



## **K95800 Reichert Friction & Wear Tester**



### **Test Method**

This Reichert test method covers the procedure for determining wear properties (WP) and Extreme pressure properties (EP) to evaluate lubricant and additives.

### **Description**

This test rig consists of rigidly mounted test roller (cylinder) is pressed against friction wheel which is cross-cylinder contact configuration. The friction wheel partially submerged in the lubricant bath under test. In this test, rig loading is applied through dead weights. Normal load and frictional force measured through dual measurement load cell. Contact type acoustic emission detector Incorporated for scratching noise from the contact. Which will stop the test automatically in addition to that the lubricant chamber has got heater and controls lubricant temperature ambient to set value. Online data acquisition software acquires the normal load, frictional force, co-efficient of friction, sound level, temperature of the oil bath, sliding distance and analyze & compare the test. In addition to this Koehler will provide optical microscope with CCD camera based image acquisition system software to measure wear scar area, this is done by measuring the major axis & minor axis of the scar for calculation of scar diameter.

## **Included Accessories**

- Data Acquisition Software - CD
- Optical Microscope with CCD camera based image acquisition system software
- to view the scar on PC ( PC is not under our scope of supply).
- Dial Guage
- Test Rolls
  - (i) Brass - Qty – 25 Nos
  - (ii) Copper - Qty – 25 Nos
  - (iii) Aluminum - Qty – 25 Nos
  - (iv) Bearing Steel - Qty – 25 Nos
  - (v) Friction Wheel (bearing steel) - Qty – 25 Nos

## **Specifications**

Frictional Force - 2N to 200N

Normal Load - 50N to 500N (in steps of 50N) –dead weights

RPM - 50 to 1500 rpm (continuously variable through AC Frequency drive)

Temperature - Ambient to 1200C

Temperature Sensor - RTD

Sliding Speed - 0.85 to 2.50 m/s

Friction Wheel Dia - 31.4 dia x 10mm length

Test Roller - 12mm dia x 15mm length

Preset Timer - 99hrs:59min:59sec

Acoustic Sensor - To measure noise level 10 $\mu$  least count 10mm range - To measure the radial wear

Dial indicator

Sample volume - 25ml approx.