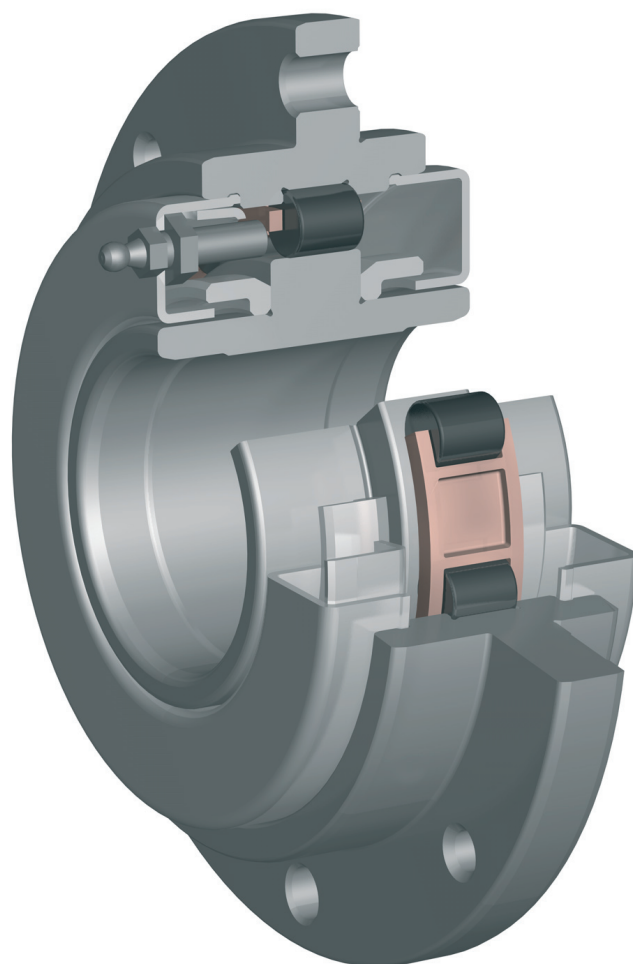


Regreasable traction motor bearing units

Next generation TMBUs



Customer benefits

- Reduced life cycle costs
- Extended service life, up to 18 years
- Auxiliary free volume protects against overgreasing
- Fully interchangeable with existing TMBUs
- More than 10 years of TMBU field experience



The traction motor bearing unit (TMBU) is a shielded and factory pre-lubricated bearing unit, principally designed for flange mounting on the motor housing. The design enables extended service intervals. This solution is based on a very compact and space-saving design. This TMBU can be considered as a subsystem of the traction motor, as the bearing unit incorporates several features, such as grease, sealing and electrical insulation. The electrical insulation is realized by using either an INSOCOAT coating or a hybrid design with ceramic rolling elements.

For additional information about the TMBU concept, refer to the Railway technical handbook, Volume 2, Drive systems (PUB 42/P7 13085 EN).

Compared to the design features of the current TMBU, the subsystem life of the new regreasable TMBU can be extended from the present 6 years to 18 years, because of the regreasing feature.

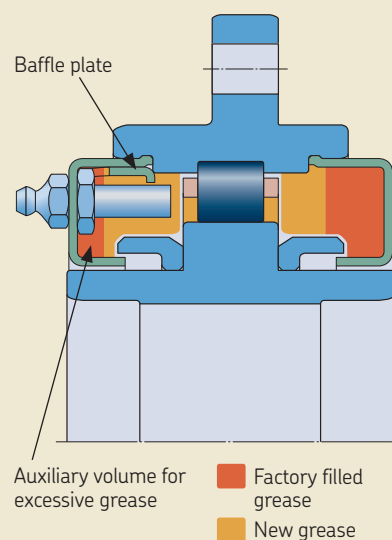
The regreasable TMBU is designed to accommodate an additional amount of grease when replenishing and to avoid overgreasing.

The bearing unit service life and grease life are calculated separately, because they depend on the application conditions and need to correspond to customer needs.

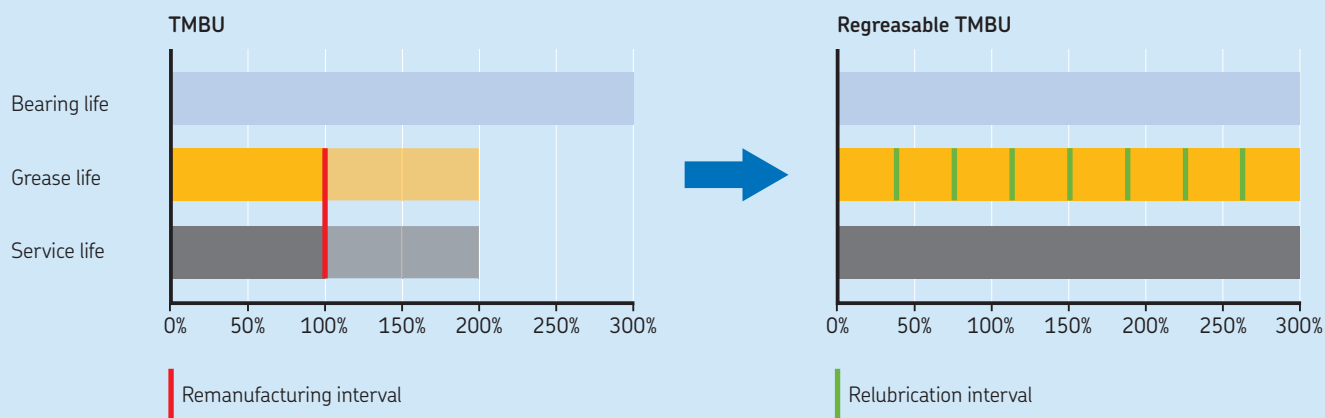
Product features

- Relubrication interval and amount of grease adjusted according application needs
- Overheating avoided by auxiliary volume for excessive grease
- Reliable electrical insulation (hybrid and INSOCOAT variants)
- Lubrication feature close to the rolling contact enables proper supply of new grease
- Polymer (PEEK) and brass (M) cage execution
- Integrated labyrinth seals
- Optimized internal design
- Exact quantity of grease can be supplied through the SKF grease meter (LAGM E)
- Optional integrated sensor possible

Grease distribution in the regreasable TMBU after replenishment



Comparison of bearing, grease and service life for current TMBU and regreasable TMBU



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