



FAM® BUSHING

HIGH RESISTANCE TO ABRASION AND HIGH CONTACT PRESSURE IN SHOCK WORKING CONDITIONS, WITH NO MAINTENANCE.

FAM® bushings manufactured from a manganese steel, have excellent resistance to abrasive wear thanks to a mechanical work hardening of the contact area and require only initial greasing.

Surface characteristics

The contact area is superficially mechanical work hardened, to have an initial hard surface layer which is reinforced under mechanical stresses (shocks, abrasion). It can be smooth or cross hatched.

The cross hatching provides an excellent distribution of the grease and enables the removal of abrasive particles from the contact area.

FAM® technology benefits

- Maintenance free
- High abrasion resistance
- High shocks resistance and high pressures.

Conditions of use

Max dynamic pressure	50 MPa
Max speed	0,5 m/s
Max temperature	380 °C / 720 °F
Lubrication	FAM® bushings require only initial greasing. This type of bushing can be used without any lubrication in very abrasive conditions.



FAM[®] BUSHING

Applications:

► Steel industry

- Joints of furnace gates
- Joints of blooms conveyor roller on continuous casting outlet
- Joints of slabs clamps and coils clamps
- Rollers of transfer ramp of sheet metal
- Lateral guide roller of sheet metal on shearing and slitting lines
- Joints of ingot guide rollers on spraying column

► Cement industry

- Joints and rollers of metallic deck conveyor
- Joints of extractor feeding screw

► Mining industry

- Joints of tunnel mining machines

► Handling

- Joints of shoe brake of rolling bridge crane
- Joints of grabs, clamps
- Joints of clamshell bucket
- Joints of bridge crane spreader

Mating shafts

Shafts hardened for 56 to 60 HRC are recommended. For optimal performances of the joints, special shafts are available from HEF DURFERRIT: FAM ST, FAM HT, FAM OX.

Assembly instructions

FAM[®] bushings are best assembled by press fitting or by nitrogen mounting. (Other assembly techniques can also be used). For further information, please contact HEF DURFERRIT prior to use.

Tolerances

a) Interference

We recommend the assembly of our FAM[®] bushings according to an interference fit of H7/s7. However, under special working conditions (high loads, large diameters) the interference can be increased.

For further information, please contact HEF DURFERRIT.

b) Clearance

Bushing ID	Bushing ID Tolerance	Shaft tolerance
25 mm < ID < 50 mm	+ 50 µm	- 100 µm
	+ 200 µm	- 150 µm
50 mm < ID < 100 mm	+ 50 µm	- 200 µm
	+ 300 µm	- 250 µm
100 mm < ID	+ 100 µm	- 250 µm
	+ 400 µm	- 300 µm

Note: these clearances can be increased in case of high abrasive environments.

Available basic forms

Different forms are available with FAM[®] technology: bushings, flanged bushings, spherical plain bearings, sliding plates.

This solution 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.



Mechanical Components Division:
 7, rue Salvador Dali
 42000 Saint-Etienne - France
 Tél.: +33 (0) 4 77 46 53 90
 Fax: +33 (0) 4 77 46 53 95
 E-mail: bushings@hef.fr

HEF USA Headquarters:
 2015 Progress Drive
 Springfield, Ohio 45505
 Phone: (937) 323-2556
 Fax: (937) 323-5787
 E-mail: sales@hefusa.net
 Internet: www.hefusa.net