

# *Long distance runners.*

*From 18,000 to 36,000 running hours.*

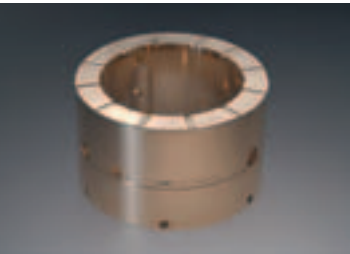


More than 2,000 two-stroke TPL...-B turbochargers have accumulated over thirty million running hours since the first units went into commercial operation in 1999. In addition to being a proud statistic, this total is also iron-clad proof of the outstanding reliability of the TPL...-B bearings.

The excellent field performance of the bearings is backed up by service experience. As a result, ABB now officially approves running TPL...-B turbochargers without an intermediate bearing inspection until the next scheduled overhaul at 36,000 running hours. The 18,000 running hour bearing inspection recommended in the past, and which required disassembly of the complete cartridge, is therefore no longer necessary!

## TPL..-B bearings go the distance

A new service concept recently introduced for TPL..-B turbochargers lets ship operators skip bearing inspections between scheduled overhauls. The bearings can now stay in place for 36,000 running hours, or from “drydock to drydock”.



18,000 hrs



### Intermediate inspection

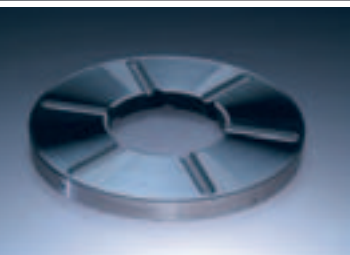
- check for contamination
- check tolerances & clearances
- report and recommendations

18,000 hrs



### Overhaul

- dismantle turbocharger
- check and clean all parts
- change bearings
- report and recommendations



### Long-distance runners

ABB Turbo Systems introduced the TPL..-B turbocharger series in 1999 for low-speed two-stroke diesel engines, mainly for marine applications. The engine output range covered by the TPL..-B series is 3,000 to 28,000 kW per turbocharger.

TPL..-B turbochargers were designed from the outset for easy maintenance and service. Field experience with tens of thousands of ABB turbochargers with plain bearings went into their development. ABB's engineers could subsequently present to the marine world a two-stroke turbocharger with bearings able to run for some 36,000 hours before being exchanged.

### “Turbo pit stop”

With this new recommendation, end-users of ABB TPL..-B turbochargers enjoy the cost benefits of a service-friendly, faster intermediate inspection at 18,000 running hours. The standard 36,000 hour overhaul remains the same; no extra work has to be carried out.

This latest innovation from ABB is a longstanding “wish come true” for shipowners. Just a short port stay is all that is now needed for the intermediate TPL..-B inspection. With this “turbo pit-stop”, ABB sets a new industry benchmark – field-proven 36,000 hour bearing exchange intervals for the TPL..-B, allowing the two-stroke turbochargers to be run with the same bearings from “drydock to drydock”.

### Designed to last

The TPL..-B bearing assembly's proven high reliability is due to its unique design. The main axial bearing is a free-floating thrust disc with profiles on both sides, rotating at about half the rotor speed. This ensures thick oil films, offering extra-high resistance to wear. Disc wear is also reduced by an extremely hard coating, while a squeeze oil film damper ensures exact centring of the radial bearing bushes.

For more information about this new service concept, please contact your nearest ABB Turbocharging service station.