



# Peek Lining Bearing



# Peek Lining Bearing for Rotating Plant Bearing

—Here, the Tribology Solution.—

## Development concept

- Downsizing of bearing unit
- Elimination of oil jacking
- Improvement of heat resistance
- Enable to nonconductive
- Ecological products (Lead free)
- Maintenance free by longer life

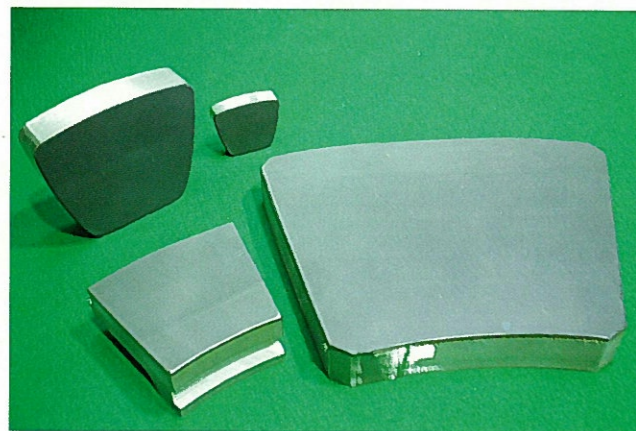
Daido Metal Co., Ltd. chose PEEK as a replacement for white metal in its large high-load and high-speed revolution bearings because of its excellent durability and sliding properties. The application of PEEK to the surface of the bearings improved load capacity by 50 percent and reduced friction by approximately 30 to 40 percent. This enabled the surface of the bearing to be reduced by approximately 60% and the operating temperature to be increased to 250°C(482°F) (compared to 125°C(257°F) for white metal products)

## Bearing material

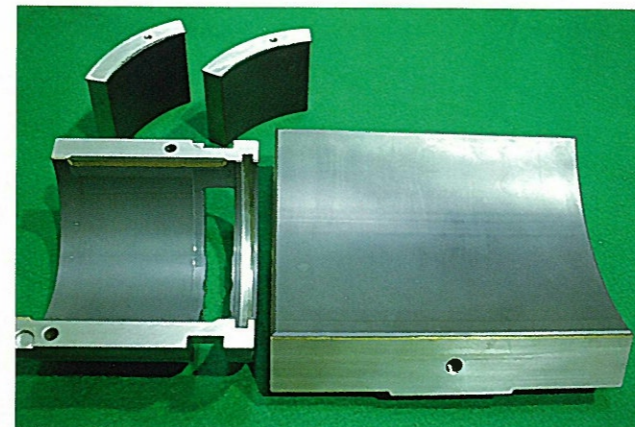
- Material No. DTK01    Component : PEEK+CF+ $\alpha$
- Material No. DTK07    Component : PEEK+ $\alpha$

PEEK : Poly-Ether-Ether-Ketone  
 CF : Carbon-Fiber  
 $\alpha$  : additive

## Peek lining bearings



Thrust bearing



Journal bearing

## Main application

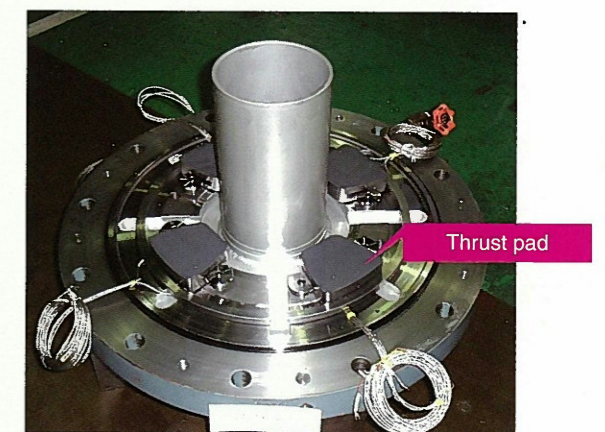
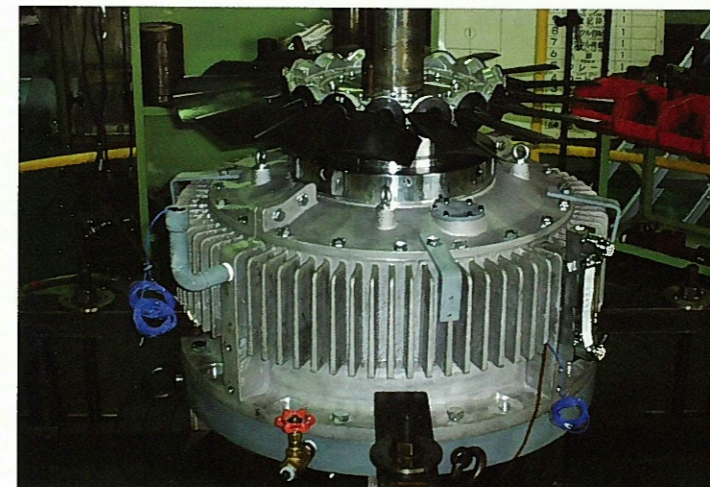
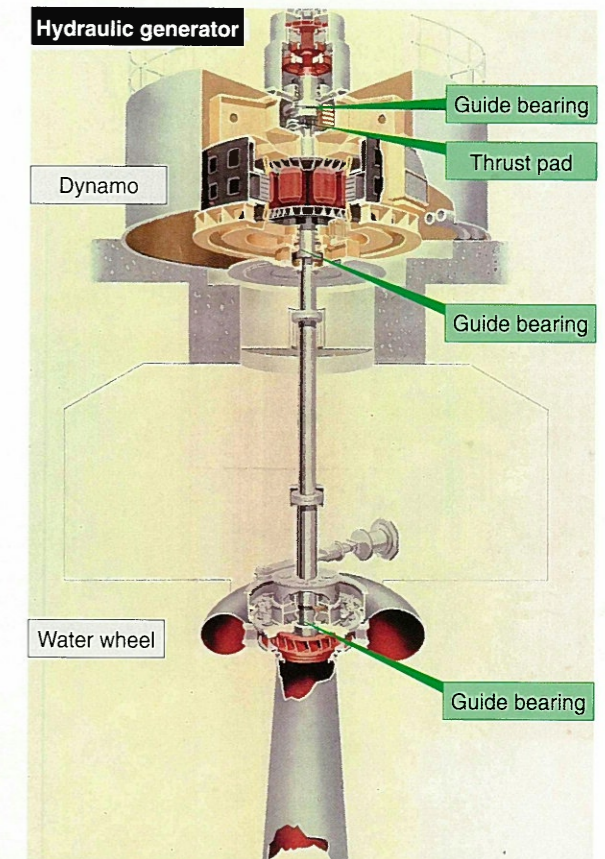
- Bearing for large-scale water-turbine generator
- Bearing for vertical pump
- Bearing for compact water-turbine generator

## Other application

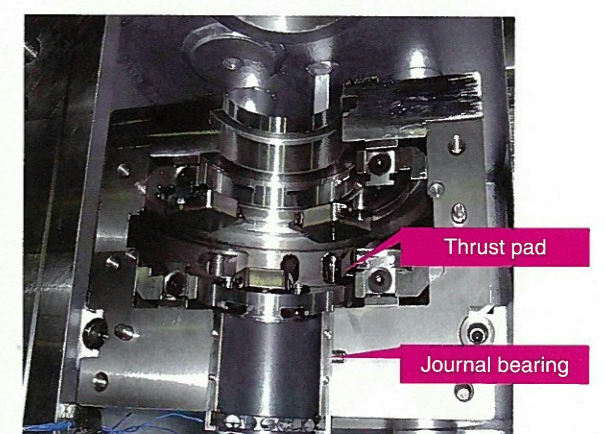
- Thrust bearing for horizontal extruder machine
- Thrust bearing for vertical type motor
- Thrust bearing for compressor
- Journal bearing for horizontal type motor
- Thrust bearing for rolling machine, etc.

## Award & ISO

- Wins JEC Awards(France) in Mar. 2004
- Authorized by ISO14001 in Mar. 2001



Air-cooled vertical assembly bearing



Horizontal assembly bearing for Water turbine