

## Single Column Computer Controlled Tensile Testing Machine HLL-5000 Series



### Using Scopes

HLL-5000 Series Single Column Computer Controlled Tensile Testing Machine is applicable for tensile, compression and bending tests of materials with relatively small test force, such as rubber, plastic, textile, waterproofing material, cable, network wire, metal wire, metal rod, metal plate and others. With attaching tools, it can also do compression and bending tests.

### Application

The equipment is applicable to the measurement and analysis of mechanical performance not only metal, non-metal material, but also composite materials. It is widely used in aerospace, petrochemical, machinery manufacturing, wire and cable, textiles, fibers, plastics, rubber, ceramics, food, medicine packaging, plastic pipes, plastic doors and windows, geotextile, film, wood, paper, metal materials and manufacturing. According to GB, JIS, ASTM, DIN, ISO and other standards, it can automatically strike the maximum test force value breaking force value, yield strength, upper and lower yield strength, tensile strength, compressive strength, elongation, tensile modulus, flexural modulus test data etc.

## Measuring and Control System

- Based on full digital STC300 measuring and control card;
- Realize load, deformation, crosshead displacement, test process four kind close loop control;
- Data collection system use 4 channel of high accuracy 24 digit A/D converter;
- Resolution can upto 1/500000, full range without step;
- Choose BB, AD, Xilinx etc. brand famous integrated components, fully digital design.

## Loadframe Structure and Driven Type

- Loadframe is floor type, with high strength, low deformation, compact structure and beautiful appearance;
- Adopt Circular Arc Profile Synchronous Belt Transmission, eliminate dual direction clearance;
- Adopt Japansonic AC servo motor and driving system, ensure transmission and moment of force stable;
- Adopt imported high accuracy ball leading screw, stable transmission.

## Technical Specification

Model	HLL-5120	HLL-5220	HLL-5520	HLL-5130	HLL-5230	HLL-5530
Code#	511-111	511-211	511-311	511-411	511-511	511-611
Max. Testing Force (KN)	0.1	0.2	0.5	1	2	5
Operation Mode	Computer Controlled					
Measuring Range	0.4%-100% of the maximum testing force					
Relative Error on Indicated Values of Testing Force	Better Than $\pm 0.5\%$ of the Indicated Value					
Error on Deformation Display	$\pm 0.5\%$					
Min. Force Resolution	0.01N					
Displacement Precision	$\pm 0.5\%$					
Deformation Accuracy	Better than $\pm 0.5\%$					
Speed Governing Range	1-500mm/min					
Testing Travelling Distance	>650 mm (can be customized according to needs)					
Testing Space Adjusting Mechanism	AC Servo Motor, Drive by Synchronous Belt					
Carried Standard	GB/T2611, ISO,ASTM,DIN					
Protection Function	Overload Protection, Limit Protection					
Power Supply	220V					
Weight (Approximate KG)	90KG					
Clamp Type	Each One Piece of Standard Clamp for Tension Test and Compression Test (Optional Clamp If Needed;Special Clamp Can Also Be Customized for Customers)					