

COMPANY CONNECT

MONDAY 7/04/2025

HANCOCK INDUSTRIAL LIMITED



Ride the Waves: Expert Tips for Installing Marine Mounts with Maximum Vibration Isolation

The correct position of the mounts can vary the vibration modes and reduce the natural frequencies of the suspended element, increasing the isolation ratio.

Key factors to consider:

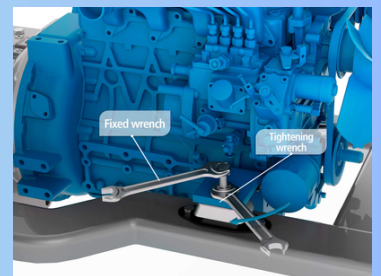
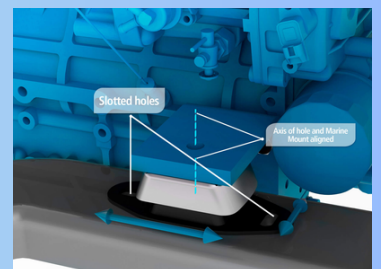
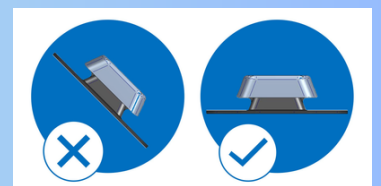
- All mounts should withstand a similar static load. In the longitudinal direction, the mounts should be installed symmetrically to the total COG.
- In the transverse direction, the mounts should be installed symmetrically to the total COG to achieve the lowest natural frequencies and better dynamic load distribution.
- To minimize dynamic forces, install the mounts on the Neutral Torque Axis (NTA), which connects the front and rear mounts with the total center of gravity.
- If the mounts are soft (to minimize the transmitted forces) and they are installed on the NTA, the dynamic forces can be effectively isolated.

Marine mounts are designed to be installed in a vertical position. Installing them angled may create static radial loads, causing the internal bushing to reach the end of stroke, increasing stiffness and reducing vibration isolation. AMC recommends vertical installation to ensure the weight of the suspended system acts in the axial direction of the mounts.

It is important to align the suspended equipment with the anti-vibration mount and fixation brackets. Misaligned mounts can increase stiffness, reduce vibration isolation, and cause hammering effects. Misalignment also creates additional stress on the elastomer, reducing its durability. The slotted holes help to accommodate the position of the Marine Mounts to keep the alignment.

Once aligned, the baseplate of the Marine Mounts can be fastened. When fastening the top screw, avoid twisting the rubber, as it can lead to stress and premature failure. To avoid twisting of the rubber, there are several methods:

- Sometimes the friction between surfaces is enough to avoid twisting the rubber.
- Tighten the top screw using a pair of bolt-nuts: while one wrench holds the bolt, the other can tighten the nut.



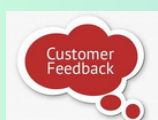
Did You Know? Effective Duct Isolation Reduces Vibration and Noise

Poorly isolated ducts can transmit vibrations and noise, reducing the overall effectiveness of machine isolation. Proper duct isolation is crucial to minimize these issues and achieve optimal results.

Key Isolation Tips:

- **Acoustic Hangers:** Use hangers combining springs and Sylomer® materials to isolate ducts. For high loads, opt for SRS+ Sylomer® hangers, and for lower loads, ST + Sylomer® are ideal.
- **Small Ducts:** For smaller ducts or pipework, Akustik Pipe Omega mounts made of Sylomer® offer a simple and effective solution.
- **Ducts Passing Through Walls:** Ensure proper isolation by decoupling the duct from the wall or ceiling with a Sylomer® sheet and polyurethane foam.

Proper installation prevents acoustic bridges and ensures the maximum isolation of machines and ducts, keeping noise and vibration under control.

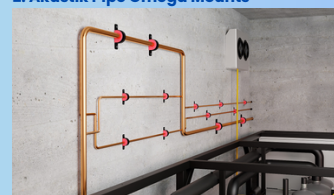


Ross Baynes, Christchurch Branch Manager from CMT group, expressed his satisfaction with our service, mentioning that the isolators were delivered promptly. He also noted that the products met his expectations perfectly.

1. Acoustic Hangers



2. Akustik Pipe Omega Mounts



3. It is necessary to decouple the ducts from the wall installing Sylomer at the perimeter

