

HEZ-15/20 Metal wire torsion testing machine



▼ Table Model



Touch screen display



▼ Floor Model

1. Application:

The metal wire torsion testing machine is suitable for measuring the ability of metal wire with a diameter (or characteristic size) of 10.0- 15.0mm to withstand plastic deformation in one-way or two-way torsion and to display the surface and internal defects of the wire.

This machine is mainly used for the analysis of the mechanical properties of metal wires in the mechanics laboratories of colleges, universities, scientific research departments, and industrial and mining enterprises. It is also widely used for online inspection of production units; the main industries include high-speed steel lines, prestressed steel wire plants, and quality Supervision, scientific research institutes, highway transportation, construction industry, steel wire ropes, wires and cables, copper and copper alloy wires for electrified railways, copper contact wires and other production and use departments.

2. Standard:

ISO 7800:2003 "Metal wire one-way torsion test method"

ISO 9649:1990 "Metal wire two-way torsion test method"

3. Technical parameter:

Model	HEZ-15/20
Loading method	Automatic loading
Display method	Touch screen display
Wire diameter	10.0-15.0mm/10-20mm
Space between two fixtures	500mm
Jaw clamping range	10.0- 15.0mm
Clamping block hardness	> 55HRC
Torsion speed	2-6 r/min
Speed error	< ±5%
Minimum reading value of turns	0.1
Max number of turns	999999999
Size (L * W * H)	1500*500*100mm
Net weight	200kg
Power	AC 220V 50Hz
Noise	<50 dB (A)

4. Main feature:

4.1 One-way twist: The sample rotates 360 degrees uniformly in one direction around its axis as one twist to the specified number of times or the sample breaks.

4.2 Two-way torsion: The sample rotates 360 degrees in one direction evenly around its own axis as one twist to the specified number of times, then rotates the same number of times in the opposite direction or the sample breaks.

5. Features:

5.1 Mechanical structure:

This model uses a high-performance motor as the power output, coupled with a high-precision geared motor, so that the power can be output smoothly. The motor is driven by a high-reliability and high-stability inverter, which improves the smoothness of machine operation and reduces power consumption.

The chuck on one side is fixed on the output shaft of the motor, and the chuck on the other side is fixed on the movable bearing seat. The moving seat adopts linear bearing, which has low friction resistance and ensures the straightness of axial movement. The axial tension force is applied by weight, and the force is applied to the wire through a 10:1 L-shaped lever. In 2021, the whole machine is fully upgraded, the work surface is beautiful and anti-rust treatment, the chuck is electroplated, the controller hardware is upgraded, and the control program is optimized.

5.2 Control unit:

The control system adopts imported Atmel microprocessor, which is independently developed by our company, combined with mature control methods, so that the control unit is guaranteed in terms of control accuracy and operational stability.

The display screen uses touch screen display, which has the characteristics of long life, stable performance and wide viewing angle. The counter is a Hall sensor with strong anti-interference ability. The counter also has high sensitivity and good dynamic performance.

6. Main functions:

6.1 This machine has the function of automatically judging wire breakage.

6.2 Humanized design of the control interface, different test states are intuitively visible;

6.3 Set different speeds arbitrarily, and the speed can be controlled in real time;

6.4 According to different test conditions, it can realize forward and reverse rotation, and the number of turns can be set;

6.5 The test break can be stopped immediately with small error;

6.6 Safety protection: It has protection functions such as overcurrent and overvoltage.

7. Working environment:

7.1 Room temperature range 10℃-35℃

7.2 On solid foundation;

7.3 In clean environment ,no vibration ,no strong electromagnetic field interference;

7.4 Power supply voltage should not exceed $\pm 10\%$ of the rated voltage.

8. Standard Accessories:

8.1 Torsion testing machine host(including distance ruler)

8.2 Precision gear motor

8.3 LCD touch screen control system

8.4 Count sensor

8.5 Printer

8.6 weight used on a balance

8.7 chuck

CTC

Certificate of Registration

Certificate No.:446Q21010121403

Awarded to

JINAN HENSGRAND INSTRUMENT CO., LTD.

Organization Code No./Unified Social Code: 91370104684680659H
Address: No. 4915, Jingshi West Road, Huaiyin District, Jinan City

Qingdao CTC Inspection & Certification CO.,LTD.(CIC) certify that the
Quality Management System of the above organization has been assessed and found to be
in accordance with the requirements of the standard:

GB/T19001-2016/ISO9001:2015
SCOPE OF CERTIFICATION/REGISTRATION

Production and sales of testing machines.
(Qualifications-based operations requiring qualification permits)

This certificate is made valid when used with certification scopes and the requirements of applicable
laws and regulations. These requirements include, but are not limited to, administrative permits,
scopes of qualifications, and CCC requirements.
Subject to operation conditions in requirements conformity with Quality Management System,
This Certificate is valid for a period of three years only,
Date from: January.21th, 2021 To: January.20th, 2024
The effectiveness of this Certificate shall be Validated by periodic surveillance audit of CTC for maintenance.
**The time limit of the certificate is to January.11th,2022, please conducting
the surveillance or re-certification assessment before January.11th,2022.**
If the assessment is overdue, the certificate is invalid.

Signed for and on behalf of: 

  

CNCA-R-2018-446

The certificate information is validity on: Our company Web: www.guoyanworld.com ; CNCA official web: cx.cnca.cn
QINGDAO CTC INSPECTION & CERTIFICATION CO.,LTD.
E-mail: GUOYANGROUP@163.COM



MACHINERY DIRECTIVE ATTESTATION OF CONFORMITY

Technical file of the company mentioned below has been inspected and audit has been completed successfully.

2006/42/EC Machinery Directive Annex VIII has been taken as references for these processes.

Company Name : **JINAN HENSGRAND INSTRUMENT CO., LTD.**
Company Address : NO.4915, WEST JINGSHI ROAD, JINAN, CHINA
Related Directives and Annex : **2006/42/EC Machinery Directive/Annex VIII**
Related Standards : **EN ISO 12100:2010, EN 60204-1:2018**
Product Name : **TESTING MACHINE**
Report No and Date : TCF-JHIC230128-MD
Product Brand/Model/Type : WDS-1, WDS-2, WDS-3, WDS-5, WDS-10, WDS-20, WDS-30, WDS-50, WDS-100, WDS-200, WDS-300, WDS-500, WDW-1, WDW-2, WDW-3, WDW-5, WDW-10, WDW-20, WDW-30, WDW-50, WDW-100, WDW-200, WDW-300, WDW-500, WDW-600, WDW-1000, WE-300, WE-600, WE-1000, WE-2000, WEW-300, WEW-600, WEW-1000, WEW-2000, WAW-300, WAW-600, WAW-1000, WAW-2000, WAW-3000, WAW-5000, WAW-6000, LAW-1000, JB-300B, JBS-300, JBW-300, JB-500B, JBS-500, JBW-500, JBW-750, CST-50, VU-2Y, VU-1S, DWC-40, DWC-60, DWC-80, DWC-100, DWC-196, YES-2000, YES-300, YAW-1000, YAW-300, YAW-2000, YAW-3000, YAW-5000, NDS-200, NDS-500, NDS-1000, NDS-2000, NDW-200, NDW-500, NDW-1000, NDW-2000, NDW-3000, NDW-5000, NDW-10000, HEZ-3, HEZ-6, HEZ-10, JWJ-10, TLS, TLW, HST-P50, HST-P100, HST-P200, HST-P300, RDJ, NDT, DWIT, GBW-60, GW-50, HST, XNR-400

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Address: Mutlukent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TURKEY
Phone: +90 0312 443 03 90 **Fax:** +90 0312 443 03 76
E-mail: info@udem.com.tr www.udem.com.tr



HST GROUP Co., LTD.

Jinan Hensgrand Instrument Co., Ltd.

NO. 4915, West Jingshi Road, Jinan 250012, PR CHINA.

Tel/Whatsapp: +86-1591008186

www.hssdgroup.com - e-mail: admin@hssdtest.com