



Operation and Assembly Instructions

Rapid Hoist Gear NG1, NG2 and NG3

General:

ANT rapid hoist gears can be assembled according to the same principles as the ANT spindle hoist gear (versions N, R, KGT). Prior to assembly the rotational direction of all rapid hoist gears, bevel gears (suitable dimensioning may render them superfluous) and of the drive motor must be checked for tightness regarding the in-feed direction of each individual rapid hoist gear. Make sure to compare the rapid hoist gear with the order specifications.

Assembly of an individual rapid hoist gear:

Mount the ventilation filter (delivered separately). Depending on the assembly direction, the lock screw on the rapid hoist gear must be removed in order to mount the 90° bend and the ventilation filter (please see reverse). Align rapid hoist gear and spindle by means of a spirit level and tighten screws. This must not lead to asymmetric tension of the rapid hoist gear. All shafts of the rapid hoist gear must turn easily and continuously in any hoist position. Dirt on the spindle leads to premature wear and tear and must be kept away from the spindle (use bellows or spiral spring if applicable). Grease the spindle along the entire hoist length. You may have to apply spindle spray before the initial application of grease. Check the rapid hoist gear again for tightness.

During alignment do not knock shaft and spindles!

Assembly of a spindle hoist system with rapid hoist gears:

During installation all elements must be carefully aligned. Alignment errors and tension increase power consumption and lead to overheating and premature wear and tear. Prior to adding a drive, every rapid hoist gear should be turned through by hand and without load across the entire hoist length. Asymmetric power consumption and/or axial marks on the spindle's exterior diameter indicate misalignment between the rapid hoist gear and its additional guides. If this happens, loosen the applicable mounting screws and turn the rapid hoist gears through once again by hand. If force requirement is now continuous, align the applicable elements; if not, determine alignment deviation by loosening additional mounting screws.

Trial run:

Prior to mounting the drive motor please check the overall rotational direction of the entire system and the proper functioning of the end switches one more time. Grease the hoist spindle along the entire hoist length sufficiently so that sufficient oil is available for the hoist operation.

After this, the initial test runs can be conducted without load. Keep checking the spindle wear pattern during the start-up phase, and check operational temperature. After about 4 to 6 hours of operation all screws must be checked.

Operation:

The loads, rotational speeds and operational conditions specified for rapid hoist gears and transmission elements must not be exceeded, not even briefly. Violations render any warranty claims null and void.

Maintenance of Rapid Hoist Gears:

Grease spindle periodically along the entire hoist length. Dry operation of the spindle leads to premature wear and tear! After 200 hours of operation, grease or oil must be changed. Additional oil or grease changes must be done after every 2000 hours of operation, but no later than 18 months, whichever is earlier. The wear of the spindle nut or travelling nut must be checked periodically (approximately every 200 hours of operation). If the axial clearance of a single-start thread is $\frac{1}{4}$ of the thread pitch, the spindle nut or travelling nut must be exchanged.

Lubrication oil amount NG 3:

2,0 l (depending of installation position)

Recommended lubrication oil:

Aral Degol GS 220

Lubrication oil amount NG 2:

0,45 l

Recommended lubrication oil:

Aral Degol GS 220

Amount of grease NG 1:

0,1 l

Recommended type of grease:

CASTROL Longtime PD00

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