



## Fixed profile bearings (Radial, Combined radial and axial)

### Bearing bore:

- Cylindrical bore – for low to medium speed applications
- Multi-lobe bore (lemon, 4-lobe, offset, double offset) – for higher speed applications

### Outer surface:

- Cylindrical
- Spherical
- Cylindrical or spherical surface with exchangeable segments (electrically insulated possibility)

### Materials:

- Steel C10, C15, S355J2+N
- Contact surfaces of tin or lead based babbit

### Application:

- Generators
- Turbines
- Gearboxes
- Compressors
- Motors
- Pumps

Design options include thrust load capacity on the end faces, hydrostatic jacking for use at start up and run down, holes for temperature sensors, oil scraper rings etc.

### Examples include:



#### **Radial bearing**

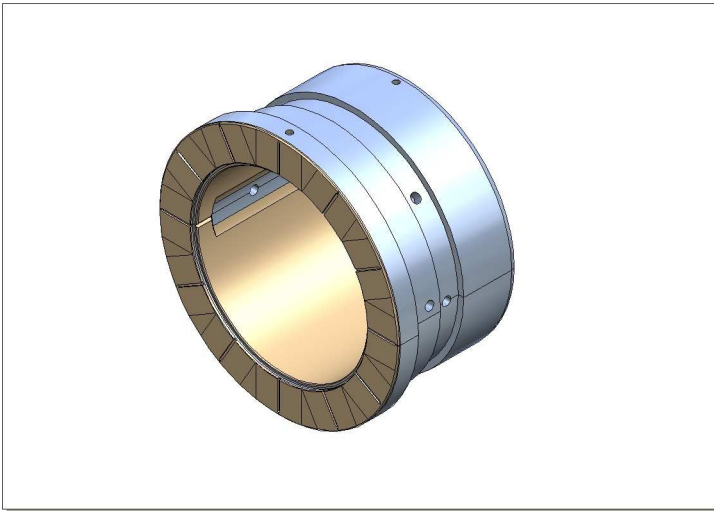
**Customer:** FLENDER (DE, F)

**Application:** Gearboxes

**Technical information:**

Bearing bore: Cylindrical, lemon, 4-lobe, offset

Materials: Steel C10, C15  
Tin based babbit



**Combined radial and axial bearing**

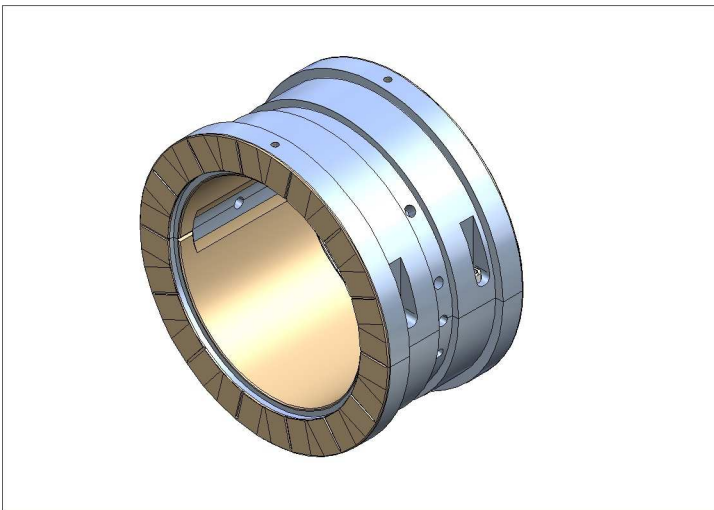
**Customer:** FLENDER, RENK (DE, F)

**Application:** Gearboxes

**Technical information:**

Bearing bore: Cylindrical, lemon, 4-lobe, offset

Materials: Steel C10, C15  
Tin based babbit



**Combined radial and axial bearing**

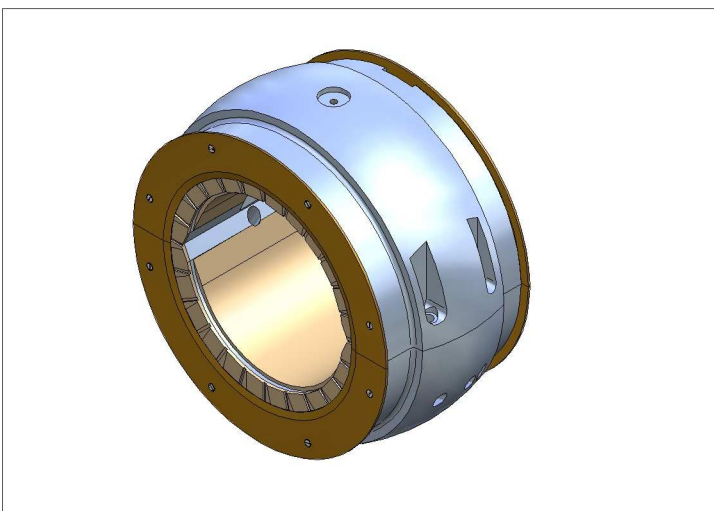
**Customer:** FLENDER, RENK (DE, F)

**Application:** Gearboxes

**Technical information:**

Bearing bore: Cylindrical, lemon, 4-lobe, offset

Materials: Steel C10, C15  
Tin based babbit



**Combined radial and axial bearing**

**Customer:** SIEMENS (DE, CZ)

**Application:** Generators

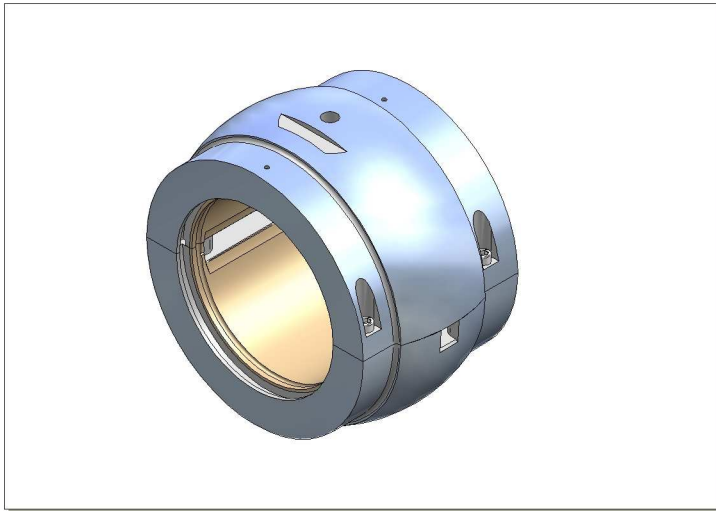
**Technical information:**

Bearing bore: Lemon

Outer surface: Spherical

Materials: Steel C10, C15  
Tin based babbit

Construction with oil scraper rings



### Radial bearing

**Customer:** ŠKODA POWER (CZ)

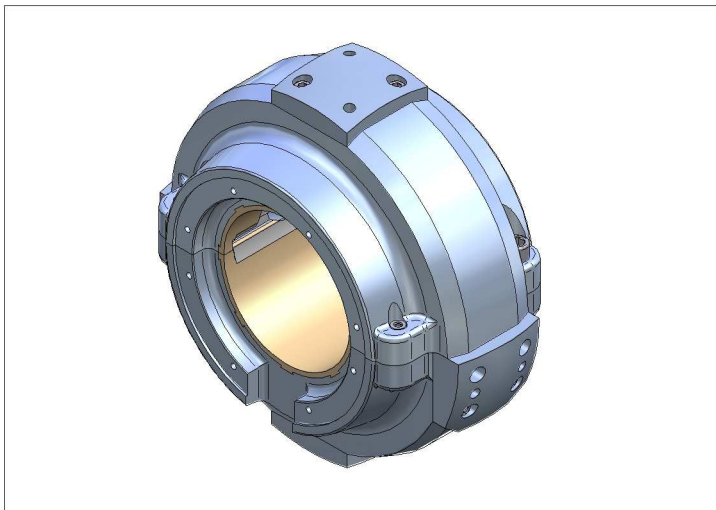
**Application:** Steam turbines

**Technical information:**

Bearing bore: Lemon

Outer surface: Spherical

Materials: Steel C10, C15  
Tin based babbit



### Radial bearing

**Customer:** BRUSH SEM (CZ)

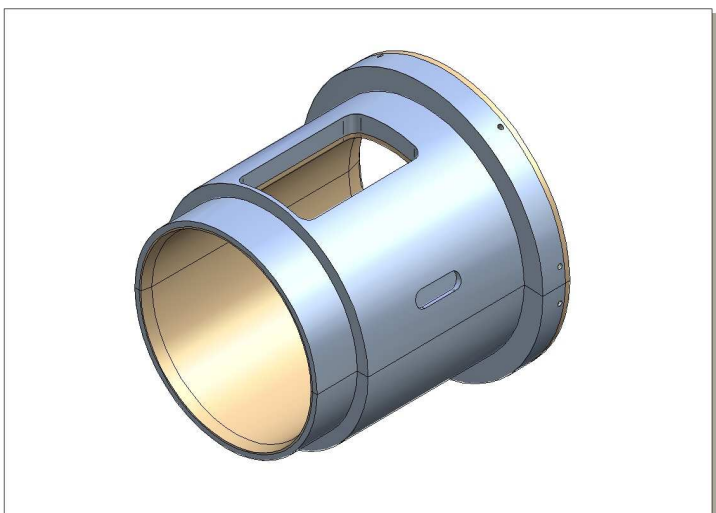
**Application:** Generators

**Technical information:**

Bearing bore: Lemon

Outer surface: Spherical exchangeable segments

Materials: Steel C10, C15  
Tin based babbit



### Radial bearing

**Customer:** ČESKÉ DRÁHY (CZ)

**Application:** Wheel-seat of the railway wagon axles

**Technical information:**

Bearing bore: Cylindrical

Outer surface: Cylindrical

Materials: Steel S355J2+N, C10, C15  
Lead based babbit

## **Tilting Pad Journal Bearings**

### **Bearing bore:**

- determined by calculations – for high speed applications

### **Outer surface:**

- Cylindrical
- Cylindrical surface with exchangeable segments

### **Materials:**

- Body of Bearing - Steel S235JR, S355J2+N
- Segments – Steel S355J2+N, 42CrMo4
- Contact surfaces of tin or lead based babbitt

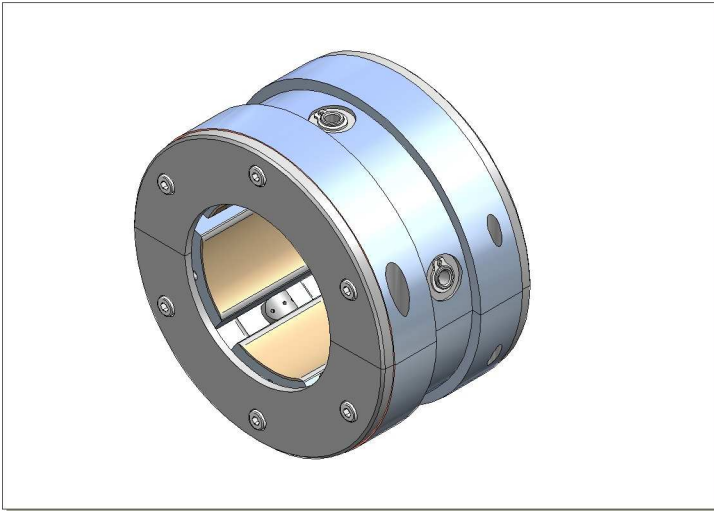
### **Application:**

- Generators
- Turbines
- Gearboxes
- Compressors
- Motors
- Pumps

Design options include hydrostatic jacking, holes for temperature sensors, oil scraper rings, end seals etc.



**Examples include:**



**Tilting Pad Journal Bearing**

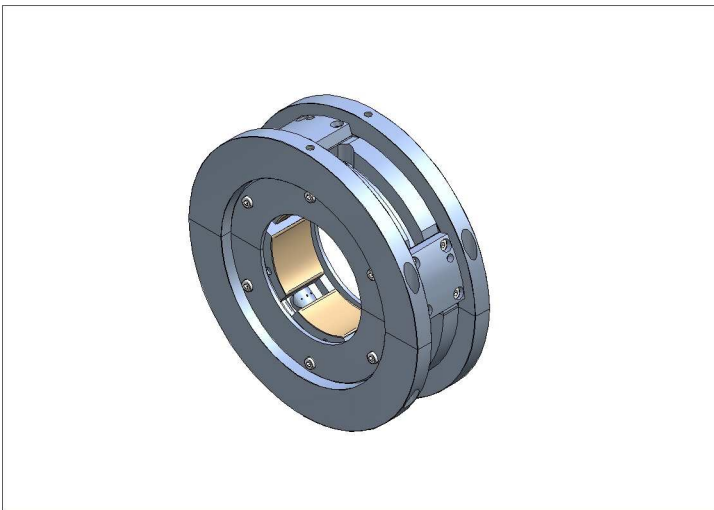
**Customer:** FLENDER (DE, F)

**Application:** High-speed gearboxes

**Technical information:**

Bearing bore: determined by calculations

Materials: Steel S355J2+N  
Tin based babbit



**Tilting Pad Journal Bearing**

**Customer:** FLENDER (DE, F)

**Application:** High-speed gearboxes

**Technical information:**

Bearing bore: determined by calculations

Outer surface: Cylindrical exchangeable segments

Materials: Steel S355J2+N  
Tin based babbit

## **Tilting Pad Thrust Bearings**

### **Contact surface:**

- Designed to include Directed Lubrication which reduces power loss, oil flow and pad temperature.

### **Materials:**

- Body of Bearing - Steel S235JR, S355J2+N
- Segments – Steel S235JR, S355J2+N, C10, C15, 16MnCr5, 34CrNiMo6
- Contact surfaces of tin or lead based babbit

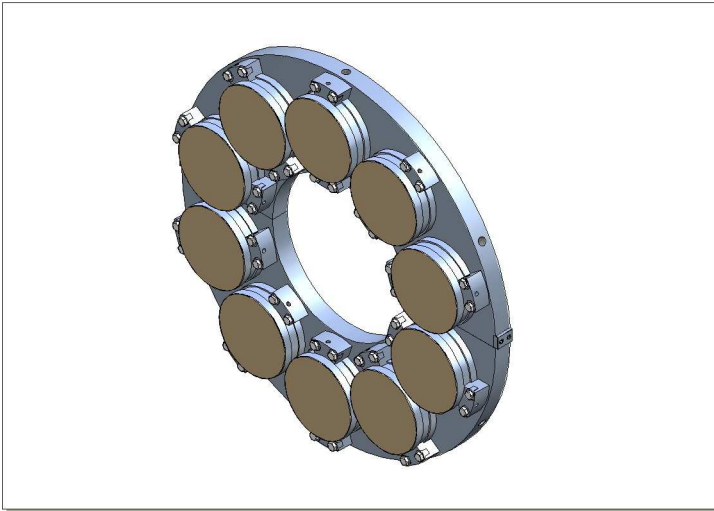
### **Application:**

- Generators
- Turbines
- Gearboxes
- Compressors
- Motors
- Pumps
- Vertical mills

Design options include hydrostatic jacking for use at start up and run down, holes for temperature sensors etc.



**Examples include:**



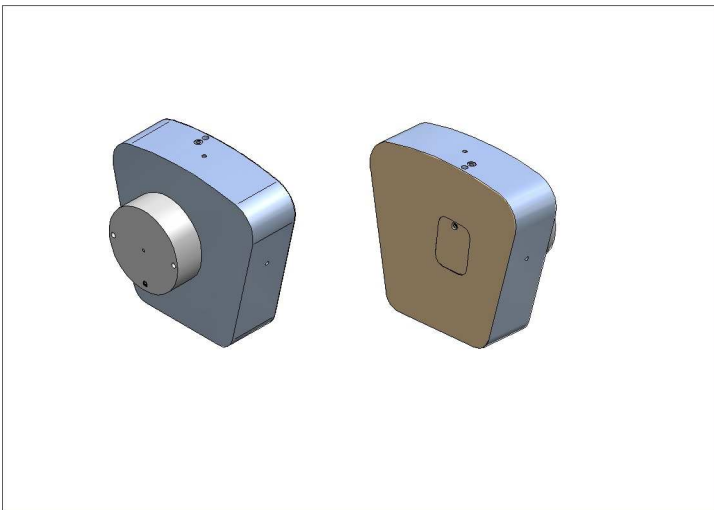
**Tilting Pad Thrust Bearing**

**Customer:** FLENDER, RENK (DE, F)

**Application:** Gearboxes

**Technical information:**

Materials: Steel S355J2+N  
Tin based babbit



**Thrust bearing segments**

**Customer:** FLENDER (DE, CZ)

**Application:** Vertical mill (low speed engine)

**Technical information:**

Materials: Steel S235JR, 34CrNiMo6  
Lead based babbit

## **Horizontal Bearing Assemblies**

### **Bearing bore:**

- Determined by calculations

### **Outer surface:**

- Cylindrical
- Spherical
- Cylindrical or spherical surface with exchangeable segments (electrically insulated possibility)

### **Materials:**

- Depending on structural design
- Contact surfaces of tin or lead based babbitt

### **Application:**

- Generators
- Turbines
- Gearboxes
- Compressors
- Motors
- Pumps

Design options include hydrostatic jacking for use at start up and run down, holes for temperature sensors, oil scraper rings, end seals etc.

### **Examples include:**



#### **Radial bearing with tilting thrust segments**

**Customer:** FLENDER, RENK (DE, F)

**Application:** Gearboxes

#### **Technical information:**

Bearing bore: Lemon, 4-lobe

Materials: Steel C10, C15  
Tin based babbitt