ISO 21866-1:2020 (E)

Plain bearings — Automotive engine bearing test rig using actual connecting rods — Part 1: Test rig

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Classification of bearing tests

5 Test rig

5.1 Test rig construction
5.2 Rig frame construction
5.3 Foundation structure
5.4 Test using actual engine connecting rod
5.4.1 Structure around the test bearing
5.4.2 Structure around the support bearing
5.4.3 Connection of the connecting rod with dynamic servo actuator
5.4.4 Test shaft for different diameter of test bearings
5.4.5 Temperature measurement for the test bearing
5.4.6 Adjustment of the misalignment of the test bearing and the shaft

Annex A (informative) Example for bearing seizure test

Annex B (informative) Example for bearing fatigue test

Annex C (informative) Theoretical oil film conditions by the rigidity of the bearing housing

Annex D (informative) Resonance frequency by frame type (calculation)

Page count: 15