World leading manufacturer of

GANGWAYS

Walk to work

- Offshore and Marine Gangways
- Upgrades and Modifications
- Services
- MA Academy

www.m-a.no
Telescopic Gangways

Walk to work

Marine Aluminium’s Telescopic Gangways are the market leading products for safe and efficient transfers of manpower and utilities between fixed and floating installations.

Telescopic Gangways bridge the gap between fixed and floating installations, or between two floating installations or vessels. The main purpose is personnel access, but they can also support a wide range of utility transfer lines, such as fuel, water, compressed air or power/LAN/fibre and cargo transfer.

Marine Aluminium Telescopic Gangways are favoured by offshore clients for several reasons; connection time, efficiency and level of safety being the most important.

All Marine Aluminium Telescopic Gangways can be designed and custom made according to client requirements. All Gangways will be approved by the major class societies. Most standard lengths are type approved.

Continuous product development

Marine Aluminium was the first, and is by far, the most experienced manufacturer of aluminium Gangways. Since the very first one was designed back in 1979, we have been providing millions of safe transfers worldwide every year - supported by a global team of highly qualified and experienced product specialists.

In 2015 we celebrated the delivery of Marine Aluminium 100th Gangway – an unparalleled achievement in our business and one we are very proud of. However, our experts are not resting. With our ground breaking new technological advances in Active Motion Compensation and Autolanding, Marine Aluminium Telescopic Gangways will be available for an even wider range of use, and even tougher conditions, on vessels and rigs worldwide in the future.

Main Advantages

- Excellent safety record
- More than 99% uptime documented
- Field proven design in harsh conditions
- Easy operations without significant preparation on receiving end
- Extremely durable
- Low maintenance
- Cargo transfer through Gangway
- Almost 40 years of Offshore Gangway experience. More than 100 bridges delivered, enabling millions of safe crew transfers every year.
From inside the cabin, operators are in total control during landing and lifting – ensuring safe and efficient operations. When connected with landing cone, the Gangway will not require to be continuously manned – and thereby reducing operational cost.

Marine Aluminium’s new Side Mounted Gangway is yet another example of how our continuous product development enables an even wider use of Gangways on rigs and ships around the world.
In need of a Telescopic Gangway, but not looking to buy? Uptime Rental offers you the possibility to rent our world leading products.

To ensure flexibility for our clients’ varying needs, Marine Aluminium/Uptime International have established Uptime Rental - a joint rental service for Telescopic Gangways. Uptime Rental disposes a pool of Gangways which can be rented either short- or long-term, also including operating and servicing personnel.

**AVAILABLE RENTAL PRODUCTS:**

- **Uptime Rental 12.0m:**
  - Operating length: 9.0m
  - Telescope: +/- 3.0m

- **Uptime Rental 23.4m:**
  - Operating length: 19.4m
  - Telescope: +/- 4.0m

- **Uptime Rental 26.0m:**
  - Operating length: 22.0m
  - Telescope: +/- 4.0m

- **Uptime Rental 26.0m with Skid and Adjustable Pedestal:**
  - Operating length: 22.0m
  - Telescope: +/- 4.0m

- **Uptime Rental 42.5m:**
  - Operating length: 36.5m
  - Telescope: +/- 6.0m

- **Fixed Gangway 25.0m/40.0m:**
  - Operating length: 25.0m/40.0m
  - Telescope: +/- 0.0m

A typical 23.4m Telescopic Gangway in use offshore.
Uptime – in brief
Uptime is a company in the Marine Aluminium Group (MAG) developing motion compensated equipment for sale and rental. The company is responsible for MAG’s offering of smaller to mid-size Gangways, as well as motion compensated Helidecks.

Fixed Gangways

For bridging a gap between fixed installations with low relative movement, Marine Aluminium’s Fixed Gangways provide safe and efficient means of transferring people and utilities. Typical applications are connecting jackup rigs and fixed platforms.

Fixed Gangways are available up to 60 meters in length, as well as in versions with variable length. They can be installed using the platform’s own crane and comes without hydraulic machinery.

**FIXED GANGWAY OPTIONS:**

- Turntable – for control of sideways movements
- Wheel arrangement/bogie – for control of longitudinal movements and torsional forces
- Outfitted according to requirements
**PRODUCTS**

**Product range:** Marine Aluminium Telescopic Gangways are available in different sizes from 12.0 to 57.5 meters in length.

Medium size Gangways are perfect for high frequency hook-ups and disconnections. Up to 55 daily connections documented.

For long-term hook-ups it is essential to have Gangways that can handle the movements between vessels and installations, and for such assignments Gangway lengths from 42.5 to 57.5 meters are ideal.

---

**UPTIME 12.0m – delivered by**

- **Operation length:** 9.0m
- **Telescopic movement:** +/- 3.0m
- **Typical applications:**
  - Crew transfer vessels (CTV)
  - Smaller ships

---

**UPTIME 23.4m – delivered by**

- **Operation length:** 19.4m
- **Telescopic movement:** +/- 4.0m
- **Typical applications:**
  - Compact semi-submersible (CSS)
  - Platform supply vessel (PSV)
  - Support vessels

---

**UPTIME 26.0m – delivered by**

- **Operation length:** 22.0m
- **Telescopic movement:** +/- 4.0m
- **Typical applications:**
  - Compact semi-submersible (CSS)
  - Support vessels

---

**UPTIME 26.0m – w/ ADJUSTABLE PEDESTAL AND SKID – delivered by**

- **Operation length:** 22.0m
- **Telescopic movement:** +/- 4.0m
- **Typical applications:**
  - Service support vessels (SSV)
- **Elevation movement:** 6.0m
- **Adjustable Pedestal elevation above deck:**
  - Lower: 8.5m
  - Middle: 11.5m
  - Upper: 14.5m
### Products

<table>
<thead>
<tr>
<th>Model</th>
<th>Operation Length</th>
<th>Telescopic Movement</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 34.5m</td>
<td>29.5m</td>
<td>+/- 5.0m</td>
<td>Barges and semi-submersible accommodation units in sheltered waters</td>
</tr>
<tr>
<td>MA 42.5m</td>
<td>36.5m</td>
<td>+/- 6.0m</td>
<td>Accommodation barges, monohull accommodation vessels and semi-submersibles worldwide</td>
</tr>
<tr>
<td>MA 45.5m</td>
<td>38.0m</td>
<td>+/- 7.5m</td>
<td>Monohull accommodation vessels, North Sea spec. Semi-submersible accommodation units worldwide</td>
</tr>
<tr>
<td>MA 46.5m</td>
<td>38.5m</td>
<td>+/- 8.0m</td>
<td>Monohull accommodation vessels, semi-submersibles. Gulf of Mexico, Africa, Brazil, Asia</td>
</tr>
<tr>
<td>MA 57.5m</td>
<td>47.5m</td>
<td>+/- 10.0m</td>
<td>Floating production storage and offloading (FPSO), monohull accommodation vessels, semi-submersibles</td>
</tr>
</tbody>
</table>
Motion compensation
Active and passive

With active or passive motion compensation, Gangway connection time can be significantly increased.

All MA Gangways are equipped with extensive safety and redundancy systems. As a minimum, the Gangways will have accumulator systems, emergency lift-off systems and power back-up, but can also be fitted with monitoring system, active motion compensation, personnel tracking system, CCTV, gas monitoring and other equipment. These features ensure safe operation even under the toughest conditions and in an emergency situation.

Passive Motion Compensation (PMC)
PMC is used when Marine Aluminium Gangways are connected and in operation. After landing, the Gangway is placed in "free flow mode" with engines turned off. Operators are not required during "free flow mode". PMC then allows the Gangway to absorb movements in all three axes through telescope, slew and lift/luff. PMC has proven to be the solution for reliable access and reduced wear and tear on Gangway components.

Marine Aluminium PMC solution is commonly used on larger Gangways for accommodation units, where the Gangways are to be connected for as long as possible.

Should a major power failure occur on board the vessel, the emergency lift-off function will still be operative due to power from the Gangway's own accumulators. These provide enough power to lift and retract the Gangway into safe position, a redundancy feature which enhances safety even further.

Active Motion Compensation (AMC)
Marine Aluminium AMC system is used to increase the operational window in which the Gangway can connect/disconnect. It enables the Gangway to compensate for vessel movements, allowing a smooth connection to the landing area. AMC is commonly used on Gangways that need to connect often and depend on connection time.

Bumper Mode
For operations with receiving platforms having limited space or weight restrictions, a bumper is installed on the Gangway tip instead of the landing cone. This is the standard for offshore wind installation access, in combination with an AMC system. (Note: Bumper mode is only offered on Gangways < 30 m)

MAIN ADVANTAGES OF AMC:

- Increased connection window
- Gentler and more efficient landings
- Safe connections
- Can also be retrofitted to selected Gangways
Autolanding®

Safer landing even in harsher conditions

Using highly advanced measuring technology, Marine Aluminium’s patented Autolanding® feature enables the Gangway tip to maintain position in relation to a fixed or moving target.

Equipped with Autolanding®, the Gangway “knows” the position it should be in, and can be landed fully automatically under the supervision of the bridge operator.

The system continually measures movements in relation to the landing site, and withdraws from landing if the movements are too large, to ensure a safe and secure touchdown. This feature is an important contribution to increased operational safety.

Autolanding® also allows the Gangway to keep a fixed position without landing, a feature which is ideal for access and work.

Autolanding® requires our Active Motion Compensation system.

Autolashing®

Automatic anchoring

To attach the landing cone to the landing site in a safer and more efficient way, Marine Aluminium has developed Autolashing®. This new patent pending type of landing cone anchors itself to the landing site automatically, using powerful magnets.

With Autolashing®, no personnel are needed for the lashing operation. The landing cone’s magnets will be switched on and off mechanically, using the movement in the landing cone damper.

The anchoring magnets are always switched on when the Gangway is connected to an installation - and they are always turned off when the Gangway lifts the cone - for example in the case of an emergency lift-off. The Autolashing® feature also ensures less force on the bridge and landing site during emergency lift-offs.

MAIN ADVANTAGES

- Increased window for connections and operations
- Assisted landing sequence
- Reduces potential for human error
- Reduces potential damage to equipment
- Can also be retrofitted to existing Gangways

With Marine Aluminium’s Autolashing® feature, no personnel are required for the lashing operation.

MAIN ADVANTAGES

- No need for manual lashing by crew
- No modification needed to landing platform
- Can also be retrofitted to existing Gangways
- The Gangway can be positioned in different angles to the receiving end
- EX-proof solution
### Pedestals

**Access any level**

#### Marine Aluminium Pedestals position the Gangway at correct heights and at optimal angles towards the installations they are serving.

Usually, normal working angle should be within plus or minus five to ten degrees. To increase the access of possible heights, a different height may be required. This is achieved by installing the Gangways on Fixed (modular) Pedestals or Adjustable Pedestal.

**Fixed Pedestals:**
Marine Aluminium offers design, class approval and supply of Fixed Pedestals – tailored to each client’s requirements. The Pedestal are manufactured to meet the appropriate height for each individual vessel. This allows for a horizontal start position. For project flexibility, spool pieces for various installation heights can be offered.

**Adjustable Pedestals**
For vessels operating on various contracts, the height of the installations they work with can vary. To easily change a Gangway’s elevation on such vessels, Marine Aluminium recommends our patented Adjustable Pedestal.

This arrangement enables the Gangway to be mechanically raised and lowered to the desired height in a very short time. To ensure safety at all times, the pedestal is locked with bolts when at the required height.

Marine Aluminium Adjustable Pedestals are customized according to each client’s requirements. They are often used on Uptime International Gangways, where frequent landings at different heights are required.

#### MAIN ADVANTAGES

- Increased safety
- Increased vessel connection flexibility
- More efficient transfers
- Improved personnel comfort
- Adjustable height connections to vessels

---

57.5 meters Telescopic Gangway with Adjustable Pedestal, designed for Edda Accommodation.

Adjustable Pedestal.
MA Gangway Safety Pack
Safeguarding every step

Enjoy an upgrade to a more user-friendly HMI-based alarm and monitoring system.

The system is prepared for connectivity of a wide range of existing and new sensors – for added safety and better preventative maintenance:

- Distance sensor (option 1).
- Landing cone camera (option 2).
- Wind sensor (option 3).
- Acceleration sensor (option 4).
- A variety of maintenance trends (option 5)

A secure internet connection allows data collection, remote monitoring and servicing.

MAIN ADVANTAGES:

- Improved view of the landing area
- Prevents personnel from being on the Gangway during landing
- More feedback to the operator
- Safer Gangway control
- Easier maintenance planning
- Reduced life cycle costs
- Available for new Gangways and as retrofits to existing

IMS
Monitor your hydraulics

To reduce the need for on-site resources and maintenance, as well as keeping life cycle costs down, Marine Aluminium Gangways can be equipped with the Intelligent hydraulic condition monitoring system (IMS). The system allows operators of critical hydraulic assets access to previously unavailable condition statuses. IMS continually analyses the hydraulic fluids, and presents the results via tailored easy-to-read graphics – ensuring that focus is not drawn away from primary tasks.

MAIN ADVANTAGES:

- Increase your operational window by having asset condition information available at all times
- Critically reduce downtime and life cycle costs by optimizing equipment operation, maintenance and the use of non-renewables
- Early warning system
- Full integration towards both Uptime International and Marine Aluminium designs
- Through its scalability, IMS integrates easily with other hydraulic assets
Total Maintenance Management – TMM

In response to our clients’ needs for uninterrupted operations, and to reduce their operational and financial risks, Marine Aluminium has developed Total Maintenance Management – our value-adding service program for the entire life-cycle of our products.

With TMM, Marine Aluminium takes full responsibility of managing, planning, executing and documenting your maintenance and repair activities. Based on a dedicated focus on environment, health and personnel safety, we support our clients in achieving their business targets by maximizing Gangway connection time and reducing operational expenses.

Our TMM concept comprises:

- **INSPECTION PROGRAM**
- **MAINTENANCE AND REPAIRS**
- **MANAGEMENT AND SPARE PARTS**
- **TRAINING AND CERTIFICATION**
- **24/7 GLOBAL TMM SERVICE**
- **MODIFICATIONS AND UPGRADES**

The TMM services is bundled in three different program levels: Standard, Medium and Plus.

TMM offers high-value benefits to all Gangway owners:

**Corporate**
- Increased connection time of Gangway
- Optimized operational expenses
- Maximized return on assets

**Technical dep./Maintenance**
- Makers verification of tech. integrity
- Inspection continuity and control

**Gangway and DP Operators**
- Safe and confident operation of Gangway
- Efficient operation and coordination of vessel and Gangway moves

**Fleet managers**
- Optimization of spare part availability and cost
- Cross learning and cost savings between fleet (fleet efficiency)

**Offshore personnel**
- Safe transfer between work and living area
Having trained and certified operators is key to ensure safe Gangway operation during varying conditions offshore. MA Academy provides the skills and knowledge needed.

MA Academy trains Gangway operators to become certified operators. The training consists of relevant theory for safe operation, basic Gangway structure and preventive maintenance. Theory and simulator training are combined to give operators a good understanding of how to perform a safe operation of their Gangway.

The certification process consists of:
- Basic course – theory and simulator training at MA Academy
- On-job training – training together with a certified operator on your Gangway
- Advanced Course – theory and simulator training at MA Academy
- Certification – theoretical and practical test at MA Academy

Courses are arranged at the MA Academy at Husey, Norway (English) or in Macae, Brazil (English or Portuguese). Special training courses at client’s location can also be offered upon request.

First-line maintenance course
In addition to our operator training, MA Academy can also provide technical personnel with a two-day first-line maintenance course. Training is performed by specialists on Gangway operation, maintenance and design criteria, at our MA Academy at Husøy, Norway.

The main focus of this course is how to perform correct preventive maintenance in order to have a safe Gangway with increased connection time. This will also help you meet the DNV-GL requirements regarding both annual survey and 5-year survey, stated in the new DNV-GL standard.
Why us?

Marine Aluminium AS is an internationally recognized supplier of innovative and sustainable access solutions. We have designed, fabricated and supplied aluminium structures to satisfied offshore, marine and onshore clients since 1953, and have gained an extensive knowledge and experience within our field of expertise.

We always strive towards our next innovation, and aluminium is the perfect material for our structures. Due to its great durability and low weight, and the technical developments we have contributed to, aluminium has become the safest and most economical construction material for the offshore and marine industries.

Our overall vision is to make offshore access safe and reliable. Our daily efforts are focused on the customer, loyalty, team spirit and our ability to find the right solutions. The result: Market leading high quality products and services, offered at competitive pricing.

**Trusted and preferred**

The Gangway is the most important feature on an accommodation unit. People are relying on it to walk safely to work over open sea – often in rough conditions. The accommodation unit’s income is also dependent on the Gangway’s connection time and operability. With more than 60-years’ experience and a superior Gangway track record, Marine Aluminium is the preferred supplier for all the largest offshore accommodation suppliers in the world.
KARMØY
Main Office

Postal address:
Marine Aluminium AS
P.O. Box 134
N-4299 Avaldsnes, Norway

Visiting address:
Husøyveien 165
N-4262 Avaldsnes

Phone: +47 52 84 84 00
E-mail: post@m-a.no
www.m-a.no

SALES OFFICES

Locations
- Abu Dhabi, U.A.E.
- Busan, South Korea
- Houston, USA
- Macaé, Brasil
- Madrid, Spain
- Ningbo, China
- Singapore
- Ålesund, Norway