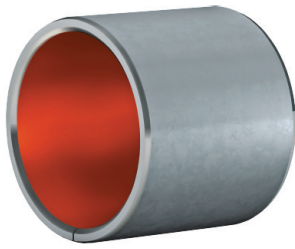
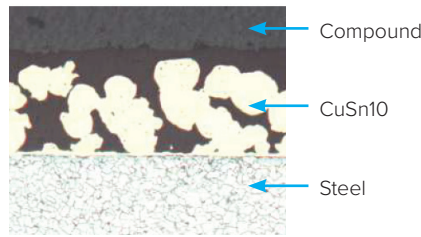


Maintenance free bearing material for performance demanding lubricated applications



GLYCO® 298 bushing



Photomicrograph of the 3-layer material (steel back + sliding layer of porous bronze + compound of PTFE and additives)



Material delamination comparison results after shock absorber rig test under 6 MPa radial load pressure and 2.6 m/s speed

Challenge

For some applications, e.g. shock absorbers or pumps operating with lubrication through oil or other fluids at higher load, maintenance free bearings extended service life is needed.

Solution

GLYCO® 298 is a sliding material especially developed for fluid lubricated applications. It is distinguished by a high load carrying capacity and wear resistance against material delamination and cavitation as well as a low friction coefficient.

Specific additives to the PTFE base material have been used in order to improve these key performance characteristics.

Key Features

- Maintenance-free operation lubrication for use under severe fluid lubricated conditions
- High pv-value
- High wear resistance
- High load capacity
- Low friction
- Rotating, oscillating and axial motion possible
- Wide range of part design types

Benefit	Details
High Load capacity (lubricated)	static: max. 250 MPa dynamic: max. 100 MPa
High wear resistance under oil lubrication	pv max. = 30 MPa x m/s under lubricated conditions* <small>*Tenneco specific shock absorber test conditions</small>
Operating temperature	- 200 to 260 °C
Low Friction coefficient (lubricated)	Depending on operation condition from 0.02 to 0.07

Additional Information

GLYCO® 298 is a three layer composite material. A porous tin bronze sinter structure is applied on a steel back. This layer is impregnated with a PTFE sliding material and a specific combination of fillers especially chosen to improve the performance of this material under fluid lubrication conditions.

On the top of this filled bronze structure, a 10 to 30 µm thick overlay of the same sliding material is applied, providing a smooth surface for the application.

GLYCO® 298 sliding bearings are therefore showing low friction and improved wear resistance against flow delamination and cavitation under lubricated operation compared to other standard PTFE-based materials.

In addition, this material is providing in case of requirement for start/stop operating conditions clearly better results than conventional materials.

Applications: Automotive fluid lubricated systems like shock absorbers, transmissions, various pumps and compressors systems.

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Shock absorber rig in operation at Tenneco Technology center during test of GLYCO® 298

