Mounting instructions for free standing AirLoc Wedgmount® precision levelers VRC

Please read these operating instructions carefully. The weights that are supported by these precision parts can be extremely heavy. Due to the extremely high gearing of the wedge construction, these loads are usually hidden and are often underestimated. Incorrect or poorly planned assembly of the Wedgmount® levelers can impair the performance of the machine.

The product must be in a technically flawless condition. Do not use if you notice visible damage!

Safety instructions

Avoid overloading

AirLoc Wedgmount® levelers are designed to support a specific load. Please consult the data sheet to find the permissible maximum load of the Wedgmounts. Otherwise, this could damage the Wedgmount®.

Please also note that if the machine centre of gravity is off centre, this can result in different loads on the different Wedgmount® levels. Take the maximum load of the Wedgmount® as the reference for the maximum load.

Observe the leveling range

Every Wedgmount® has a limited leveling range. When you reach the upper or lower leveling limit, the leveling stud torque will rise significantly. Do not apply force to turn the leveling stud! Otherwise, this could damage the Wedgmount®.

Use spacer disks or AirLoc spacers on the spherical seats to enlarge the leveling range, if necessary.

General notes on leveling the machine

Machine feet surfaces that have not been machined require Wedgmount® levelers with spherical seats VRKC(V) with an additional spherical washer set (spherical seat DIN 6319) above the isolation disc on the stud assembly/anchor bolt.

The contact surfaces of both the machine and floor must be thoroughly clean. It is advisable to use a clean cloth for cleaning the contact surfaces.

The Wedgmount® must be equally loaded. An eccentric load can cause the wedge to break when the machine is leveled and, in the worst case, cause the machine to tip over!

Ensure an equal load on the Wedgmount®

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Anchoring top-heavy machines to the floor

Bolt-on or freestanding Wedgmount® levelers may not be used with top-heavy machines!

Danger of tilting!

Only use a bolt-through or rigid clamp Wedgmount® to securely fix the machine to the ground.

Machine transport

The bolt-on AirLoc Wedgmount® precision levelers, because of their protection against falling out, can remain on the machine flange and do not need to be disassembled for transport. In this case, the Wedgmount® must be kept clear, i.e. the machine must be positioned on wooden beams.

When the machine is raised, ensure that the isolation pad is not stuck to the floor or machine. Otherwise, the Wedgmount® can be pulled apart and become damaged. Observe the Wedgmount® while slowly lifting the machine. If the isolation pads are stuck to the floor, carefully release them using a rubber mallet.

1. Isolation/non-skid pads

The AirLoc pads placed under the Wedgmounts® vary in thickness according to the type of pad used. The thin non-skid pad must always be on the upper surface against the machine.

2. Preparations and mounting the machine

The contact surfaces of both machine and floor must be thoroughly clean. It is important that all contact surfaces have equal loading and that full area coverage is ensured. A realignment in the X- and Y-direction can only be achieved on MSC-type AirLoc Wedgmount® levelers or other mounting aids, prior to transferring the load onto the Wedgmount® (with a high coefficient of friction).

Machines that are lowered by crane must be placed on MSC-type AirLoc mounting Wedgmount® levelers, or onto suitable wooden blocks in order to avoid damaging the Wedgmount®. The machine is lowered onto mounting Wedgmount® levelers and can then be carefully placed onto the free-standing Wedgmount®. The fine adjustment can then be carried out (please refer to the information in point 4 for the settling time).

3. Machine support points

The load should be distributed over the entire Wedgmount® leveler whenever possible. Partial or one-sided loading should be strictly avoided.

If partial loading is unavoidable, the following restrictions must be observed:

- Mounts with 3 wedges, apply the load so that the weight is distributed over the three wedges even in the leveling end position.
- Mounts with 4 wedges, distribute the load over the centre wedges and do not apply the load between the centre wedges.

Preferably, the load should be applied to the entire longitudinal length of the Wedgmount in the direction of the leveling stud.

CAUTION: The load on the smaller surfaces on top of the Wedgmount® may not exceed the maximum specified load of the isolation or non-skid pads!

4. Settling time of the isolation material

All vibration isolation pads fixed under the Wedgmounts® will be compressed under load. The compression process requires a certain amount of time. The machine alignment should be checked approximately 3 weeks after installation and, if necessary, the machine must be re-leveled. We recommend regular checks of the machine alignment (min. once per year).

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