ISO 12130-1:2001-11 (E)

Plain bearings - Hydrodynamic plain tilting pad thrust bearings under steady-state conditions - Part 1: Calculation of tilting pad thrust bearings

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Fundamentals, assumptions and premises 2

4 Symbols, terms and units 3

5 Calculation procedure 6
5.1 Loading operations 6
5.2 Coordinate of centre of pressure 7
5.3 Load-carrying capacity 7
5.4 Frictional power 9
5.5 Lubricant flow rate 9
5.6 Heat balance 10
5.7 Minimum lubricant film thickness and specific bearing load 13
5.8 Operating conditions 13
5.9 Further influence factors 14

Annex A (normative) Examples of calculation 15

A.1 Example 15
A.2 Example 19

Bibliography 24