

MPX-3X Pin/ball on disc friction and wear tester

One.Product Description



This machine belongs to our proprietary product which is researched, developed, designed independently, the lower rotary spindle, the upper part adopts the direct and indirect two kinds of loading mode, reduce the error effectively under small load test. The underneath type spindle rotate , the upper part adopts direct and indirect two loading modes, which effectively reduces the test error under small load. All kinds of metal and non-metallic materials (plastic, nylon, etc.) can be made into pin-disc specimens, and the sliding friction test on the machine is carried out to test the wear resistance test of various materials under the selected load and speed, and the friction coefficient of the material can be measured. This test machine is suitable for comprehensive comparative study of materials, and is also an efficient experimental instrument for tribology teaching and research in colleges and universities.

The system software support friction force real-time acquisition, support ultra pre shutdown protection, support time real-time control, curve zoom, support chart automatically, can save a variety of data editing and project research on friction and wear special function.

Two. The principle of work



The lower sub disc is driven by the motor to rotate, and the lower sample disc is fixed on the sub disk. The pin sample is fixed on the guide column above, applying force to the friction pair above by weights or lever loading, precision type friction measurement device fixed on the specimen pillar. Friction force is collected in real time when sample rotation

Product advantages are as follow:

1. Driving mode: This type of testing machine is driven by servo motor, which has strong controllability and low failure rate. After years of continuous improvement, it is stable and reliable, and guarantees the accuracy of real-time tracking measurement of test force and friction force.
2. Main structure: In order to reduce the effect of vibration of motor and accessory parts on the wear mark, we adopt the lower body, thickened supporting plate and precision bearing when the friction test is carried out.
3. Electrical part: The equipment adopts independent industrial controller and module, which can guarantee the effect of high speed equipment or severe vibration of specimen surface on the performance of the control part.

Three. Technical parameters

NO	Name	Index
1	Max load	20Kg
2	Relative Accuracy of test force	500g±10g; 20Kg±30g
3	Spindle speed	1-2000rpm,Servo motor stepless speed change
5	Max friction torque	1N.m
6	Relative Accuracy of friction torque	±2%
7	Pin sample diameter	Φ 5mm*12mm(Customized)
8	Ball sample diameter	Φ 6.35mm(Customized)
9	Max diameter of disc specimen	60mm
10	Contact form	Pin/ball on disc(Extensible)
11	Loading mode	Self-balancing two-stage spring loading



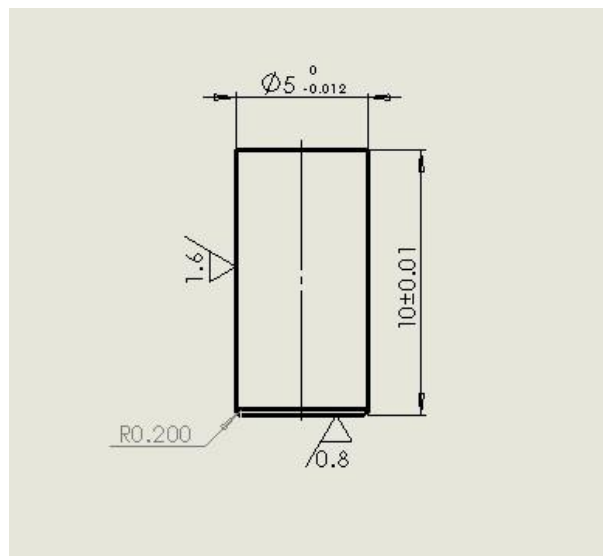
12	control mode	Microcomputer semi-automatic control
13	Size	420x270x580mm
14	Power	220V 50Hz 5A

※ ※ Product upgrade instructions

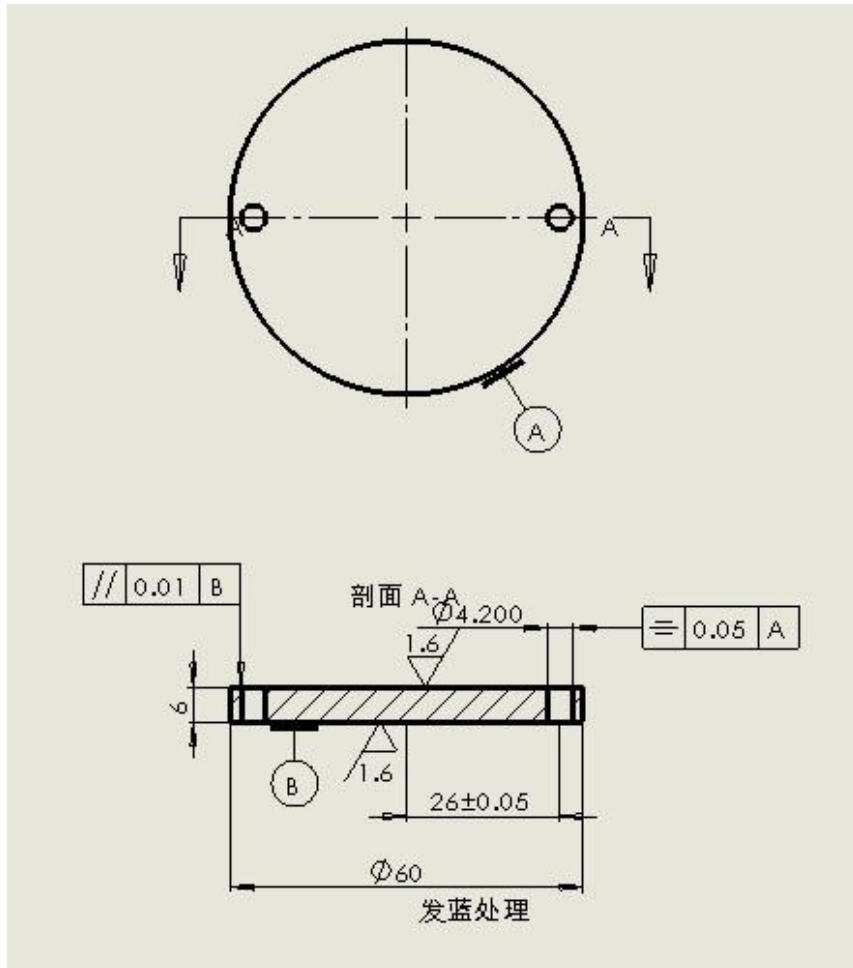
Sunligh testing machine adhering to "innovation, focus" MPX pin disc friction and wear testing machine has been tested by the market has become a stable, popular, cost-effective friction and wear research entry-level test equipment, Four systems have been successfully upgraded in Sunligh testing Machine-Technology Center, as follow:

1. Loading system increases manual control function, so that it can be more flexible and convenient to install sample and weights.
2. The accuracy of friction measurement is improved several times by adding auxiliary units in the friction measurement system, and the precision of friction measurement is improved significantly under micro-load.
3. Increase the anti springback arm, improve the reliability of the equipment to prevent impact and measure friction.
4. The control system of pin-on-disc friction and wear tester is upgraded to professional HTMS-9.1.1, which makes the operation more convenient and the measurement more accurate.

Four、 Sample pin and sample disc size



Diameter optional 5 or 10mm pins



Tel:+86-0531-85860713, +8615508660930

WeChat/WhatsApp: +8615508660930

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