

General Conclusions

Here we wish to point out some important and general conclusion points for the present study:

It is established that Ferro-fluid as a lubricant improves the bearing performance for Neuringer-Rosensweig magnetic fluid flow model for almost all squeeze film bearing. It is examined from the present study that this type of bearing system can support a load even in the absence of flow with an appropriate choice of roughness parameters, unlike, the case of conventional lubricant. This study makes it clear that the roughness must be given due consideration while designing magnetic fluid based squeeze film bearing systems. The magnetization helps in reducing the adverse effect of roughness up to some extent. This is all the more significant from bearings life period point of view. The effect of transverse roughness is adverse in general. There exists some scopes for obtaining a better performance in the case of negatively skewed roughness particularly when variance (-ve) is in place.

