



# PEL<sup>®</sup> BH bushings

**HIGH RESISTANCE TO WEAR AND SEIZURE UNDER HARD WORKING CONDITIONS: HIGH PRESSURE, CORROSION, ABRASION, SHOCKS AND LOW MAINTENANCE**

The PEL<sup>®</sup> BH bushing is a machined bearing with excellent resistance to wear and seizure. With these bearings, the intervals of lubrication are considerably increased.

## Examples of applications

Excavators – Wheel loaders – Backhoe loaders – Dumper trucks – Cranes – Tractors – Ploughs – Handlers – Bush-cutter pillar arms – Garbage collection trucks – Iron and steel works – Cement industry – etc...

## Surface characteristics

The cavities on the surface of the PEL<sup>®</sup> BH bushing provide large grease reserves while maintaining an optimum load distribution.

The duplex surface treatment provides high surface hardness and excellent resistance to abrasive wear, seizure and corrosion.

## Conditions of use

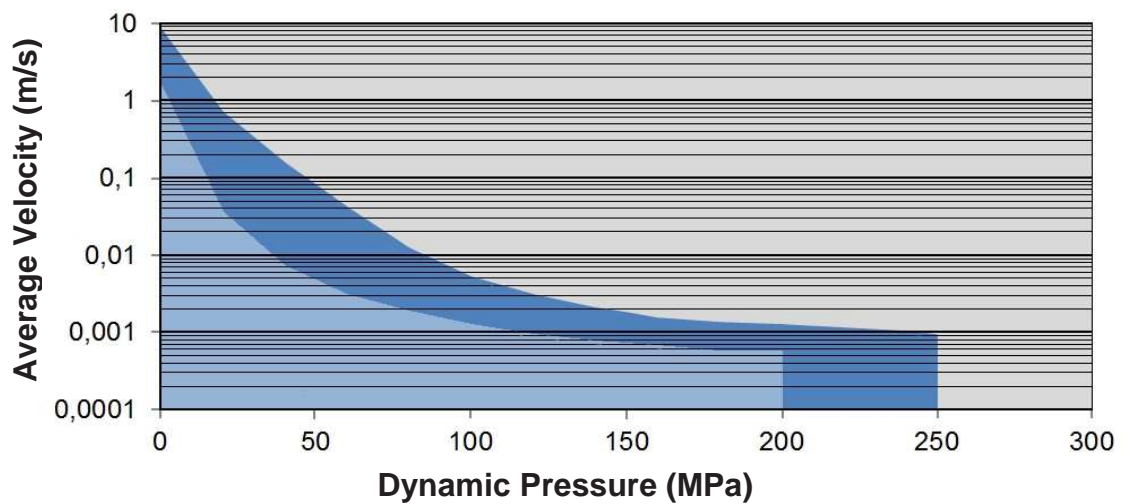
<b>Static pressure max (MPa)</b>	<b>450</b>
<b>Dynamic pressure max (MPa)</b>	<b>200</b>
<b>Speed (m/s)</b>	<b>1,5</b>
<b>PV factor (MPa.m/s)</b>	<b>See curve next page</b>
<b>Max Temp (°C)</b>	<b>250</b>
<b>Lubrication</b>	<b>greased</b>
<b>Greasing intervals</b>	<b>Up to 500 h</b>

## Standard tolerances

<b>Bushing inner diameter</b>	<b>H9</b>
<b>Bushing outer diameter</b>	<b>p6</b>
<b>Housing</b>	<b>H7</b>
<b>Shaft tolerances</b>	<b>f7</b>
<b>Shaft roughness</b>	<b>Ra &lt; 0.8</b>
<b>Shaft hardness</b>	<b>&gt; 56 HRC</b>

- Nitrocarburising specialist, owner of QPQ<sup>®</sup>, TENIFER<sup>®</sup>, ARCOR<sup>®</sup>, SURSULF<sup>®</sup>, TUFFTRIDE<sup>®</sup>...
- Low friction, anti-corrosion coatings: lamellar zinc, PTFE & MoS<sub>2</sub> coatings...
- PVD & CVD coatings expert: DLC (aC:H, TaC), hard coatings (CrN, TiN,...): CERTESS<sup>®</sup>
- Anti-seizure treatment: STANAL<sup>®</sup> 400 (for stainless steel), DELSUN<sup>®</sup> (for bronze and copper alloys)

## PV curve



NB : curve obtained from test bench results

Normal applications (with marginal lubrication)

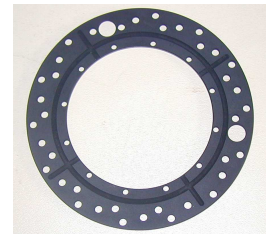
Possible applications after validation tests (with regular lubrication)

## Assembly instructions

PEL<sup>®</sup> BH bushings are best assembled by press fitting or by nitrogen mounting (Other assembly techniques can also be used. If necessary, please contact HEF DURFERRIT prior to use.)

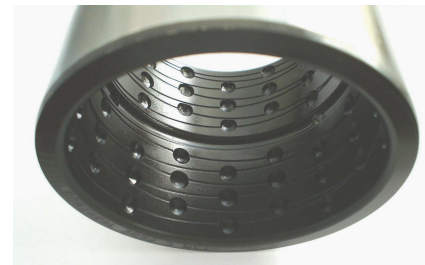
## Available basic forms

Different forms are available with PEL<sup>®</sup> BH technology: Cylindrical or flanged bushings, sliding plates, thrust washers...



## Customizable bushings and products

PEL<sup>®</sup> BH bushings may be customized to answer your specific needs. For example the PEL<sup>®</sup> BH HG with an added helical groove allows re-greasing under load and low angle oscillation.



For optimal performances, special HEF DURFERRIT shafts are available from HEF: PEL<sup>®</sup> ST, PEL<sup>®</sup> STC...

## Large testing capabilities and strong R&D

- 60 tribologists and R&D engineers
- More than 30 test benches, customizable tribometers
- Studies in special environment: Cryogenic, high temperature, water, oil, grease, dust ...
- More than 2 500 studies in various industries
- More than 600 patents



The PEL<sup>®</sup> BH bushing is based on our experience in the field of tribology. Therefore, it should be tested and validated in your real working conditions before being adopted for permanent use.

  
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You have a friction problem? HEF DURFERRIT has the solution!