



HRB-5T Timken lubricant ring on block testing machine

One.Product Description:

The HRB Timken test machine produced by Jinan Sunlight is a new type of ubricant friction and wear tester, which mainly realizes the sliding friction of the ring block. It can be used to test the bearing capacity and OK value of lubricants under various conditions of changing the lubrication state (oil lubrication or grease lubrication), load and speed. The extreme pressure properties of the fixed lubricants. At the same time, the ring block tester can also be used to test the wear resistance of all kinds of metal material and non-metallic material (nylon, plastic, etc.) in sliding friction state. It can also determine the friction force of various material and calculate the friction coefficient of various materials.



Reference for appearance (continuous innovation, only reference)

Two.Main function and feature:



The new type of friction and wear testing machine adopts new manufacturing technology and control technology. The test force is applied smoothly and reliably, and the control of spindle speed, rotation, test force, friction torque, friction pair temperature and test time is simple and stable. The analysis of the advantages of the product is as follows:

1. Driving mode: this type of test machine is driven by servo motor, with good controllability and low failure rate. After many years of improvement, its performance is stable and reliable, and the accuracy of testing force and friction force is ensured in real time.

2. The main structure: when the friction test is carried out, the effect of the vibration of the motor and its accessory parts on the grinding marks should be reduced. Therefore, we adopt the whole body, the thickening support plate and the precision bearing.

3. Electrical part: the equipment adopts an independent industrial controller and module to effectively ensure the effect of the high speed of the equipment or the violent vibration of the oil film rupture on the performance of the control part.

Three. Technical parameters

NO	The project name	Technical indicators
1.	Max test force	5KN
2.	Loading mode	weight loading spring buffer
3.	Leverage ratio	10:1
4.	Loading rate	8~15N/s
5.	Scale label of friction force	0.5N/100 measure
6.	Temperature control error stability	±0.5%
7.	Precision of temperature measurement	±2°C
8.	Spindle speed range	1~1500r/min
9.	Standard sample	(1) Test ring $\phi 49.22 \times 13.06$ (2) Test block 12.32×19.05
10.	Main motor power	1.5KW



11.	Size	1000×700×1700mm
12.	Weight	Frame:350kg;Control cabinet: 80kg

Five. Principle of Timken ring block test machine

The Timken friction tester is mainly used to test the load carrying capacity of lubricants and to distinguish the extreme pressure properties of lubricants. The performance of the extreme pressure is represented by the OK value. A steel test ring is rotated by a test shaft on a steel test block. The test ring is mounted on a horizontal shaft and the test block is mounted on a test block frame. The lubricants flow to the specimen ring at a certain temperature. The test machine spindle drives the sample ring to rotate, and the test ring and the test block bear pressure. The maximum load O K can be obtained by observing the abrasion scratch on the surface of the test block without the scratch.

- A. Used to evaluate the friction properties of lubricating oil and grease
- B. Test of extreme pressure, wear resistance and friction performance
- C. Meets GB11144 ASTM D2782 ASTM D2509 IP 240 IP 326 related standards
- D. Configuration safety shield
- E. Automatic loading device
- F. Automatic lubricating grease sampler
- G. Test speed is adjustable
- H. Loading speed is adjustable
- I. Automatic injection of grease
- J. Lubricating oil inlet box volume 3.8L, built in circulating heating pump.
- K. Test microsystems can be used to test specimen scratches

Tel:+86-0531-85860713, +8615508660930

WeChat/WhatsApp: +8615508660930

Skype:+8615589966455

QQ: 1538151698

The contact: Janna Tang

Email:cnjntest@163.com

Add:No. 102-1, building 68, Xinmao Qilu science and technology city, No. 299, Zidong avenue, Tianqiao district, Jinan city, Shandong province China

Jinan Hengxu Testing Machine Technology Co.,Ltd