

Micro Friction Wear Test System – MFW110

<http://www.uskoreahotlink.com/products/testing-inspection/friction-wear-tribometers/>

The **MFW120** system is a Micro Scale Wear Tester ideal for evaluating the resistance characteristics for newly developed nano, bio, ultrathin coatings, metal, non-metal, and plastic materials since it can handle very low loads and is designed to perform tests using simple specimens.

A spherical pin or ball is generally used as the counter material on the rotating disc. A diverse range of tests can be performed by simply changing the jig. The two-jaw disc can work with round or rectangular type discs. Adjusting the heat and humidity for the test environment is controlled via a connected computer with data acquisition software to collect the raw data. The pressure load is set using dead weights on the lever to apply a load range from a minimum of 1 gf (0.01 N) to a maximum of 1 kgf (10N). Additional options include a chamber and lubrication deposition system to test a variety of lubricated conditions, temperature control, humidity control, and custom jigs to accommodate various sample sizes and shapes.

Control Parameters

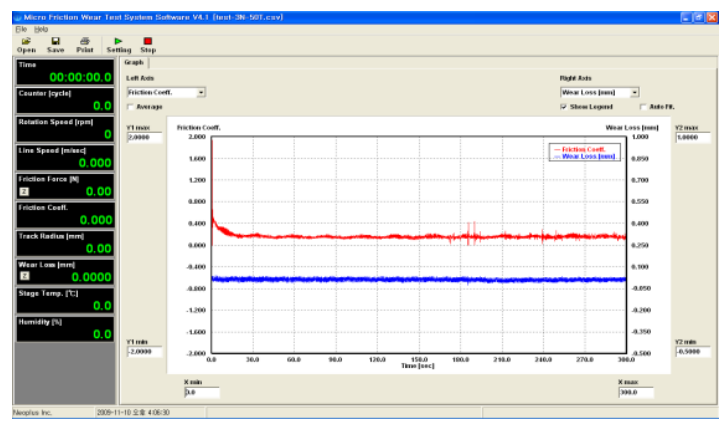
- Rotation speed (rpm)
- Temperature (°C)
- Time (sec)
- Load (N)
- Humidity (%)
- Cycle

Recorded Parameters

- Rotation speed (rpm)
- Sliding speed (m/sec)
- Temperature (°)
- Test cycle (cycle)
- Friction force (N)
- Sliding distance (m)
- Test time (sec)
- Friction coefficient (μ)

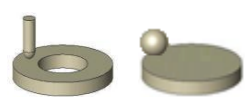
System Software & Graphic Display

- User-friendly screen configuration
- Average and peak curve readings
- Real-time data display and storage



Test Modes

- Spherical Pin-on-Disc
- Ball-on-Disc
- Spherical Pin



Test Load Range	1 gf – 1 kgf (0.01 N – 10 N)
RPM	10 – 400 rpm
Temperature	R.T. to 100°C ± 2°C
Pin Size	Spherical pin Ø 5 × L 20 mm
Ball Size	Ø 1/8", Ø 1/4", Ø 1/2"
System Size	500 x 300 x 440 mm
Power	1kW, 220V, 50/60Hz
Weight	~25 kg