

RAMPS BRIDGES AND TAIL LIFTS



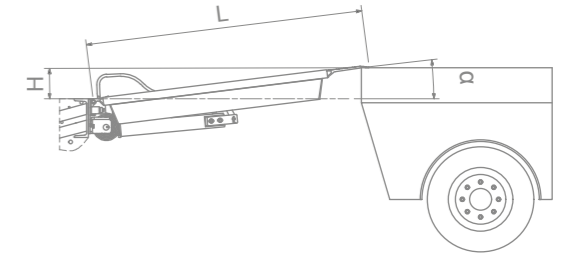
The range of ramps, bridges and tail lifts produced by Metalmec is able to meet professional requirements for loading and unloading vehicles and equipment, particularly those of logistics companies, goods transport vehicle suppliers and truck/trailer manufacturers. With the ability to move vehicles weighing between 300 kg and

7500 kg (manual pallet trucks, electric pallet trucks, forklifts, etc.), whatever your needs for overcoming positive or negative height differences, our range of standard or customised products is sure to provide you with a solution that will guarantee you the best in terms of quality, durability and safety.

HOW TO DETERMINE THE LENGTH OF THE BRIDGE OR TAIL LIFT

During use, the inclination (α) of the bridge or tail lift must not exceed a maximum slope of 12.5% (in accordance with the UNI EN 1398:2009 standard). In order to establish the minimum length (L) of the bridge or tail lift to a good approximation, apply the following formula:

$$\text{LENGTH OF BRIDGE OR TAIL LIFT IN MILLIMETRES (L)} = \frac{\text{HEIGHT DIFFERENCE IN MILLIMETRES (H) X 100}{\% \text{ MAXIMUM SLOPE } (\alpha)}$$



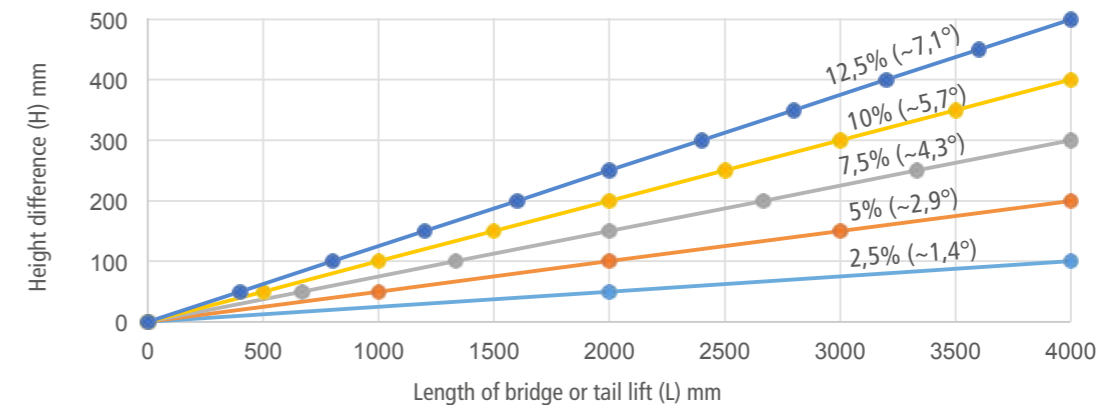
Height difference (H) refers to the height of the loading bed from the fulcrum of the bridge or tail lift.

The maximum slope (α) depends on the vehicle used during the loading and unloading activity. In this respect we recommend, for safe operation, the following maximum slopes based on some of the vehicles used in logistics:

4% for manual pallet trucks, 8% for walk-behind electric pallet trucks and 12% for electric ride-on forklifts.

EXAMPLE: Let's assume we need to overcome a height difference (H) of 100 mm using an electric pallet truck. By applying the formula indicated above, we obtain: LENGTH OF BRIDGE OR TAIL LIFT IN MILLIMETRES (L) = 100 mm x 100 / 8 = 1250 mm You must therefore select a bridge or tail lift with a minimum length of 1250 mm.

The diagram clearly shows the dimensions used to determine the length of the bridge or tail lift and their interrelationships expressed by the formula above.



NOTES

- In order to ensure a minimum safety clearance on each side of the transport vehicle, the width of the bridge or tail lift must be at least 0.70 m greater than the track width of the vehicle in transit/transport, and in any event not less than 1.25 m (in accordance with the UNI EN 1398:2009 standard). In order to ensure greater safety conditions for the operators, it is recommended to use a bridge or tail lift with a width equal to that of the vehicle's loading bed.
- The support ends or "heads" must rest on at least 0.10 m of the loading/unloading dock and loading bed of the vehicle.
- Transit is only permitted for vehicles with rubber wheels or tracks.
- Transit is strictly prohibited to any vehicles with metal tracks or metal parts that could come into contact with the structure of the bridge or tail lift.
- For the MS040G loading bridges, a loading dock foundation strength greater than 1.6 kg/cm² is advised.
- If the loading dock foundation is made of concrete or similar, a minimum strength class of C25/30 is advised, which means the concrete has F_{ck} = 25 N/mm² and R_{ck} = 30 N/mm² (in accordance with the UNI EN 206-1:2006 and UNI 11104:2004 standards).
- The instructions for use and maintenance are described in the instruction and warning manual supplied with the product.
- The manufacturer's declaration of conformity is an integral part of the instruction and warning manual.
- For all information regulating the supply of these products, please refer to the manufacturer's General Conditions of Sale at the following website: www.metalmecsr.it

OPTIONS

- The guide rail is available on request in 3 m long bars of rough, non-galvanised steel.
- Bridges and tail lifts are available in the dimensions shown on the following product pages (width B greater than or equal to 1250 mm, in accordance with the UNI EN 1398:2009 standard). If you require products with different dimensions from those stated, please contact us directly.