



**UNIVERSE**

## **TIMKEN LOAD TESTER AZA1330**

The AZA1330 Timken Load Tester from AZA Lab is a high-precision tribology testing instrument designed to evaluate the load-carrying capacity and extreme-pressure (EP) properties of lubricants and greases.

The instrument operates in accordance with:

- ASTM D2782 – Standard Test Method for Measurement of Extreme-Pressure Properties of Lubricating Fluids (Timken Method)
- ASTM D2509 – Standard Test Method for Measurement of Load-Carrying Capacity of Lubricating Grease (Timken Method)

The Timken Method is globally recognized for assessing the anti-wear and extreme-pressure performance of lubricants under boundary lubrication conditions.

The AZA1330 provides accurate determination of the Timken OK Load, helping lubricant manufacturers, research laboratories, and quality control facilities evaluate lubricant durability, EP additive effectiveness, and wear protection characteristics. Built with servo-controlled drive technology, digital monitoring systems, precision load application, and rugged industrial construction, the AZA1330 delivers highly repeatable and standards-compliant test performance for demanding laboratory environments.



### **APPLICATIONS**

The AZA1330 Timken Load Tester is widely used for:

- Extreme-pressure additive evaluation
- Lubricating grease quality testing
- Transmission oil performance testing
- Hydraulic fluid EP analysis
- Tribology research and development
- Lubricant formulation optimization



## UNIVERSE TECHNICAL SPECIFICATIONS

Parameter	Specification
Model	AZA1330
Product Name	Timken Load Tester
Applicable Standards	ASTM D2782, ASTM D2509
Maximum Test Force	5000 N
Test Force Accuracy	±1%
Maximum Friction Force	300 N
Friction Force Accuracy	±2%
Spindle Speed Range	100 – 3000 rpm
Spindle Speed Error	±2%
Speed Display Range	0 – 9,999,999
Time Display Range	0 – 9999 s or min
Test Temperature Range	Ambient to 300°C
Temperature Control Accuracy	±2%



## UNIVERSE TECHNICAL SPECIFICATIONS

Parameter	Specification
Drive Motor	1.5 kW Servo Motor (0–1500 rpm)
Power Requirement	AC 220V, 50Hz
Dimensions (L × W × H)	1000 × 700 × 1470 mm
Weight	700 kg

## WORKING CONDITIONS

Parameter	Condition
Ambient Temperature	10 – 35°C
Relative Humidity	≤ 80%
Environmental Requirements	No Vibration, No Corrosive Media, No Strong Magnetic Field
Power Supply Fluctuation	±10% of Rated Voltage
Installation Requirement	Horizontal Placement on Solid Base