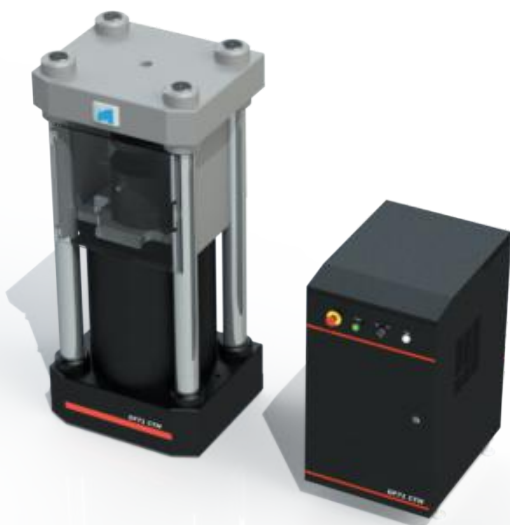


DF series electro-hydraulic servo hydraulic test system

DF系列电液伺服液压试验系统

型号 product model

DF71 压力试验机



01 概况 Overview

DF71 series compression testing machine is suitable for the compressive strength test of cement, concrete and rock. With appropriate grips and testing device, it can meet the splitting test, bending test and static pressure elastic modulus test of concrete. The test force ranges 600kN-3000kN. DF71 test system is the most powerful choice for engineering quality inspection, scientific research institutes, colleges and metallurgy.

02 测试解决方案 Test solution

Concrete compression test, concrete elastic modulus test

03 标准与方法 Standards and methods

- GB/T 2611 《试验机通用技术要求》
- GB/T 50081 《混凝土物理力学性能试验方法》
- JJG 139 《拉力、压力和万能试验机检定规定》

04 优势与特点 Advantages and features



05 设备主要参数 Technical parameter

Model	DF71.605	DF71.106	DF71.206	DF71.306
Rated capacity (KN)	600	1000	2000	2000
Accuracy	class 1			
Relative error of test force	±1%			
Effective measuring range	2%~100%FS			
Loading rate	0.02%-2%FS /s			
Displacement resolution (mm)	0.007/0.012			
Effective column spacing(mm)	320	380	380	440
Platen distance(mm)	> 300			
Max. piston speed (mm)	130	75	75	50
Max. piston stroke (mm)	> 135	> 135	> 135	> 200
Compression platen (mm)	ø230	ø300	ø300	ø300
Power supply	3~3W+N+PE,380V/50HZ			
Power (kW)	2.5	4.5	4.5	4.5
Overall dimension(mm)	1300×500×400	1520×600×550	1520×600×550	1650×700×600

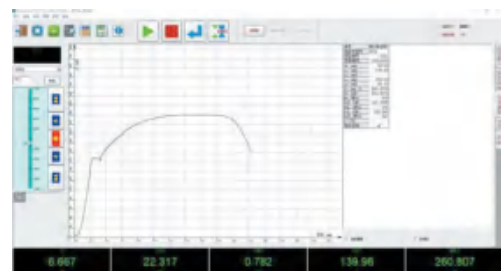
MGC measurement and control system



Features

- 24 bit ADC sensor measurement, high resolution and stability
- High speed acquisition digital quadrature pulse signal
- Digital closed-loop control, force/ deformation/ displacement
- 16 bit DAC control channel, quickly adjust actuator response
- Support USB2.0 full speed or RJ45 Ethernet communication

ActiveTest software



Features

- Support interface switching between Chinese & English
- Complete test standard and test scheme Library
- Powerful data analysis and curve processing ability
- Flexible user rights management
- Free edit of test report
- The test data can be exported to multiple file formats

Fixture 夹具单元



Peel grips



Counter top tensile grips



Double shear tensile grips



Winding cloth belt grips



Rope tensile grips



Geotextile grips



Pneumatic yarn tensile grips



Shoulder grips



Involute type wire grips



Chain tensile grips



Four point flexure grips



Scale tensile grips



Shear grips



Cable grips



Small double row tensile grips



Cloth belt tensile grips



Handle type tensile grips



High temperature tensile grips



High temperature compression



High temperature shear grips

Handle type tensile grips

- The wedge grips produced by SINOTEST is operated manually. The clamping force increases with the test force. Convenient, economical and reliable.
- Characteristic:
 - a) Capacity ranges from 50kN-300kN;
 - b) Manual operation (lifting, spring tightening automatically), convenient for maintenance;
 - c) Round sample end range: $\varnothing 6$ - $\varnothing 34$ mm;
 - d) Flat sample end range: 0-24mm;
 - e) Reliable clamping, no slipping.



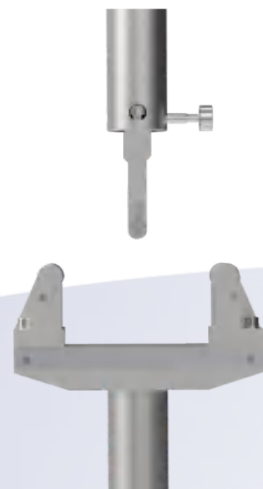
Compression platens

- The compression platens produced by SINOTEST has high precision base and hardened surface with practical value.
- These platens have various sizes. Adopt universal joint designs and optional threaded bracket joints for easy installation. Centering groove, anti rotation and integrated positioning pin improve the accuracy and repeatability.
- Characteristic:
 - a) It can provide various test force;
 - b) Equipped with sample centering groove;
 - c) Anti rotation characteristics and integrated positioning pin
 - d) The material can be chose according to the sample.



Three point flexure grips

- The span is adjustable and easy to use. Equip with a ruler on base to position the roller accurately. High hardness grinds can reduce the unnecessary load and friction force on the sample to ensure the test accuracy.
- Characteristic:
 - a) It can provide various test force;
 - b) The span is adjustable and flexible;
 - c) High rigidity and stable performance.



EXTENSOMETER

引伸计



CBY series axial extensometer is used to measure and control the axial deformation of the gauge length section of the specimen under tension, compression or fatigue test:

Sensor level: 0.5 (indication $\pm 0.5\%$)
 Deformation measurement range: 2% FS ~ 100% FS
 Sensitivity: 1.5mV/V

Model	Gauge	Range
CBY1 10-2.5	10	2.5
CBY1 25-2.5	25	2.5
CBY1 25-5	25	5
CBY1 25-12.5	25	12.5
CBY1 50-2.5	50	2.5
CBY1 50-5	50	5
CBY1 50-12.5	50	12.5
CBY1 50-25	50	25
CBY1 100-2.5	100	2.5
CBY1 100-5	100	5
CBY1 100-25	100	25
CBY1 200-12.5	200	12.5
CBY1 200-25	200	25
CBY1 250-12.5	250	12.5
CBY1 250-25	250	25
CBY1 300-12.5	300	12.5
CBY1 300-25	300	25
CBY1 350-12.5	350	12.5
CBY1 350-25	350	25
CBY1 400-12.5	400	12.5
CBY1 400-25	400	25
CBY1 500-12.5	500	12.5
CBY1 500-25	500	25
CBY1 600-12.5	600	12.5
CBY1 600-25	600	25

SENSOR

传感器



This load sensor has large rigidity and high precision, ensuring the stability of high strength and long-term test. By using intelligent compensation technology, the influence of external environment and additional load on the sensor is effectively avoided, and the influence of inertial force on force measurement is automatically compensated.

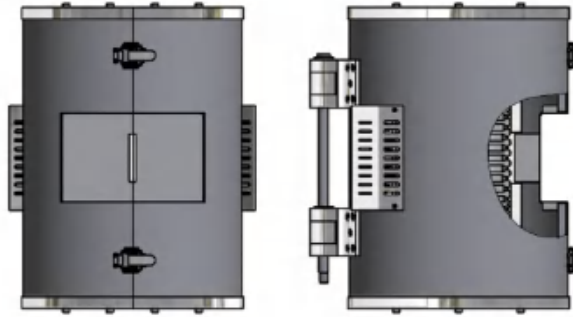
Features:

High precision and good consistency.
 Integral seal brings stable and reliable performance.
 Strong resistance to lateral force.
 Low output sensitivity, good rigidity and long service life.

Model	Specification
CLY20 spoke sensor	2KN
	5KN
	10KN
	20KN
	30KN
	50KN
	100KN
	100KN
	200KN
	300KN
	500KN
	600KN
	800KN
	1000KN
CLY30 spoke sensor	20KN
	50KN
	100KN
	200KN
	300KN

HIGH TEMPERATURE

furnace 高温炉



High temperature furnace structure: furnace shell, upper & lower end cap, heat insulation board, muffle tube, heating part, electrode plate, insulation layer, etc. The furnace shell, upper & lower end cap and heat insulation board are made of high temperature resistant stainless steel; The furnace muffle tube is made of sintered alumina high temperature resistant material. The heating part (divided into upper, middle and lower sections) is inlaid and wound in the muffle tube with Fe-Cr-Al Alloys. The furnace is heated semi naked and exposed. The oxidation resistance and service life of the furnace wire are improved. The ultra-fine ceramic wool is selected as the insulation material. The overall structure of the high temperature furnace is compact, easy to operate and has good insulation effect.

Technical parameter:

Structure	split type
Heating control	three section heating, subsection control
Wire diameter	Φ1.5mm
Working temp.	300-1100°C
Uniform temp.	150mm
Temp. fluctuation	≤ ±2°C
Gradient	≤ 3°C
Internal size	Φ90X380
External size	Φ320X460
Power	AC 380V 4KW

ENVIRONMENTAL

box 环境箱



The high and low temperature environmental test chamber is mainly composed of high and low temperature chamber, temperature measurement and control system, refrigeration system, etc. This device is a kind of equipment simulating high and low temperature environment in atmosphere. It mainly provides controllable high and low temperature test environment for various test devices. The device has a wide temperature setting range, it adopts the balanced temperature regulation mode and be able to adjust the ideal temperature environment, and has the characteristics of stable temperature control and good temperature uniformity. It can be widely used in Colleges and universities, scientific research institutes, quality inspection, production enterprises and other industries.

Technical parameter:

Working temp.	- 70°C ~ +350°C
Temp. fluctuation	≤ ±2°C
Temp. gradient	(50 mm axial direction) ≤ 3°C
Heating power	2kW
Blower motor	220V、180W
Cooling power	2.5kW
Effective space	240x240x400mm(LxWxH) accept customization

N series torsion testing system

N系列扭转试验测试系统

型号: NWS系列

product model :NWS Series

01 概 况 Overview

It can be used for torsional mechanical properties test of metal, nonmetallic composite material and structural components. For example, torsional failure, torsional shear modulus and multi-step torque loading test. It can measure the shear modulus and specified non proportional torsional stress by using torsion angle meter.

02 标准与方法 Standards and methods

- Inspection standard: JJG269 《扭转试验机》
- Test method: GB/T10128 《金属室温扭转试验方法》
- HB7595 《使用温度不高于425℃的MJ螺纹自锁螺母试验方法》

03 优势和特点 Advantages and characteristics

- Stepless adjustable speed, multi section test speed

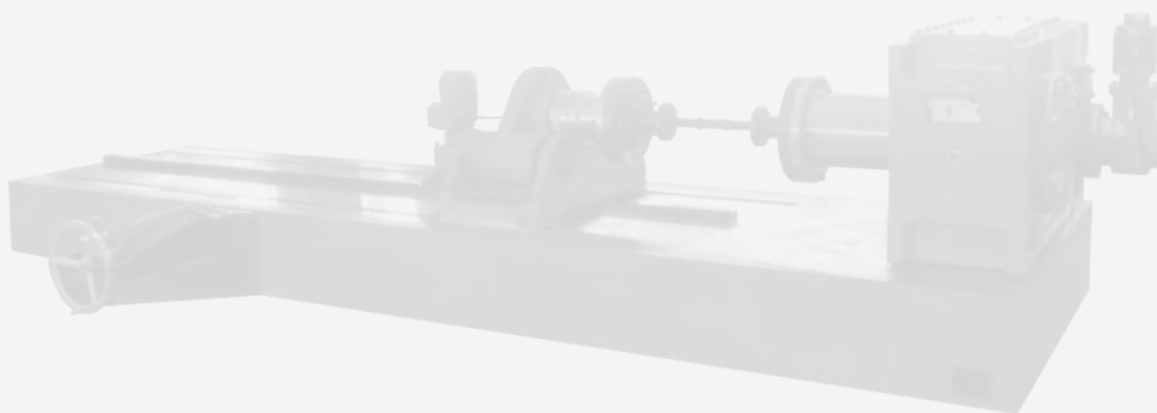
- Optional atmospheric furnace, high&low temperature chamber, etc

- Automatic tracking and measuring torque, torsion angle and force



- Servo loading system, fast response, accurate positioning, low noise, low energy consumption

- Incremental double closed-loop control technology. With torsion meter, it can carry out torque, torsion angle, deformation three closed-loop control

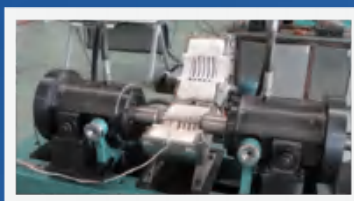


04

技术参数

Technical parameter

- Max. torque: 500/1000/2000/5000/80000N.m
- Torque measurement range: 1%---100%FS
- Torque measurement accuracy: $\leq 0.5\%$
- Torque measurement resolution: 19bit (500000code)
- Torsion angle display accuracy: $\pm 0.5\%$
- Torsion angle measurement resolution: 0.0002°
- Torsion angle measurement range: $0-10000^\circ$



High temperature torsion testing machine



Rubber torsion testing machine



Rubber deflection testing machine



Research grade electronic universal testing machine

**DOLI EDCi controller**

- 24 bit (1000000 code) industry leading, high resolution
- Communicate with temperature controller, and control it to ensure the test not disturbed
- Automatically heating to setting temperature
- Automatic load measurement system calibration, temperature drift prevention
- Discriminate different inserted sensors automatically



EDCi20 controller & RMCi manual control box

Self-developed TMC controller

- High operation speed, transmission & sampling speed, measurement resolution
- Small sampling temperature drift of analog signal
- External independent screen display manual control box
- 4 strain measuring channels(force sensor, extensometer)
- 4 AB phase signal measuring channels (encoder, grating ruler)
- Automatic plug identification technology
- Controller sampling frequency: 1000Hz



TMC controller & self-made manual control box

TEST SOFTWARE

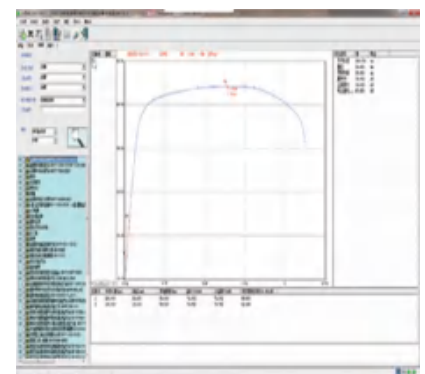
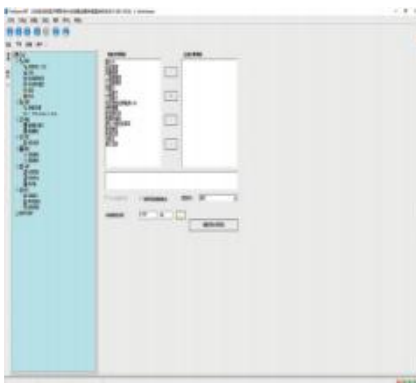
TestExpert.NET 静态试验软件

Win7/win10 platform,
virtual panel operation,
Chinese-English interface
quick switch

PID editing,
storage and calling function,
using different PID for
closed-loop control test

Various test standards
methods for different countries

Support new standard
customization to software



- Software supports international unit system, converts units arbitrarily
- Closed-loop sectional control and acquisition, sectional data acquisition frequency setting
- Automatically or manually clear or restore force, displacement, deformation measuring channels, etc

- Damage prevention from heating expansion-cooling contraction. Load keeping function
- Real-time TXT text data storage, automatically store in database
- Original sample data output to TXT & EXECL, test results & curves output to EXECL

- Real-time curve drawing, like stress-strain/force-deformation/force-time
- Fracture detection / specified channel value automatic test stop function
- Protection function: overload/overspeed automatic stop, moving beam limit



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