The Ultimate Guide to Leveling Mounts & Pads
What are leveling feet & pads?

Most folks don’t know what a leveling foot is until they have to adjust one because their appliance doesn’t sit straight. Leveling feet are necessary because most floors are not truly level.

Appliances and machinery that must be off the ground and level are designed with adjustable “leveling feet” at each corner to allow for that fact. A leveling foot is simply a device that allows adjustment of a machine to ensure it is level if the floor is not.

The principle is that by using a threaded shaft attached to the machine and a “foot” which meets the floor, one can lengthen or shorten each corner independently.

LEVELING Mounts, Feet, & Pads

The two different kinds of leveling mounts are tapped (female) and stud (male).

There are hundreds of different leveling feet and pads that can hold anywhere from 20 pounds all the way up to 42,000 pounds. To put that into perspective that is enough to hold a jet fighter, subway car, or spy satellite.

Like many parts, the shafts can be ordered in both metric and standard thread sizes and the pads can be made from many types of material including rubber, metal, and plastic.

There are standard mounts that swivel 10 – 15 degrees in every direction and can include non-swivel bases.
Leveling feet come in many shapes and sizes. Some are smaller than an inch tall, others are used in the industry to level machines weighing many tons.

There are many benefits to ordering the right kind of leveling device. Aside from the obvious of having a level surface, the right leveling devices can add a longer life and less maintenance to your application.

So how do you choose? In this guide you will find everything you need to pick the right leveling device or pad for your application. If you need further assistance please contact us at (888)-695-1754 or email us at sales@askmonroe.com.
Type (Tapped or Stud)

Questions to ask yourself?

1. What is the leveling device going to be used for?
2. Does the height of the machine need to be increased or does it need new support?
3. Will the height of the machine need to be adjusted in the future?

Tapped

The tapped style, or female, has a bolt head that’s part of the design. The adjusting shaft is part of the machine or a separate part completely. Typically they are fixed in position and have a lower range of adjustment. Made for heavy duty applications that are not going to be lifted or adjusted. They would most likely be used on a machine that has less movement and remains at a lower profile.

Stud

The stud, or male, is a threaded stud and is an integral part of the foot that are permanently attached to each other. Turning the leveling foot clockwise shortens it, turning it counter clockwise lengthens it. They offer a great range of adjustment, and typically can be adjusted in place with the proper tool which gives a little more flexibility with options from the beginning. You can also customize the length of the stud to the machine that you are fitting it to.
So once you know if you need tapped or stud, the next important consideration to think about is the load amount. Knowing the load amount of your application will help to narrow down the next few steps in picking the right leveling mount.

When thinking of the load you have to consider the base material. The base of the leveling mount can be plastic for lighter loads, or metal such as steel, zinc, or stainless steel for the medium to heavy loads.
Step 3.

**Style & Features**

All leveling devices have different styles and features. Many can be interchanged with one another. Distinguishing what style and features are needed in a leveling device or mount can be as easy as adjustable glides to heavy-duty anti vibration leveling mounts like the might mount.

Questions to ask yourself?

1. How heavy of a load will they be supporting?
2. Is there a need to absorb vibration from the machine?
3. What kind of machine will they be used on?
4. Are there special conditions that need to be considered?
5. Will the application be moved around?

Let's take a closer look at each one.
Adjustable Glides

If the application needs to be moved around and also add support then the adjustable leveling device may be the route to take. Adjustable glides are designed to not only support but also help move smaller lightweight applications or furniture from place to place.

Adjustable glides can hold a load capacity anywhere from 250lb-500lb (114kg-227kg). They are also available with economical pads for extreme durability.

If a lighter load support is needed, PVC base glides are perfect for 50 lbs max. They still offer great support and are low maintenance.

Adding a poly cushion base leveler helps reduce vibrations and a no-slip grip. If added protection is needed to the base of the application, poly cushion top levelers can also be added for added support.
Polymount Leveling Mounts

Polymount leveling mounts come in tapped, stud, and also a teardrop stud style. The studs are either made of low carbon steel with a clear zinc finish or 300 grade stainless steel. They have a 15 degree off centerline tilt which allows for mounting on uneven surfaces.

These economical leveling mounts are great for light applications like office furniture to heavy applications like production machinery and conveyors. Polymounts have a molded base of glass-reinforced nylon that is corrosion resistant. They do well in light-duty vibration and have pop-out lag holes that allow the mounts to be secured to the floor.

Keeping a low profile is exactly what these leveling mounts will do. With their sleek streamlined look, the low profile gives more clearance at the base. This gives them the ability to fit into tighter compact spaces.

They can hold loads anywhere from 2,000 pounds to 6,000 pounds. They are also available with an anti-vibration/non-slip pad.

The teardrop stud has an added feature and function with its teardrop shape. The laghole is offset to the outside of the machine footprint giving it the teardrop shape. This allows for a simple and easy lag bolt installation so you don’t have to move the machine to drill a lag hole.
Mighty Mount Leveling Mounts

These bright safety yellow finished mighty mounts are a great solution for high vibration machinery that has computerized parts. They are an OSHA approved anchoring standard with a zinc-plated steel stud.

With a range of thirteen different sizes, they not only absorb vibrations but also external shocks. They have a very wide range in load capacities from 30 pounds all the way to 12,500. They all have a one-inch thick non-skid elastomer pad that will add years of life to expensive industrial equipment.

* Please contact us at (888)-695-1754 for load sizes heavier than 4,500 lb (2041 kg).
**Level-It Leveling Mounts**

Level-It leveling mounts are perfect for a wide variety of industrial applications. From light to heavy applications, they can support up to 20,000 pounds. They come in stud and tapped, standard or metric, and versions with steel, stainless steel or FDA friendly Delrin bases.

They can be equipped with a durable non-skid pad that utilizes a unique patented "snap-lock" system called the Snaplock™.

**Swivel Action**

A 10–15 degree swivel in all directions allows the user to still get the best performance from their application when on uneven surfaces. If a centered stational level is required a non-swivel option is also available.
Anti-Vibe Leveling Mounts

Industrial machinery can be extremely expensive and in some cases sensitive to movement around it. They can be costly if something breaks or fails and can also require a lot in maintenance if they are not taken care of properly.

With the high vibrations CNC machines or any industrial machine can have, anti-vibration leveling mounts will be something you will want to invest in. They are specially made to reduce vibrations of sensitive or large machines.

Anti-Vibe leveling mounts help protect industrial machines up to 98% by isolating these vibrations. They are available in both standard and metric dimensions and can hold light to heavy-duty loads ranging from 200 lbs - 27,100 lbs.
Step 4. Extra Features

As you have seen in our guide some of the leveling mounts have different features that are pointed out on their page. The final questions to ask yourself have to do with added features like base and top levelers or swivel ability.

We hope you find our guide helpful and if you have any questions please contact one of our sales engineers at sales@askmonroe.com or call us at (888) 695-1754.

1. Does the application need extra protection with base and top levelers?

2. Do you need to have the leveling mounts have a non-skid pad to the leveling foot?

3. Will the machine be moved around? If yes, consider a Snap-lock mount that will protect the pad from ripping off when moved.

4. Is there need for a swivel? Many mounts can have a swivel base from 10-15 degrees that supports uneven surfaces.
Leveling Pads

Leveling pads are not to be confused with leveling feet. Virtually every appliance ever made has threaded leveling feet for easy adjustments. Washing machines must be level to spin and drain properly, and you certainly don’t want an unleveled stove or refrigerator.

Leveling pads are used when the machine being leveled needs to be isolated from vibration from the machine to the floor or from the floor to the machine. While leveling feet are almost always solid metal, leveling pads usually have a rubber or urethane pad at the bottom, which will provide grip to keep the machine from moving.

Leveling pads may be used instead of leveling feet when a floor may be scarred or marred by a steel foot. Industrial Machines are more likely use leveling feet.

Snaplock™ Pads

They can be equipped with a durable non-skid pad that utilizes a unique patented “snap-lock” system called the Snaplock™. It virtually locks the elastomer pad onto the leveler allowing for repeated movement of equipment or machinery without fear of pad separation.
Suggestions

1. Do you have a runaway machine? You may need a leveling mount that you can secure to the floor. Consider the polymounts or teardrop polymounts. They have off center holes where hole can be drilled for mounting bolts.

2. Is the machine in need of protection against vibration? If so consider anti-vibration or the might mount. These will help isolate and absorb vibrations to get the longest life out of your machine.

3. Do you need a mount to sit lower because of confined spaces? If so a low-profile leveling mount can give support to machinery in tight spaces.