



InfraDye Infrared Lab Dyeing Machine

The InfraDye is designed to dye samples quickly and at a low cost. In order to reduce dyeing errors, textile manufacturers need lab dyeing machine for testing samples before dyeing large batches. In addition, fabric dyeing laboratories also need these machines for dyeing studies.

InfraDye

Infrared Lab Dyeing Machine



- Longer service life**
 Solid state relay control electric heating, no mechanical contact, long service life. The mechanical shell is made of stainless steel powder coating process, the mechanical interior is made of high quality SUS304 stainless steel, and the dyeing cup is made of SUS316, which is durable.



Power
230V 50Hz 32A



Weight
145 kg



Dimension
710*840*750mm (D*W*H)

- Smart temperature control algorithm**
 Achieving different test temperatures, suitable for all kinds of dyeing with room temperature and high temperature.
- Multiple dyeing solutions**
 Can be realized at one time: different specimens can be dyed in different cups.
- Smart instrument**
 Can be connected through Wi-Fi with SmarTexLab App installed in the smart phones, set parameters, monitor the test status, receive equipment warning reminders, replenishment reminders, etc., and share test results with one click.
- User-friendly, convenient and efficient**
 Microcomputer control, simple operation, automatically retain the current data in case of power failure, the running process can be edited, and the buzzer automatically alerts after the test is completed.
- Stable, durable and noiseless**
 The transmission mechanism is upgraded to rotary operation, which is more stable, more durable and noiseless.
- Multiple safety protection**
 Such as over-temperature alarm function and automatic stop of rotating cup holder when the door is mistakenly opened.
- Temperature calibration function**
 Can avoid the temperature differences caused by the aging of the probe.

Specifications

Test temperature range	
room temperature	0°C ~ 140 °C
Temperature control range	
room temperature	25 °C ~ 140 °C
Heating temperature	
control speed	0.1 °C / min ~3 °C / min
Temperature control accuracy	
Isothermal state	± 0.5°C/min
Temperature control mode	optimized automatic control
Rotational speed	0 ~ 50 rpm (adjustable)

Accessories

test cup volume	300±20ml 24pcs
T-socket wrench	1 pc
stainless steel copy wrench	1 pc
Fuse	4 pcs
Gloves	1 pc

Optional Accessories

Heating tube



SmartPull Tensile Tester

SmartPull Tensile Tester is AC servo-driven and equipped with ball screws to provide stable pulling force and achieve higher testing accuracy. The software of the tester is compatible and powerful by outputting comprehensive test indexes, such as displacement, maximum force, elongation, stress, etc.; and there are various safety designs to protect the instrument and the operator's safety. It is a tensile machine specially built for textiles, leather, footwear, etc. It can do tension, compression, bending, tearing, shearing, peeling and top breaking tests. It is applicable to many international standards, such as ISO3377, ISO 13935, ISO 13937, ISO 20932-1, ISO 4674, ASTM 5034, ASTM D4964, GB/T 3917.5, FZ/T 01030 and so on.

SmartPull Tensile Tester



- Safety guarantee for the whole testing process**
 Equipped with intelligent and active displacement and torque alarm system, overload and emergency stop device, up and down travel limiting device, always keep the testing process safe and stable.
- Powerful software**
 The test software can be applied to different languages, and can present the displacement, maximum force, elongation, stress, maximum stress, bending stress, speed and other test results. That is getting more comprehensive test indicators.
- Applicable up to a series of standards**
 Many standards and optional standards such as ISO3377 ISO 13935 ISO 13937 ISO 20932-1 ISO 4674 ASTM 5034 ASTM D4964 GB/T 3917.5 FZ/T 01030,etc.
- Easy operation**
 Multi-functional pneumatic gripper, replace the clips to complete different tests, easy and quick. No need to replace the sensor when do tensile tests and top breaking tests.
- Unique design**
 Unique appearance design combined with sense of technology, surface aluminum alloy hard oxidation treatment, durable.
- User-friendly**
 Side cutting design, more user-friendly.



Power
230V 50/60Hz 5A



Weight
90kg



Dimension
630*460*1470mm (D*W*H)

The Specification of SmartPull

Testing capacity	250 kg , 500 kg
Test level	class1
Max Travel	800mm (without fixture)
Travel accuracy	≤1%
Travel speed	1mm/min ~500mm/min
Speed accuracy	≤1%
Test force range	0.2% ~ 100%FS
Test force value accuracy	±1%
Range of constant rate control	0.5%~100FS

Software configuration (standard)

A version of the test system, with a single-step test

Software configuration (optional)

The C version of the test system can achieve a multi-step test

Optional fixture and standards

Manual tension fixture or pneumatic tension fixture: ISO 9073-3, ISO13934-1/2, ISO 13935-1/2, ASTM D5034, ASTM D5035, ISO 3377-1, ISO 13936-1, ISO 13936-2, ISO 13937-2, ISO 13937-3, GB/T 3917.5, GB/T 3923.1 (equipped with: clamps by 25x25mm, 25x50mm, 25x75mm)

ISO 9073-4, GB/T 3917.3 (clamps by 25x100 mm)

ISO 13937-4, ISO 4674-1 (clamps by 25x200 mm)

ISO 20932-1 (linear clamps are required, or use other clamps)

Footswitch	Use in case of pneumatic clamps
U-shaped Fixture	ASTM D4964
Yarn Fixture	ISO2062
Bursting Fixture	ASTM D6797 FZ/T 01030 GB/T 19976
Leather Tearing Fixture	ISO 3377-2

Computer Configuration of SmartPull

CPU for the Intel Celeron (Celeron) 2GHz or more CPU

Memory at least 512MB, more than 1GB is better

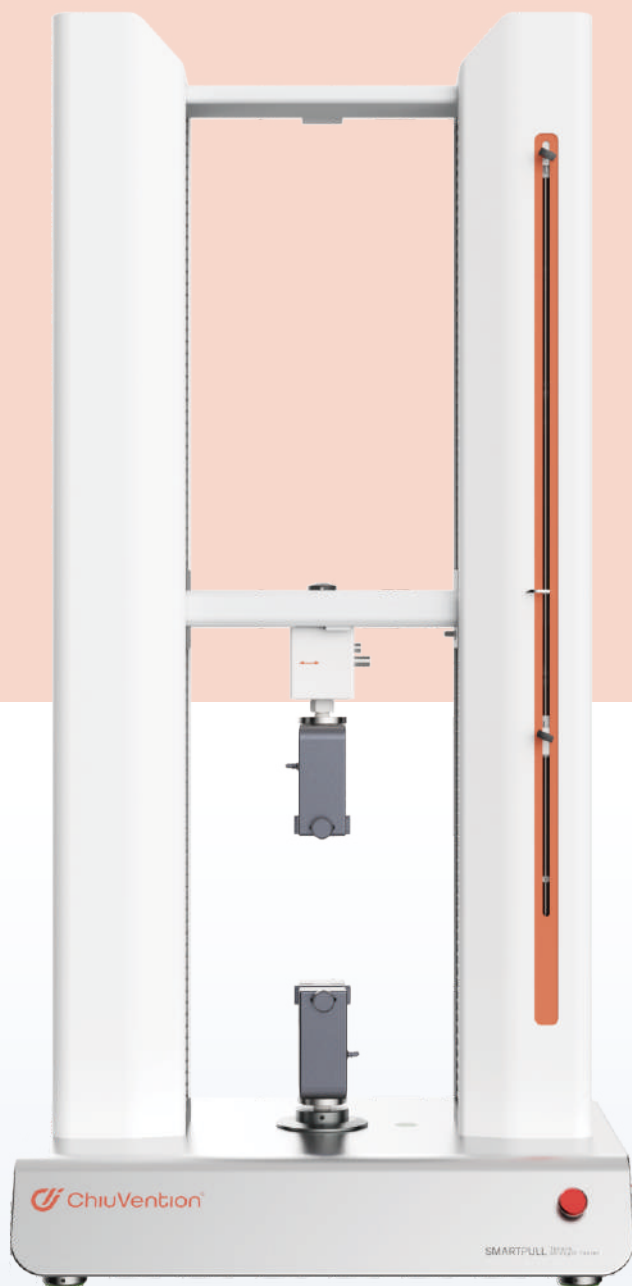
Hard disk space of more than 2GB

Display resolution of 1024 × 768 or more.

Printer compatible with the operating system (if output reports are required)

The applicable operating system for Microsoft's Windows XP, Windows 7, Windows 8, Windows 10

If you need to output the report in Word and Excel format, you should install Microsoft's Microsoft Office 2003, 2007, and 2010 versions of the software.



SmartPull Tensile Tester

SmartPull Tensile Tester is AC servo-driven and equipped with ball screws to provide stable pulling force and achieve higher testing accuracy. The software of the tester is compatible and powerful by outputting comprehensive test indexes, such as displacement, maximum force, elongation, stress, etc.; and there are various safety designs to protect the instrument and guarantee the operator's safety. It is a tensile machine specially designed for textiles, leather, footwear, etc. It can do tension, compression, bending, tearing, shearing, peeling, and top-breaking tests. It is applicable to many international standards, such as ISO 9073-3, ISO13934-1/2, ISO 13935-1/2, ASTM D5034, ASTM D5035, ISO 3377-1, ISO 13936-1, FZ/T 01030, GB/T 19976 and so on.

SmartPull Tensile Tester



Power
230V 50/60Hz 5A



Weight
160kg



Dimension
830*600*1730 mm

- **Higher testing accuracy**

AC servo drive and ball screw achieve stable and constant pulling force, with force accuracy within 1%, ensuring the reliability and repeatability of test results.

- **Powerful software**

The test software can be applied to different languages and can present the displacement, maximum force, elongation, stress, maximum stress, bending stress, speed, and other test results. That is, getting more comprehensive test indexes.

- **Safety guarantee for the whole testing process**

Equipped with an intelligent and active displacement and torque alarm system, overload and emergency stop device, and up and down travel limiting device, SmartPull always keeps the testing process safe and stable.

- **It can be customized to meet diversified needs.**

S-type load cell for pulling force of 5KN-10KN can be customized to realize more testing functions, and the testing software also can be customized to realize automatic repeated testing.

- **Lightweight design**

The SmartPull is 100 kg lighter than the initial generation, making it easier to handle and operate.

The Specification of SmartPull

Testing capacity	1000 kg
Test level	class1
Max Travel	900mm (without fixture)
Travel accuracy	≤1%
Travel speed	1mm/min ~500mm/min
Speed accuracy	≤1%
Test force range	0.2% ~ 100%FS
Test force value accuracy	±1%
Range of constant rate control	0.5%~100FS

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