

Introduction

This document provides detailed instructions for the safe handling, removal, installation, and storage of our flat surface and curved surface (two-rail) magnetic mounting bases, which are designed for use in vibration accelerometer installations. It is essential to follow these guidelines carefully to ensure both the safety of personnel and the proper functioning of the equipment.

Disclaimer: The instructions provided herein are recommendations based on the general best practices for the handling and installation of magnetic mounting bases. These guidelines should not be considered exhaustive or definitive in all circumstances. Specific situations or environments may require additional precautions or methods for handling, installation, or removal. It is the responsibility of the user to evaluate the conditions of each individual situation and take appropriate action to ensure safe and effective use of the magnetic mounting bases.







Safety Gear

Before handling the magnetic mounting bases, the following safety gear is recommended:

>> Protective gloves:

Use heavy-duty gloves to prevent injury while handling the magnetic mounting bases. Gloves help reduce the risk of pinching and protect against sharp edges.

>> Eye protection:

Safety glasses or goggles should be worn to protect your eyes from any potential debris or accidental impact during the handling and installation process.

Recommended Removal Process

When removing the magnetic mounting bases from the surface, follow these steps:



Ensure the system being monitored is powered down (if applicable) and the magnetic mounting base is not under any electrical or mechanical load.

Position the magnetic mounting base: If the magnetic mounting base is attached to a flat surface, lift one edge slightly using a firm grip.



Rock the magnetic mounting base: For both flat and curved surfaces, gently rock the magnetic mounting base into place while slowly lifting to release its hold.



Avoid sudden movements: Never yank or force the magnetic mounting base off the surface, as this may damage the equipment or cause injury.

Safe Handling Instructions

When handling the magnetic mounting bases, it is critical to follow these safety practices:

» Keep magnetic mounting bases apart:

Never allow the bottom of the flat surface base or the rails of the curved surface base to come into close proximity or to touch each other. Doing so can cause a powerful attraction that may pinch fingers or cause damage.

>> Pinch hazard:

Always keep fingers clear of the sides and bottom of the magnetic mounting bases. The magnetic mounting bases can exert significant force and result in pinching injuries if not handled carefully.

>> Handling with care:

Never attempt to force a magnetic mounting base into position. Always gently rock the magnetic mounting base into place to avoid undue stress on the surface of the equipment, and to avoid excessive shock to the accelerometer mounted to the magnetic base.

>> Extra Measures:

When possible, during transport it is advised to keep the supplied shunts attached to the magnetic mounting bases to mitigate the magnetic attraction to surrounding objects.

Proper Storage

To ensure the longevity and safety of the magnetic mounting bases, follow these storage guidelines:

» Keep magnetic mounting bases away from metal objects:

Store the magnetic mounting bases in a dry or low humidity environment, clean area, away from other ferromagnetic materials that could interfere with their magnetic fields.

» Use protective covers or containers:

Store the magnetic mounting bases in a designated, non-metallic container or cover them when not in use to prevent accidental attraction to other metal objects.

» Avoid extreme temperatures:

Store the magnetic mounting bases in environments where the temperature is stable and within the specified range for your magnetic mounting bases (lower than 266°F / 130°C). Extreme heat can impact their magnetic properties.

*Please note that because of the iron content of the two-rail magnetic mounting bases, the rails will accumulate surface rust over time. To mitigate this, we recommend a low-humidity storage area. When not in use, CTC utilizes nitrogen-purged cabinets to avoid corrosion.

Installation of Magnet Mounting Bases

Before installing the magnetic mounting bases, make sure to follow these installation instructions:

- Clean the target surface: Ensure the target surface where the magnetic mounting base will be installed is clean and free from dust, debris, or contaminants. A clean surface ensures a better magnetic grip and helps prevent any interference that could affect the magnetic mounting base's performance.
- Place the magnetic mounting base: For curved surfaces, begin by placing the edge of the magnetic mounting base first, and gently rock the rest of the magnetic mounting base into place. This process minimizes the risk of saturating any equipment or sensors attached to the magnetic mounting base. Saturation could interfere with or damage the internal sensing elements of the equipment.
- 3 **Rock the magnetic mounting base into position:** After placing the magnetic mounting base, gently rock it back and forth. For curved surfaces, ensure the rails fit the curve of the surface enough so that no wiggling or shifting occurs during data collection. The magnetic mounting base should be stable and firmly adhered to the surface to prevent any movement during operation



Recommended Rail Orientation for Rounded Surfaces

When placing magnetic mounting bases on curved or rounded surfaces, follow these instructions to ensure proper attachment:



Place one rail down first: Start by gently setting one rail of the magnetic mounting base onto the surface, ensuring it is firmly aligned.



Orient rails for stability: When using a two-rail magnetic mounting base, orient the rails so they align with the natural curvature of the surface. This helps distribute the magnetic force evenly, ensuring a secure fit.



Rock into position: After placing the first rail, gently rock the magnetic mounting base into position. Be cautious to keep your fingers clear of the bottom side to prevent pinching.

Conclusion

Following these safety guidelines will ensure safe handling, removal, installation, and storage of our flat and curved surface magnetic mounting bases. Proper care is essential to maintaining the integrity of the equipment and preventing injury during use.

For additional information or if you have any questions, please contact our customer support team:





Scan here to view the complete selection of CTC magnetic mounting bases and mounting hardware

