



FALEX High Speed High Temperature Bearing Test Rig

The Falex High Speed - High Temperature Bearing Test Rig offers versatility and operational simplicity. This test apparatus is designed to evaluate greases for extended periods of ball bearing operation under light loads, high speed and elevated temperatures.



The standard apparatus includes two independent "CRC" axially loaded test spindles. These spindles rotate two SAE No. 204 ball bearings; at 10,000 or 20,000 revolutions per minute under light loads. Alternate spindle systems are available upon request.

The instrumentation console allows operator control of the instrument test parameters and provides test data display. Standard configuration provides Chamber Temperature from ambient to 371° C (700° F), Torque, Specimen Temperature, Chamber Temperature, and Test Time displays.

The Falex High Speed-High Temperature Test Machine provides the accuracy and precision to obtain reliable test data as outlined in the ASTM

STANDARD TEST METHOD

ASTM D 3336 - Standard Test Method for Performance Characteristics of Lubricating Grease in Ball Bearings at Elevated Temperature

SPECIFICATIONS AND FEATURES

SPEED:

Dual range: 10,000 and 20,000 revolutions per minute under light loads.

LOAD:

15 lbs. maximum axial load, mechanically applied.

TEMPERATURE CONTROL:

Digital Temperature Control for Test Chamber System (370° C max)
High/Low Test Temperature Cutoff.

TIMING SYSTEM:

Digital Test Time Duration on and off timers and system total elapsed time indicator.

TEST DRIVE SYSTEM:

Two 1½ HP single phase AC drive motor with thermal protection.

TEST TORQUE SYSTEM:

Digital Test Torque display with high and low torque cutoffs.

CABINTRY:

Heavy construction steel with electro/mechanical compartment, test ovens, and instrumentation panel.

STANDARD SPINDLE ASSEMBLY:

Type "CRC" (full floating spindle) as described in ASTM D 3336.

SYSTEM DESCRIPTION

F-1516 FALEX HIGH SPEED-HIGH TEMPERATURE BEARING TEST MACHINE

Two Independent Test Stations
Dual Range Test Speeds - 10,000 or 20,000 RPM
Two 1½ HP AC Motors with Independent Control
Test Heater Chambers with Programmable Controllers
Test Torque Display and Cutoff
Test Duration Display and Control
Two Type CRC (full floating spindle) as described in ASTM STM D3336

SYSTEM OPTIONS

F-1516-DAC FALEX SOFTWARE™ DATA ACQUISITION SYSTEM

Real time display and data acquisition of Test Torque, Oven Temperature and Spindle Temperature. Includes PC Kit.

F-1516-25 SPINDLE ASSEMBLY FIXTURE

Stand alone fixture to assist with test spindle assembly prior to insertion in test oven.

F-1516-29 AXIAL LOAD SPRINGS

As described in ASTM STM D 3336. 100 per pack.

F-1516-236 SPARE PARTS KITS

Includes:

- (1) Spindle Shaft
- (1) Heater for right oven
- (1) Heater for left oven
- (2) Locknuts
- (4) Flat Belts
- (4) Thermocouples, Type J

F-1516-30A FLAT BELT

F-1516-30B REPLACEMENT HEATER, RIGHT OVEN

F-1516-29D REPLACEMENT HEATER, LEFT OVEN

F-1516-30D REPLACEMENT SPINDLE SHAFT

F-1516-30E THERMOCOUPLE, TYPE J

TEST SPECIMENS

611-078-001 TEST BEARING, MRC 204517

Fabricated from heat resistant steel, suitable for temperatures as high as 371°C (700°F). Equipped with suitable ball retainer.

611-078-070 TEST BEARING, STANDARD

Fabricated from AISI 52100 steel, suitable for temperatures as high as 149°C (300°F). Equipped with suitable ball retainer.

Falex test consumable pieces are available in a wide range of materials, surface finishes, and hardness, or from user supplied material. Please contact your Falex Representative for price and availability.

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