# 64 000 hours overhaul of Marine Reduction Gearbox
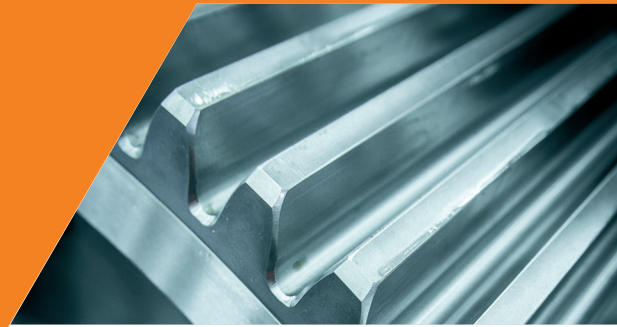
After 10 years of service, an overhaul is recommended in order to ensure the continued functionality of your marine gearbox. The gearbox will then have been running for more than 64 000 hours, which in most cases equals more than 2.7 billion revolutions.

Such a long serving propulsion system goes through innumerable starts and stops, causing wear and tear to the bearings and clutches. Despite the rigid housing, the shafts in the gearbox will always face some level of deflections, due to the weight of the supported clutch and flanges.

Such deflections, in combination with the contamination of the lubrication oil and the vibration, affect the overall condition of the gearbox. By this time, the bearings usually reach their maximum allowable service life as well.

Even the hydraulic and electrical auxiliary equipment contains parts that have limited operational expectancy due to external factors, such as vibration and pollution.

## PLANNED MAINTENANCE FOR ENSURED AVAILABILITY

After 64 000 running hours, the gearbox needs to be over-hauled/maintained. The service includes a pre-inspection to determine the level of service required. We recommend that you do the pre-inspection well in advance, (at least 8 months) before the drydocking or overhaul, allowing enough time for procuring long lead parts. We submit a detailed report after the inspection is made.

**"THE CONDITION OF THE GEARBOX OFTEN INDICATES THE HEALTH OF THE WHOLE PROPULSION SYSTEM."**

## SCOPE OF SUPPLY

— A complete new set of bearings
— Filters for the hydraulic system
— All gaskets and O-rings
— All temperature sensors & pressure switches
— Clutch control
    and pressure relief valves for the clutch
— Thermostatic element
    in the temperature regulation valve
— All gauges.

After the overhaul the gearbox can run another healthy 64 000 running hours, or 10 years. This will not only re-duce the risk for gearbox failures, resulting in breakdowns and unanticipated downtime, but will also help you to maintain the service quality for your customers.

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