

Product Name :
Electronic Spring Tension Machine

Product Code :
ELAB-MTE0002



Description :

Electronic Spring Tension Machine

Technical Specification :

Spring tension and compression test instrument Adopting electric load reduction system after deceleration to driven precision ball screw assembly loading to achieve a fully digital adjustment data acquisition and control process.

It is made based on the national spring tensile and compression tester standards of technical requirement, professional design of automatic control and data acquisition system, realized the data acquisition and control process full digital adjustment.

Mainly used to tension spring, compression spring, saucer reed, tower spring, leaf spring, clip spring, flat spring, composite spring, gas spring, mold spring, deformed spring and other precision spring tensile, compression, displacement and rigidity test and analysis.

Main Features:

Automatically clearing: test force, displacement, according to the needs to be cleared at any time;

Automatic calibration: system can automatically realize the accuracy of the calibration value

Automatic shifting: automatic switching the appropriate range to ensure accuracy load;

Control method: You can achieve a variety of control method, test force, test speed, displacement, etc., with the following features:

Setting the test force P , detect the spring deformation F ;

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Setting the test force P , detect the remaining height of the spring (or the tensile length of the tensile spring) H ,

Setting the spring remaining height of the spring, (or the tensile length of the tensile spring) H , detect the spring test force P ; Can set the pre-compression height of the pre-compressed spring, the number of pre-compression

can be arbitrarily set;

Setting max 10 detection points (can be set into the return detection);

The detection of the spring deformation is in contact with the work pressure plate shall prevail, then the test should have the reaction force, the size of the test force (ie, the initial force) arbitrarily set;

The deformation caused by the sensor can be compensated.

The deformation caused by the sensor and stiffness of the machine does not affect the accuracy of displacement.

Technical Specifications :

Max test force (N): 10kN, 20kN, 30kN, 50kN, 100kN, 200kN, 300kN

Effective tensile space: 800, 700, 700

Effective compression space: 800, 700, 700

Structure: Four columns floor type (upper tensile, lower compression / upper compression, lower tensile)

Control method: Computer automatic control

Displacement value relative error: $\pm 1\%$

Displacement resolution: 0.01mm

Deformation value relative error: $\pm(50+0.15L)$ um

Test accuracy: 1 class

Test force test arrange (F-S): 2%~100% F-S(stepless)

Test force value relative error: $\pm 1\%$

Speed adjust range: 0.05-300mm/min, 0.05-200mm/min

Speed error: $\pm 1\%$

Pressure plate size: 400, 500, 550

Pressure plate diameter: 110mm

Power supply: AC 220V $\pm 10\%$,50Hz

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