# Mounting instructions for bolt-on AirLoc Wedgmount® precision levelers VRC / VRKC / VRKCV

## Jacmount® GLRN

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 wedge mounts can impair the performance of the machine.

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



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### 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 and ensure that this load limit is not exceeded when using 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® levelers. 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.



## Level the machine before tightening the bolt-on or bolt-through Wedgmount®

With a bolt-on and bolt-through Wedgmount®, first loosen the threaded fitting to level the machine and then tighten the threaded fitting. Never level the machine if the threaded fitting is tightened as this could damage the Wedgmount®!



#### Ensure an equal load on the Wedgmount®

The Wedgmount<sup>®</sup> 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!



#### Anchoring top-heavy machines to the floor

 $Bolt-on\ or\ freestanding\ Wedgmount^{\textcircled{\$}}\ levelers\ may\ not\ be\ used\ with\ top-heavy\ machines!$ 

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 there 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.

#### 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.

With AirLoc Wedgmount®, the leveling stud is turned clockwise to rise the machine.

With heavy machines, it is possible under certain circumstances to adjust the Wedgmount® to the highest position before applying the load. The machine is then leveled downwards which requires considerably less force. Make sure that there is no thread play after leveling by ensuring that the last leveling adjustment is clockwise.

Position the Wedgmount® so that the leveling stud can be easily reached. If the Wedgmount® is in the centre position under the machine, use the AirLoc leveling stud extensions.

On machines where the centre of gravity is not eccentric, all the anchor points must be equally loaded and the torques on all Wedgmount® levelers must be within the same tolerance range.

With a four-point support, always work in pairs with the support points, i.e. two right, two front, two back etc. with the same number of turns

An equal, balanced load must be ensured on the Wedgmount® levelers to prevent the machine from "walking". If this is not the case, level two diagonal Wedgmount® levelers until the torques are approximately equal.



#### 1. 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 Wedgmounts® (with a high coefficient of friction).

Machines that are lowered by crane must initially be placed onto type MSC AirLoc mounting Wedgmount® levelers or onto suitable wooden blocks in order to avoid damaging the Wedgmounts® . The machine is lowered onto mounting Wedgmount® levelers and can then be carefully placed onto the bolt-on Wedgmounts® . Finally, the fine adjustment is carried out (please refer to the information in point 3 on the settling time).

In order to avoid any possible bending of the studs by the Wedgmounts® installed on the machine when it is lowered, the Wedgmounts® must be hand-tightened with the nuts on the machine base before lowering. The nuts must be loosened before the machine can be levelled (see Safety instructions).



#### 2. Avoid unbalanced load by ball head adjustment

Rough machined feet or uneven ground require Wedgmounts® with spherical seats VRKC(V) with an additional spherical washer set (DIN 6319) above the machine foot on the stud.



#### 3. 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-levelled. We recommend regular checks of the machine alignment (min. once per year).

Tighten the mounts after precision leveling.