25 are designed only for internal use, a different employ is considered not in conformity.

Otherwise the declaration of conformity won't be considered valid.

- Put loads on the support frame without impacts that could produce damages to the structure and to the mechanical components
- Use the unit in conformity to those described in chapter 4 and 5
- Eliminate any inconvenient that could affect the safety.
- Before to start the run, check that the path should be free of obstacles and that there are no objects against the wheels. In any case make sure that there are no people or objects inside the translation area.



8 – USER / COMPETENT PERSON

USER

People that use industrial platform-tows rolltrailers series SRP2 1840/1.. 25 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

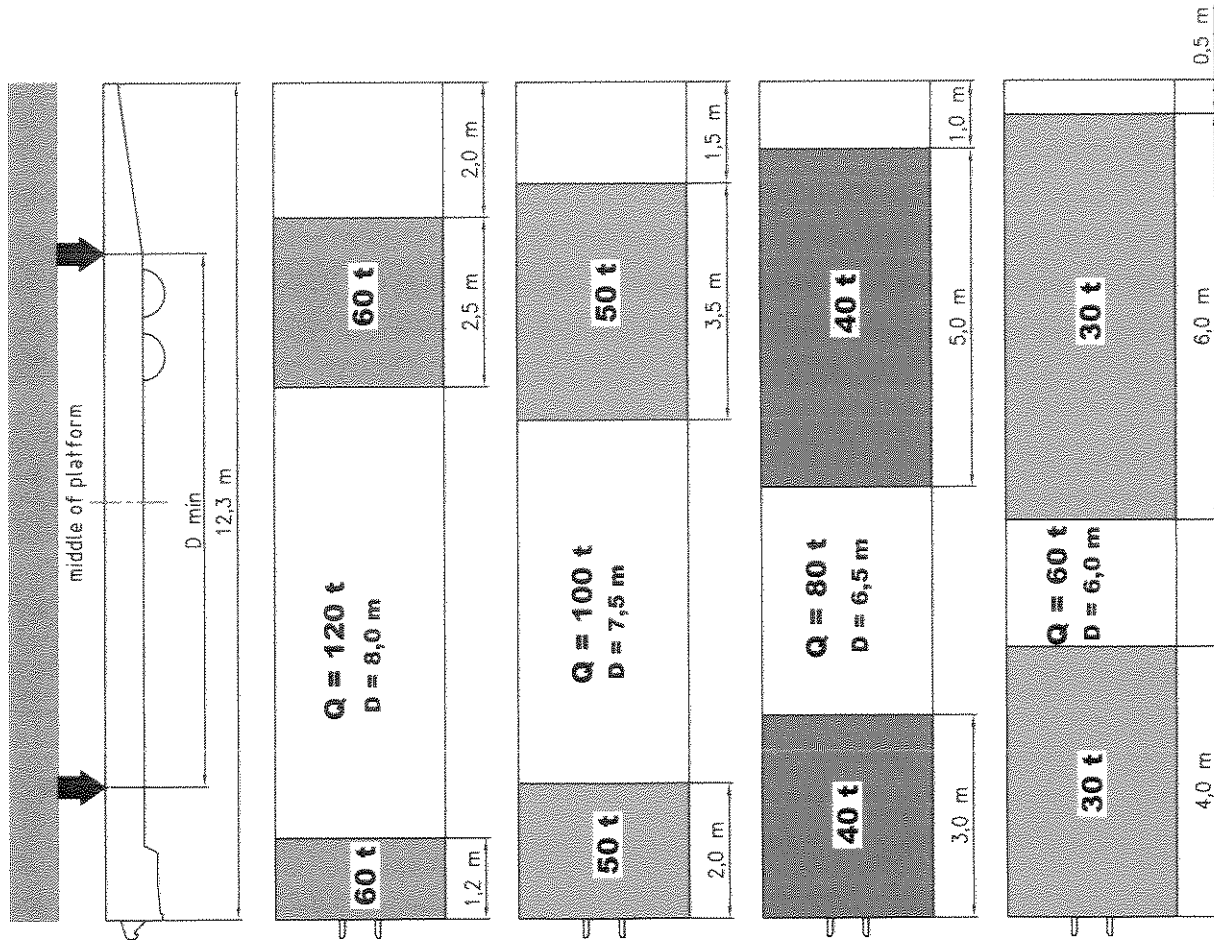
Installation, maintenance, repairs and check must be done only by competent person.

European laws said: competent person is who has experiance, 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.

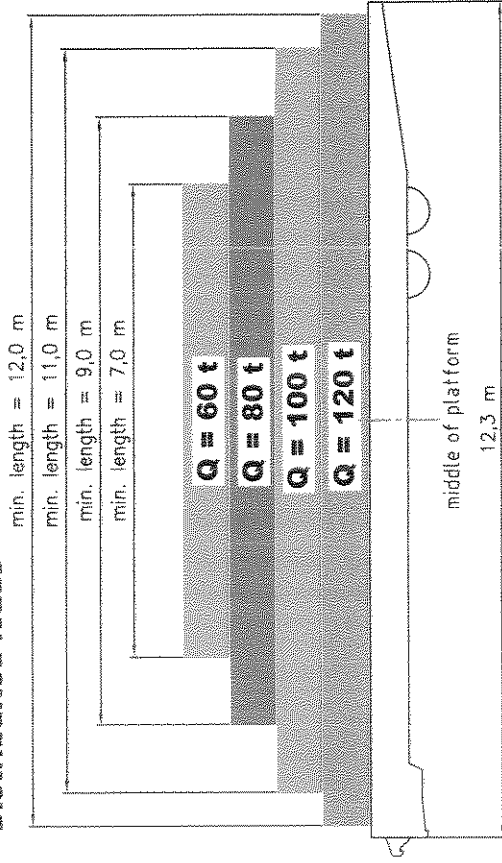
FRGC - Rolltrailer 40' 120 tons - 2,7 m wide

Point loads must be put on the platform within the marked areas possibly at a distance greater than "D"



owners reg. nos. FRGC 127201-2 to FRGC 127300-3

Distributed loads



Load gravity center must be inside the respective marked areas

