

Installations Instructions

Chocking

Chocking is the interface between machinery and its' structure. The function of this interface is to create a coplanar surface for the installed machinery. The RotaChock creates the machinery mounting plane effectively and efficiently.

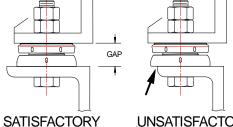
Pre-Requisites for Chocking

System design - Considering any chocking system includes ensuring the foundation is structurally stiff for the static and dynamics of the equipment plus the forces from the environment. Each industry has a different consideration for environmental forces i.e. military Grade A shock requirements are vastly different from petrochem pump systems and the chocking system must meet or exceed the requirements of the application. Defining and understanding these topics are the responsibility of the design activity but Machinery Mounting Solutions can assist.

System design considerations specific to the RotaChock include chocking thickness (gap) and bottom part support.

Step 1) Using the mounting bolt size make a preliminary selection of the RotaChock. From the RotaChock brochures select a configuration and nominal design height (gap).

Step 2) Insure the foundation width will accommodate the RotaChock diameter. The RotaChock bottom part should be fully supported.



UNSATISFACTORY

Sizing Calculation – Contact Machinery Mounting Solutions, to insure the best sizing of the RotaChock. This is free service. The rule of thumb solution is to select a RotaChock based upon bolt size but for many applications technically sound and better economic solutions will be offered.

Jacking Devices – Moving the machinery into plumb and/or alignment is most efficiently positioned by using jack bolts. There are other techniques such as our RotaJacks, hydraulic jacks or wedges but no matter the jacking device should be clear of the RotaChock. The design of the package should take in consideration ease of installation, access and the lifecycle of the



machinery. RotaChock is a mounting chock and we recommend that it not be used as a lifting device.

Machinery Checks



Clean the underside of component mounting foot.

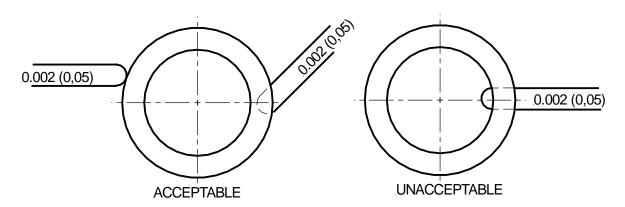
Foundation Checks

Clean the mounting surface and if primed that there is only a light coat (1 or 2 mils) of primer.

Rocker Check - Position RotaChock in approximate final location, apply hand load to top of RotaChock and try to rock the RotaChock assembly side-to-side. If it rocks, investigate the reason and correct. In most instances the surface preparation is only some localized sanding.

A more quantitative check procedure follows but typically the rocker check is adequate.

Feeler Gauge Check – Push down on the RotaChock and examine the circumference of the bottom part at the foundation with a feeler gauge of 0.05mm (0.002"). The acceptable mounting surface check is achieved when the feeler does not pass completely through the interface area.



Alignment

Accomplish alignment per machine/system target requirements for cold alignment, thermal growth and crankshaft deflections using jacking devices.

Because the RotaChock is a mechanical device align the unit 0.002" (0.05mm) above target. The 0.002" (0.05mm) is a nominal dimension to accommodate extrusion of the lubricant in the chock's internal surfaces. There may be some slight variances due to machine load, chock size, foundation surface condition and bolt stretch and we recommend that installers take notes of their equipment alignments to make the next alignment event quicker.

Chock Preparation

Unpack the RotaChock

Carbon steel RotaChocks are packaged with LPS3 on the surfaces- Clean off the top of the top part and bottom of the bottom ring with a degreaser solution.

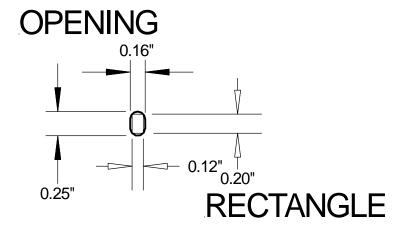


Installations Instructions

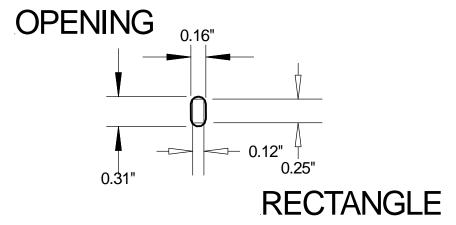
Note: The RotaChock has slots for adjustment. Many tools can be used to tighten the chock. Please note RotaChock is designed with buttress thread. The force required to tighten the chock in place against the gap is minimal. Tools that can be used for the RotaChock include: Flat head screw drivers (with tip slightly ground off to provide grip in the slot), chisels or dowel pins [All are available at Sears]

Slot sizes:

RC2 and RC3



RC4 AND LARGER







Installations Instructions

Chock Installation

Place the RotaChock in position (generally concentric with the bolt hole). Fit the RotaChock by rotating (unscrewing) by hand. Using 2 tools tighten each RotaChock. Once each RotaChock is fitted, take the load off of the vertical jacking screws and install foundation bolts.

After tightening foundations bolts to the required torque, check the final alignment. The alignment should be within cold alignment target tolerances and with no softfoot.

Protecting the RotaChock

The RotaChock uses a relatively fine thread interface, debris in the thread will make the device hard to adjust. Protect the thread from debris while the unit is being stored, transported or in the field. Also, the carbon steel chock will rust and must be preserved. All methods for steel preservation are acceptable but please note the thread should be protected during the lifecycle.

MACHINERY MOUNTING SOLUTIONS

WWW.METZIN.COM INFO@METZIN.COM

Singapore for S.E. Asia

+65 9738 8913 / +65 92311786