## General statements regarding the MAAG "GB" and "GN" series gear units.

When considering a MAAG "GB" OR "GN" series gearbox certain unique features should be considered with these units. These are features that may be an important consideration for the application required.

## **Key Points:**

- Soft foot alignment versus adjustable bearings
- Separable bearing caps versus integral
- Cast iron housings versus fabricated steel

These differences result in the some of following benefits:

- 1. The "GB" and "GN" series utilize the "soft foot" alignment procedure which allows more field options for alignment particularly if structural changes take place to the support system of the equipment. This is similar to "on board" ship propulsion gears where foundations are subject to change. Generally speaking, marine propulsion gears are almost always specified with separable bearing caps.
- 2. Adjustment procedures for field alignment are easier with the "GB" and "GN" series since gearbox disassembly IS NOT required. The adjustments are completely external as opposed to gearboxes with integral bearing caps (those with fabricated steel housings) which require disassembly of the housing cover in order to adjust a pinion bearing by shimming. This may be inconvenient and cumbersome in close quarters, as it is oftentimes in the case of platforms and many other installations. Mounting and dismounting a casing cover with integral bearing caps requires greater care, since the cover must be perfectly squared off to accept the position of the journal bearings it will be required to cap. To the contrary the cover of the "GB" and "GN" series is merely a cover. Lowering the cover onto the main case of a "GB" and "GN" unit is not as awkward an operation, sometimes a critical point on an offshore platform.
- 3. If a foundation change becomes permanent during operation, the gear box will take a "set" position. This may happen after years of operation. This is often not known until the housing of a gear is disassembled. While assembled, the housing may not change. Upon disassembly however the housing may "spring" disturbing the internal alignment between pinion and gear. Housing distortion may be such that realignment of the mesh could be a tedious trial and error procedure by adjusting the shim pack in the bearing and constantly having to assemble and disassemble the gear casing cover. This demands a professional technician, whereas the "GB" and "GN" series gearbox design eliminates this potential problem.
- 4. "GB" and "GN" series cast iron housings weather better than their fabricated steel counterparts in a corrosive [salt] environment. For this reason alone, discriminating customers select "GB" and "GN" series gear boxes even though the speeds and/or powers are not particularly high enough to warrant this selection.
- "GB" and "GN" series cast iron housings result in quieter running gears, a function of the noise proofing characteristics of cast iron. Depending upon the noise specification, it is very possible to avoid using a costly noise enclosure with a "GB" and "GN" type gear.



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Page: 1/1