

Mar. 12, 2012
T-S-013 / 766-90170

Replacement with tilting pad bearing

REASON FOR SUGGESTION:

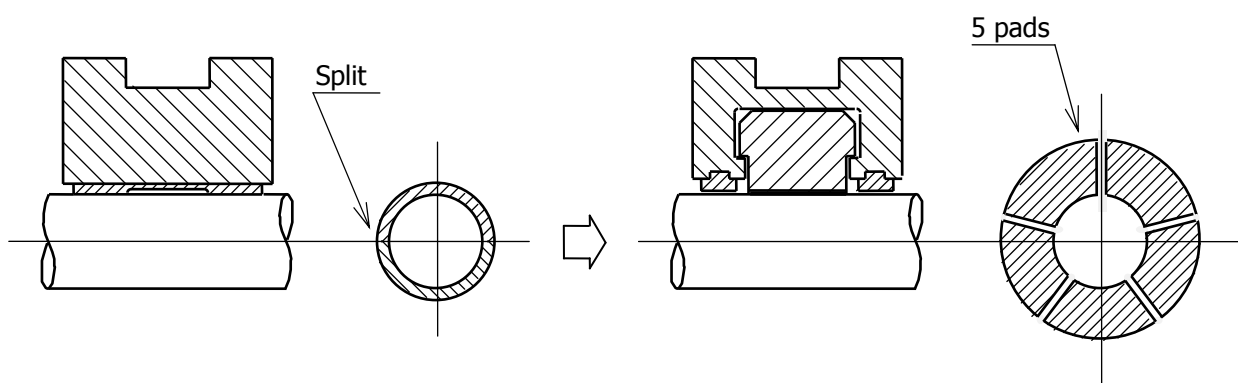
The present sleeve bearing may cause a high bearing temperature exceeding the alarm temperature in high-speed and high-load operation, which is a problem in supervision. The bearing metal or the rotor journal may be flowed out in a worst case.

Use the tilting pad bearing so that:

- 1) Its higher cooling effect will prevent the temperature rise.
- 2) The contacting condition between the back of the liner and the housing will not be factor of changing the effect of heat transfer.
- 3) No control of the amount of crush subject to change with time will be required for tilt pads bearing.
- 4) The shorter width of bearing will cause little possibility of uneven contact with the rotor.
- 5) Oil whirl or whip will be eliminated.

DETAILS OF SUGGESTION:

It is recommended to replace both sides of the bearings with the tilting pad bearings by manufacturing a new bearing housing.



Even when applied:

- (1) The rotor critical speed will be almost the same as before.
- (2) Almost the same amount of lubricating oil will be used by inserting an orifice.