Aluminum Ramps Operation & Maintenance Manual

PRODUCT IDENTIFICATION

MODELS				
M030	M040	M050	M070	M070P
M075	M080	M090	M100	M115
M115A	M115H	M120S	M125	M135
M140	M145	M150	M155	M160
M165	M170	M185	M200	M230
SH RANGE RAMPS			MPC EVENT RAMPS	

IDENTIFICATION TAG DATA

PRODUCT TYPOLOGY
MODEL
SINGLE RAMP WEIGHT
LOADING CAPACITY SINGLE OR COUPLED AND CORRESPONDING WHEELBASE
MINIMUM WHEEL/TRACKS WIDTH (IF APPLICABLE)
MANUFACTURING DATE (YEAR/MONTH)
SERIAL NUMBER

IMPORTANT NOTICE TO HELP IDENTIFYING THE APPROPRIATE MODEL GIVEN USAGE NEEDS

- **RAMP LENGTH**

Maximum allowable slope during ramps usage is 30%, corresponding to. 16.5°. Applying the following formula the corresponding ramp length can be determined:

$$\text{RAMP LENGTH (METERS)} = \frac{\text{HEIGHT DIFFERENCE (METERS)} \times 100}{\text{SLOPE (\%)}}$$

Example: if the difference in meters between loading deck and ramp base plan is equal to 1.20 meters (in most cases this difference equals loading deck height), then:

$$\textit{RAMP LENGTH (METERS)} = \frac{\textit{1.20 meters} \times 100}{30} = \textit{4 meters}$$

Deployable ramps should be at least 4 meters long; the model selection should then take into account the weight of the vehicle to be loaded through the ramps

Please Note: through the application of the above formula the ramp length is determined in correspondence to the optimal 30% slope. Should a lower slope be employed, the feasibility of ramps fitting should be checked with the manufacturer.

- ## LOADING CAPACITY

THE LOADING CAPACITY IDENTIFIES THE MAXIMUM CARRYING WEIGHT OF A SINGLE OR COUPLE OF RAMPS. MAXIMUM CARRYING WEIGHT DECLARED ON THE MANUFACTURER'S PLATE SHOULD NEVER BE EXCEEDED.

The manufacturer's plate reports the maximum loading capacity corresponding to the wheelbase of the vehicle to be loaded.

Ramps loading capacity varies along with the vehicle wheelbase.

Ramps loading capacity will in any case decrease when the vehicle wheelbase decreases.

In case a vehicle with a wheelbase different from those reported on the manufacturer's plate should be loaded, please refer to your dealer to obtain your ramps loading capacity in correspondence to this wheelbase.

Loading capacity reported on the manufacturer's plate refers to homogeneously distributed loads in relation to different wheelbases and minimum footprint. In case of vehicles presenting an un-homogeneous weight distribution (e.g. skid steer loaders, forklifts, milling machines ...) reported loading capacity can decrease: it is therefore mandatory to ask your dealer or the manufacturer the correct loading capacity to be considered.

In case of vehicles with steel crawlers, the actual vehicle's weight must be increased of a 15% amount to determine the appropriate loading capacity.

- ## CRAWLER OR WHEEL FOOTPRINT

The footprint of wheels or crawlers of the vehicle to be loaded must not be lower than that reported on the manufacturer's plate.

- ## LOADING OF STEEL CRAWLERS VEHICLES AND ROLLER COMPACTORS

Never climb on ramps with steel crawlers and steamrollers unless ramps are borderless and they have been especially geared (e.g. deploying rubber bands).

Please Note: roller compactors must present a two axes traction.

TRANSPORT AND HANDLING

- In case of manual loading never exceed maximum carrying weight per person according to applicable Health and Safety Regulations.
- In case of loading assisted by lifting equipment, polyester bands should be employed to avoid damage to ramps' structure.
- Never bump or hit the ramps with tools that can damage ramps' components or structure.

USAGE WARNINGS AND RESTRICTIONS

PERSONNEL DEPLOYED TO LOADING RAMPS USAGE MUST BE ADEQUATELY TRAINED ON THEIR USAGE AND ON EVERY APPLICABLE HEALTH AND SAFETY REGULATION.

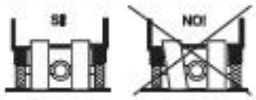
ALWAYS USE RAMPS WITH THE APPROPRIATE LENGTH, LOADING CAPACITY AND TYPOLOGY ACCORDING TO THE MANUFACTURER'S GUIDELINES. RAMPS USAGE IS STRICTLY FORBIDDEN IN ANY CASE IN WHICH MANUFACTURER'S USAGE REQUIREMENTS ARE NOT MET.

DO NOT OVERLOAD THE RAMPS

- Aluminum alloy ramps are designed to enable ramps deployment in presence of slopes.

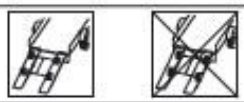
- To allow for a safe ramp placement, loading deck must be parallel to the ground. Neither ramp nor loading deck should rest on a slope. The transport vehicle should always be off, with parking brakes engaged and wheels secured trough wedges or similar means.

- Ramps must be placed parallel one another and perpendicular to the loading deck. Check that distance between ramps equals vehicle's wheel track.

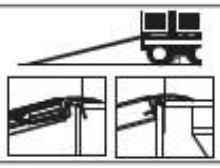


- Set loading trajectory before climbing the ramps: no corrections should be made during ascent.

- Always climb ramps using their centre section: mounting with wheels or crawlers over a ramp edge is strictly prohibited.



- Secure ramps to loading deck using recommended anchoring systems (please refer to the dedicated section of the present manual). Please make sure that the entire surface of the ramp's hedge boards rest on the loading deck.



- It is strictly forbidden to support ramps with any means to increase their maximum carrying weight.

- Speed should be constant avoiding braking and acceleration.

- Speed over ramps should always remain below 0.12 Km/h limit

- Never climb on ramps with steel crawlers and steamrollers unless ramps have been especially geared by the manufacturer (e.g. deploying rubber bands).

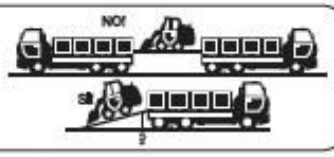
- Using ramps geared with rubber bands to support steel crawlers or steamrollers, crawlers and rollers should be kept clean to guarantee adequate traction.

- To avoid damage of the ramps surfaces, please assure that vehicles to be mounted always present clean tyres or crawlers.

- Ramps should be employed according to weight distribution between axes of the vehicle to be loaded: the heavier axe should always be kept in the higher position while, should stabilizing equipment be employed, it should be mounted on the lower part of the vehicle.

- Excavating equipment, earth-movers and the likes should always climb ramps empty, even when overall weight remains below maximum carrying weight

- Never use ramps as gangplanks unless they have been specifically geared for it by the manufacturer.

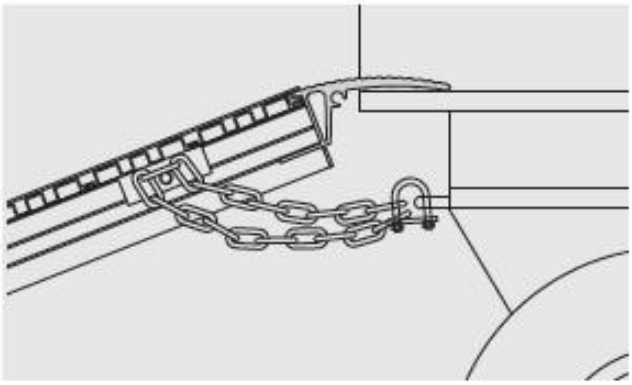


- As reported in the maintenance paragraph of this manual, prior to any loading ramp deployment, personnel should always ascertain that the ramp's structure and weldings are intact. **Should any fault be visible, ramp's usage is strictly forbidden.**

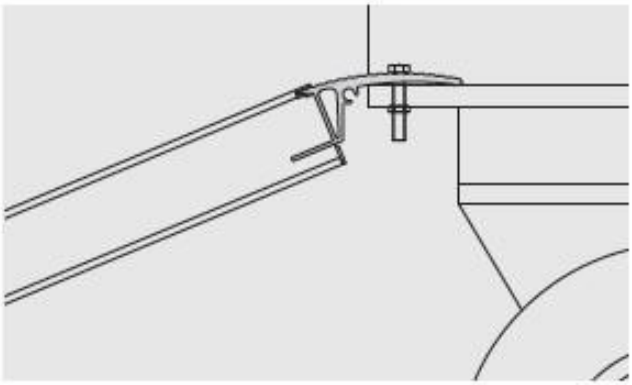
ANCHORING SOLUTIONS

Anchoring solutions are mandatory means of securing ramps to loading deck, to increase safety of use.

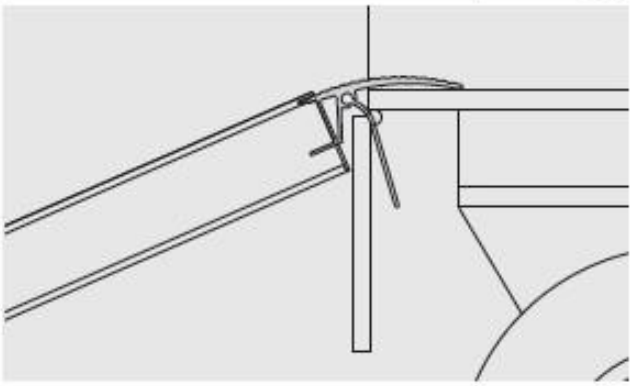
- **FASTENING CHAIN**
  The chain must be hooked to loading deck through the shackle and to ramp, below its loading surface by means of provided anchoring means, for example:
  —> a ring
  —> a reinforced rod locked by plates
  —> an hollow profile welded above the surface of the ramp
  —> a rod welded to the lower part of the hedgeboard (final part of the ramp to be placed on the loading deck).



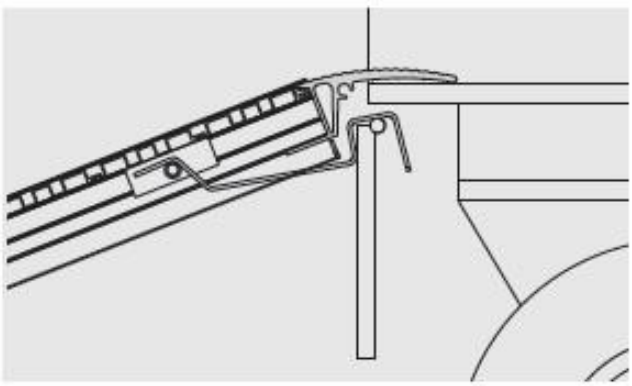
- **PIN**
  A 12-15 mm diameter pin must be inserted through holes drilled into the ramp and the loading deck.



- **ALUMINIUM BRACKET**
  The provided aluminum bracket must be slipped between loading deck and sideboard to assure correct anchorage of the ramp.



- **STEEL BRACKET**
  This anchoring solution can be assembled and disassembled as necessary. For a correct anchoring, the clamp must be slipped between loading deck and sideboard. The main advantage of this solution consists in the fact that the clamp is free to scroll along the ramp width as well as rotate around the pin used to couple it with the ramp.



MAINTENANCE

- Prior to each ramp deployment, personnel should always ascertain ramp's structure integrity: the ramp surface, struts, hedge boards and each coupling welding must not present any structural yield. Should any fault be visible, ramp's usage is strictly forbidden.
- Monthly at a minimum, presuming daily deployment, ramps should be visually inspected to ascertain their usage state or the existence of faults in their structure or welding, by qualified personnel properly instructed on procedures reported in this document.
- Users should always keep written proof of any inspection, with their date of occurrence and name, address and signature of the inspection responsible.
- Should inspections call for unplanned maintenance, maintenance services must be handled by qualified personnel, in conformity to manufacturer's prescriptions or by the manufacturer itself, to avoid forfeiture of the warranty.

LIABILITY CLAUSE

- The manufacturer shall in no event be liable to the customer for any loss to living or non-living things, due to improper use of the equipment, to complete or partial non-compliance to usage instructions and restrictions, periodical inspection instructions, or applicable safety regulations.

WARRANTY

- The Customer shall deploy the equipment according to applicable Health and Safety Regulations, for its intended usage and applying proper operations and maintenance guidelines, bearing every responsibility in case of unforeseen or uncontrollable circumstances.
- Warranty is limited to twelve months, effective upon delivery from METALMEC to the Customer and subject to the disclosure of faults within eight days from their discovery.
- Warranty will cover repair or substitution of products where manufacturing defects are acknowledged by METALMEC, excluding any fault or damage arising from negligence in use or maintenance, improper use, accidental or transport fractures, wrong environmental conditions, normal wear, etc. Equally, warranty will not cover faults not resulting in lessened functionalities or decreased intrinsic value of the product.
- Warranty does not cover reimbursements of any kind nor compensations for any kind of damages incurred by living or non-living things.
- Any cost related to shipment to and from the manufacturer's site for warranty service will be fully sustained by the customer.
- Warranty will be immediately void in case of alterations or modifications made to METALMEC products by the Customer of its own will or by third parties, or in case of any unauthorized alteration or modification performed by the customer or third parties.
- Repairs covered by warranty must be executed by the manufacturer only.

METALMEC s.r.l.

CE

CE DECLARATION OF CONFORMITY

The manufacturer:

METALMEC s.r.l.
Via San Cassiano, 6 - 24030 Mapello (BG) - Italy
Tel. +39-035-4945858 - Fax. +39-035-4945149
www.metalmecsrl.it

declares that the:

Loading ramps made of aluminium alloy 6005A
Models: M030, M040, M050, M070, M070P, M075, M080, M090, M100, M115, M115A, M115H, M120S, M125, M135, M140, M145, M150, M155, M160, M165, M170, M185, M200, M230, MPC Ramps, SH Short Ramps.

comply with the Machinery Directive 2006/42/EC.

Standards applied:

- EN ISO 12100 - Safety of machinery. General principles for design. Risk assessment and risk reduction.
- EN 1090-3 – Execution of steel structures and aluminium structures Part 3: Technical requirements for aluminium structures.
- EN 1999-1-1 - Eurocode 9: Design of aluminium structures Part 1-1: General structural rules.
- EN ISO 15614-2 – Specification and qualification of welding procedures for metallic materials. Welding procedure test. Arc welding of aluminium and its alloys.
- EN ISO 15613 – Specification and qualification of welding procedures for metallic materials. Qualification based on pre-production welding test.

Person authorised to compile the technical file: Mr. Luca Benigni,
Technical Director - Metalmec S.r.l., Via San Cassiano, 6, 24030 Mapello (BG) - Italy

Technical Director
Luca Benigni

The Ramp People
Unit C3
Mill Road
Sandown Industrial Park
Esher
Surrey
KT10 8BL
Tel. +44 (0) 1372 478 960
hello@theramppeople.co.uk
www.theramppeople.co.uk

THERAMPPEOPLE
Superior Quality Ramps