# Mounting instructions for rigid clamped AirLoc Wedgmount® precision levelers KSC / KSKC / KSKCV

# 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 Wedgemount® 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!



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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® 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  $^{\rm I\!B}$  , 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 the machine and floor must be thoroughly clean. It is important that all contact surfaces have a balanced and equal load and that full area coverage is ensured.

The stud assembly is fixed into the floor in accordance with the installation drawing from the machine manufacturer. The Wedgmounts® are inserted over the stud assembly.



Machines that are lowered by crane must be placed onto MSC-type AirLoc mounting Wedgmount® levelers, or onto suitable wooden blocks in order to avoid damaging the Wedgmounts® The machine is lowered over the studs on the mounting Wedgmount® levelers and can then be carefully placed onto the Wedgmounts® The fine adjustment is then carried out.



## $2.\,Avoid\,unbalanced\,load\,by\,by\,ball\,head\,adjustment$

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



### 3. First complete the fine levelling then tighten

Do not level when the threaded fitting is tightened! The wedge ratio delivers extremely high forces in Z-direction and can damage the stud or the Wedgmount®.

Tighten the machine after fine leveling.





 $Alternative anchoring option with resin anchors and internal thread anchor RG\,MI for bolt-through and rigid clamped Wedgmounts @$ 

When using the studs described above that are anchored into the floor, the studs stand upright and can obstruct the positioning of the machine. To avoid this, we recommend fixing internal threaded anchors into the floor. These anchors are flush with the floor and the machine can be smoothly pushed over the anchor points. Once the machine is in the correct position, the stud can be easily inserted from above and bolted down.