**fpm inbear** ul. Inżynierska 39/1 PL-81-512 Gdynia

tel./fax +48 58 620 45 71 tel./fax +48 58 620 79 30

> inbear@inbear.pl www.inbear.pl

### Feroform F36 - maintenance free bearing material

#### 1. Structure

Resistant to high temperatures phenolic resin with aramid fibres.

#### 2. Characteristics

- maintenance free bearing material with high load resistance and dark-olive colour,
- asbestos free,
- specially designed for work in high temperatures (up to 200°C),
- low wear and good bearing properties even in high temperatures,
- lubrication grooves improve bearing performance I n lubricated applications,
- resistant to abrasion and chemical corrosion,
- has minimum thermal expansion, absorbs vibrations and is resistant to impact loads,
- manufactured in casting and press moulding technology optimum for many different shapes,
- also available in wide range of semi-products,
- available additives:
  - 1 oil impregnation, improves run-off, reduces coefficient of friction,
  - 7 thermal stabilisation, for better performance in high temperatures,
  - 8 additional MoS<sub>2</sub> in order to provide better run-off in high erosion environment for example. F36.71 F36 material thermally stabilized and impregnated with oil,

#### 3. Applications

 water turbines, conveyors and worm gears, breweries, chemical, food and beverage industry, paper and txtile industry, earthmoving machines, shipyards, pumps, water turbines seals, filtration systems, water desalination and conditioning systems, etc.

#### 4. Availability

- standard range of semi-products:

sheets - dimensions: 1220 x 1220 mm thickness: 1,6-101 mm

rods - dimensions: Ø19-111 x 1220 mm

tubes – dimensions:  $\varnothing$ 20-200 x  $\varnothing$  40-250 x 1150 mm tubes – dimensions:  $\varnothing$ 200-600 x  $\varnothing$  260-700 x 1050 mm

to order: tubes with big dimensions (inner diameter up to 1800 mm),

to order: assembly ready elements even with complex shape.

# 5. Technical data

Parameter			Unit	Value
Maximum load		MPa	85	
Maximum sliding speed	dry		m/s	2,3
Working temperature	maximum	constant	°C	+200
		temporary		+210
Coefficient of friction	dry		-	0,14 - 0,18
Surface Ra finish	shaft		μm	0,2 - 0,8
	housing			1,8 - 3,2
Fitting	shaft		-	h7
	housing			H7
Shaft hardness			HB	200

#### 6. Working conditions

dry	good
oil lubricated	good
grease lubricated	good
water lubricated	fair
process fluid lubricated	good

## 7. Assembly tips

The housing should have a fit-in phase machined.

The bushes should be assembled with constant pressure without bush torsion.