RAD-eye® eliminates side load on your hydraulic pitch cylinders

RAD-eye is a new, patented cylinder solution for all types of wind turbines, which drastically reduces wear and loads on the piston rod and the complete cylinder – and extends the cylinder lifetime. When side load is an issue.

Wear and repairs of hydraulic pitch cylinders is reduced, and the cylinder lifetime is extended with RAD-eye – a new solution for all types of wind turbines.

RAD-eye is a custom designed “eye” mounted on the hydraulic piston rod end to absorb the radial forces in the cylinder.

Usually, the piston rod of the cylinder is only able to work in a linear motion, but the RAD-eye creates a parallel displacement of the piston head so it can absorb the radial forces by angular rotation.

At the same time, RAD-eye is a less costly option than other and more complex measures that could be used to avoid distortion of the pitch cylinders.

Therefore, by switching to the patented RAD-eye solution, it is possible to reduce the cost of maintenance, service and repairs – and extend the lifetime of the pitch cylinder significantly.
In a conventional pitch cylinder, the cylinder rod can only move in a linear direction – otherwise there is a risk of damage to the cylinder.

If the radial forces from the turbine blade create a deflection of the cylinder rod, there is a risk of damage to the stuffing box packing.

A RAD-eye solution creates a parallel displacement of the piston head so it can absorb the radial forces by angular rotation – and thereby limit the risk of damage and wear.

The RAD-eye is mounted on the piston rod end – and enables the pitch cylinder to rotate and thereby absorb the radial force from the turbine blade.