

Where to use

deva.metal® is a self-lubricating bearing material manufactured by advanced powder metallurgy. It is fully compacted, unlike oil-impregnated porous bronze materials that are weak by comparison. **deva.metal®** is provided with an evenly distributed solid lubricant throughout its metallic matrix.

- is suitable for dry running at slow sliding speeds and high loads,
- is stick-slip free,
- has high resistance to temperature and corrosion,
- is insensitive to contamination and edge pressures,

- can be easily machined if required.

Reference applications

Iron and steel works, furnace construction, fans, foundry machinery, waste water cleaning plants, water-, steam- and gas-turbines, pumps and compressors, food and beverage industry machinery, packing machinery, apparatus engineering, mechanical handling equipment, etc.



Material properties

Material property <small>(depending on alloy and operating conditions)</small>	Unit	Value
Max. permitted static load (\bar{p})	MPa	260
Max. permitted dynamic load (\bar{p})	MPa	130
Max. sliding speed (U)	m/s	0.4
Max. $\bar{p}U$ -value	MPa \times m/s	1.5
Friction coefficient	μ	0.09 to 0.49
Temperature range	°C	-200 to +800

Tolerances	
Housing bore	H7
Bearing outer Ø	r6/s6
Bearing inner Ø	C7 for D8 after inst.
Shaft Ø	h7
Counter material	hardness > 180 HB
Shaft surface finish	R _a 0.2 to 0.8 µm

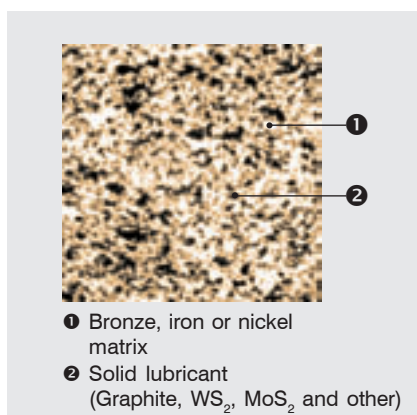
Tolerances

Other installation tolerances are possible, provided that a safe fit in the housing and the necessary running clearance are maintained.

Installation

The recommended method for installing bushes is supercooling (bronze alloys only) or press-fit.

Structure



Photomicrograph deva.metal®

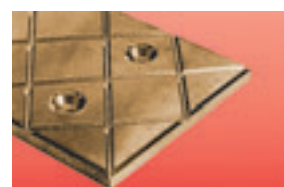
Basic forms



Flanged bearings



Cylindrical bearings



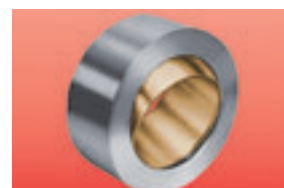
Sliding plates



Thrust washers



Machinable blanks



Spherical bearings