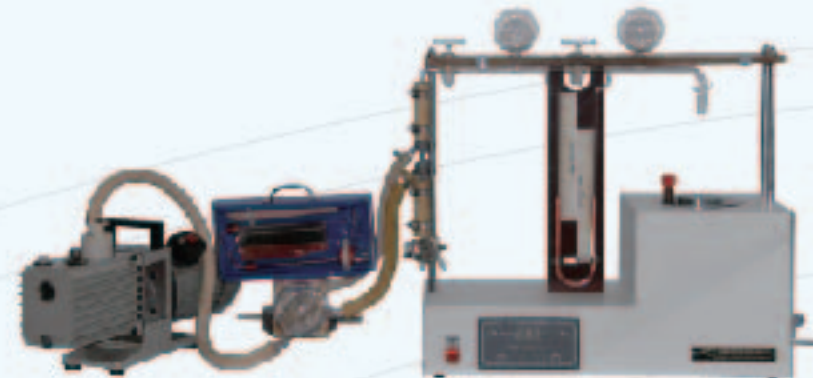# FanYuan Instrument

Fiber

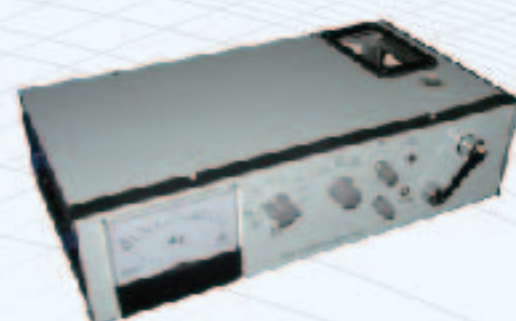**Yarn**

SF-1 Plastic Water Content Tester

Application: SF-1 Plastic Water Content Tester is used to determine the trace moisture content of plastic granules, PET chip and granules of Nylon 6 and Nylon 66 by the differential pressure method.

Related Standards: GB/T 12006.2, ISO 6188, ISO 960, ISO 15512, etc.

Parameters

Measuring range of moisture	5~500ppm for 3g sample
	30~3000ppm for 0.5g sample
Temperature range	RT~250°C
Temperature error	±3°C
Temperature fluctuation	±2°C
Vacuum degree	≤100Pa
Power supply	AC220V 50Hz

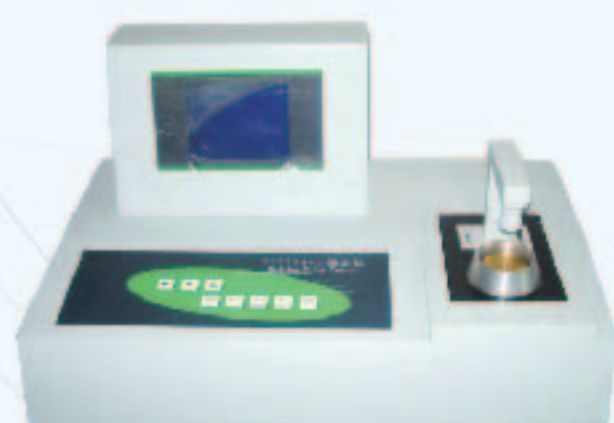## DW0180 Fiber Specific Resistance Tester

Application: DW0180 Fiber Specific Resistance Tester is used to determine the resistance of various chemical fibers on the condition of specified weight.

Parameters

| Measuring range | $10^6 \sim 10^{13} \Omega$ |
| Power supply | AC220V 50Hz |

YG252A-I Melting Point Tester

Application: YG252A-I Melting Point Tester is used to determine the melting point of powder, PET chip, and chemical fibers and so on, by analyzing the change of light transmission amount during the heating process.

Parameters

Measuring range	50~320°C
Temperature accuracy	±0.5°C
Heating speed	2, 3, 4, 5°C/min, adjustable
Power supply	AC220V 50Hz

Y178 Wool Fiber Filling Power Tester

Application: Y178 Wool Fiber Filling Power Tester is used to quickly determine the filling power of wool fibers.

Related Standards: IWS TM265.

Parameters

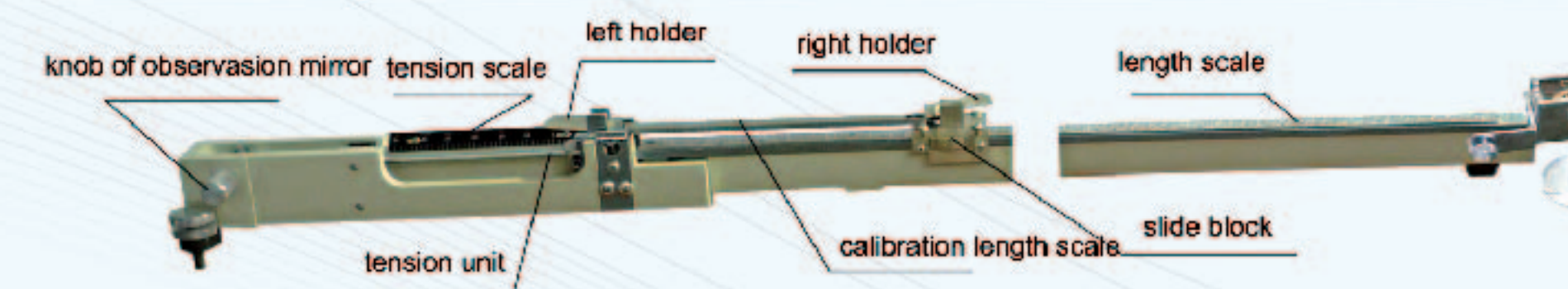| Area of test cylinder | 50cm² |
Weight of piston and ruler	500g
Load weight	1000g
Ruler measuring range	0~150mm

Yarn Twist Tester

Application: Yarn Twist Tester is used to determine the yarn twist of the single (spun or multifilament) yarns, plied yarns and cabled yarns by the direction counting method or untwist-retwist method.

Related standards: GB/T 2543.1, GB/T 2543.2, ISO 2061, ASTM D1422, ASTM D1423, JIS L1095, etc.

Y321 Hand Reeling Twist Tester

Y331A-II Digital Reeling Twist Tester

Parameters

Model No.	Y321	Y331A-II	Y331A-III
Driven mode	Manual	Electric	Automatic
Test method	Direct count	Direct count/untwist-retwist	
Test length	0 ~300mm	25, 50, 100, 250, 500mm	100, 250, 500mm
Rotating speed	---	300~1200rpm	100~3000rpm
Measuring range	0~500twist	1~9999.9twist	
Power supply	---	AC220V 50Hz	

FY111L Yarn Crimp Tester

knob of observasion mirror tension scale   left holder   right holder   length scale

tension unit   calibration length scale   slide block

Application: FY111L Yarn Crimp Tester is used to determine yarn crimp or take-up in woven fabrics and stitch or course length in knitted fabrics.

Related Standards: ISO 7211, ASTM D3883, etc.

Parameters

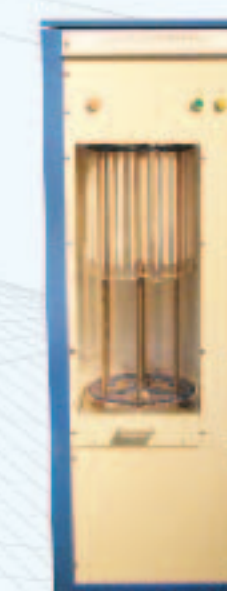| Scale length | 900mm |
| Length accuracy | 1mm |
| Pretension range | 0~35cN, 0~175cN |

FY112L Course Length Teser

Application: FY112L Course Length Tester is used to determine the entire length of a complete course of knitted fabric by mounting the yarn over the pulley of the apparatus and adding weights to remove the crimp.

Related Standards: BS 5441, FZ/T 70008, etc.

Parameters

Measuring range of course length	500~9000mm
Pulley perimeter	100mm
Tension weights	1g, 2g, 5g, 10g, 20g

YG368 Fully Automatic Filament Crimp Contraction Properties Tester

Application: YG368 Fully Automatic Filament Crimp Contraction Properties Tester is used to determine the crimp contraction properties of textured filament yarn such as terylene, chinlon and polypropylene and has many automatic functions such as change load, increase load, record time, measure length, calibrate zero, operate results and print results.

Application: BISFA-1995

Parameters

Max. sample number per time	30pcs
Sample length	1000mm±0.04mm
Load range	(2.5~5000±0.2)cN
Air pressure range	0.4~0.8Mpa
Power supply	AC220V 50Hz

Y175 Series Cotton Fineness Meter/Micronaire Tester

Application: Y175 Series Cotton Fineness Meter/Micronaire Tester is used to determine the micronaire value of loose disorientated cotton fibers taken from bales, laps and silvers, or other sources of lint cotton. The value is a measure of the air permeability of a mass of cotton under specified conditions.

Related Standards: GB/T 1103, GB/T 6498, GB/T 13778, ISO 2403, BS 3181, ASTM D1448, etc.

Parameters

Y175 (Dial)

Y175-1(Digital)

Model No.	Y175	Y175-1
Display method	Dial	Digital
Sample weight	8.0g	8.0g(standard mode) 7.50~8.49g(with weight correction)
Weighing accuracy	±0.016g	±0.01g
Measuring range	2.5~6.5	2.5~6.5(standard mode) 2.9~6.5(with weight correction)
Accuracy	±0.1	±0.05
Power supply	AC220V 50Hz	

ZK100F Fiber Fineness Tester (Vibration Method)

Application: ZK100F Fiber Fineness Tester (Vibration Method) is used to determine the linear density of single fiber by the vibration method. The natural vibration frequency of fiber is measured under specific vibration length and tension and its linear density is calculated by string vibration equation.

Related Standards: GB/T 16256, ISO 1973, etc.

Parameters

Fineness measuring range	0.8~40dtex
Fineness error	≤±2%
Power supply	AC220V 50Hz

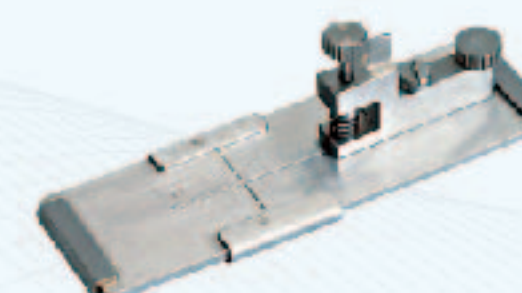## YG002C Computerized Fiber Fineness Analysis System

Application: YG002C Computerized Fiber Fineness Analysis System can be used to determine the diameter of any textile fiber or determine fiber composition by the microscopic method. Fiber's longitudinal or cross-sectional appearance can be captured and observed through the software with the help of microscope.

Related Standards: GB/T 10685, GB/T 16988, ISO 137, AATCC 20, AATCC 20A, etc.

Parameters

Measuring range	2~200μm±0.5μm
Measuring repeatability	±0.1μm
Object lens	4×, 10×, 20×

Y172 Fiber Microtome (Hardy)

Application: Y172 Fiber Microtome (Hardy) is used to cut thin cross-section slices of fiber or yarn in order to observe their longitudinal or cross-sectional appearance under the microscope. It can be used to prepare test specimens for YG002C computerized fiber fineness analysis system.

Related Standards: ISO 137, etc.

Parameters

Slice area	3×0.8mm
Minimum thickness of slice	20μm

FanYuan Instrument

F600 Fiber Blend Analyzer

Application: F600 Fiber Blend Analyzer is used to quickly and accurately determine fiber composition of two component blend of wool and synthetic fiber by the chemical method.

Related Standards: BS 4407, M&S P100, AATCC 20, AATCC 20A, etc.

Parameters

Measuring range	0.1%~100%
Sample weight	0.5~3g
Working positions	6
Power supply	AC220V 50Hz

KX730 Fibrograph

Application: KX730 Fibrograph is used to determine mean length, upper half mean length and uniformity of cotton fiber by fibro-graph method.

Related Standards: GB/T 1103, GB/T 13781, ISO 4913, ASTM D1447, etc.

Parameters

Fiber length measuring range	18~42mm
Fiber length error	±0.5mm
Uniformity error	±1.5%
Power supply	AC220V 50Hz

Y111 Roller Type Fiber Length Tester

Parameters
Fiber Draw-off Unit:

Diameter of front roller	Φ8mm
Diameter of rear roller	Φ16mm
Distance between front and rear roller	16~60mm
Diameter of velvet lap roller	Φ66mm

Fiber Analyzer:

Diameter of cotton transmission roller	Φ19.1mm
Spring pressure	70N
Clip pressure	200cN
Diameter of fiber ring	Φ10mm
Diameter of rubber ring	Φ12mm

Application: Y111 Roller Type Fiber Length Tester is used to determine the length of short cotton fibers by ranking them according to their length.

Related Standards: GB/T 6098.1, etc.

Y131 Comb Sorters

Application: Y131 Comb Sorters is used to produce staple diagrams of fibers up to 50mm in length, suitable for wool fibers.

Related Standards: ISO 920, FJ 533, etc.

Parameters

Comb space	10mm
Number of combs	31

YG011 Fiber Bundle Strength Tester/Stelometer

Application: YG011 Fiber Bundle Strength Tester/Stelometer is used to determine the breaking strength and elongation at break of cotton fibers in a flat bundle. Associated with JN-B torsion balance, it can be used to determine the breaking tenacity of cotton fibers in the flat bundle.

Related Standards: GB/T 13783, ISO 3060, BS 5116, ASTM D1445/2524, BS 5116, etc.

Parameters

Gauge length	0 or 3.2mm
Force range	20~70N
Loading speed	10N/s
Elongation range	0~50%(with 3.2mm gauge length)
Specific strength correction coefficient	0.9~1.1

KX101 Pressley Fiber Bundle Strength Tester

Application: KX101 Pressley Fiber Bundle Strength Tester is used to determine the breaking strength of cotton fibers in a flat bundle. Associated with JN-B torsion balance, it can also be used to determine the breaking tenacity of cotton fibers in the flat bundle.

Related Standards: GB/T 13783, ISO 3060, BS 5516, ASTM D1445, etc.

Parameters

Gauge length	0 or 3.2mm
Force range	5~20lbf
Specific strength correction coefficient	0.9~1.1

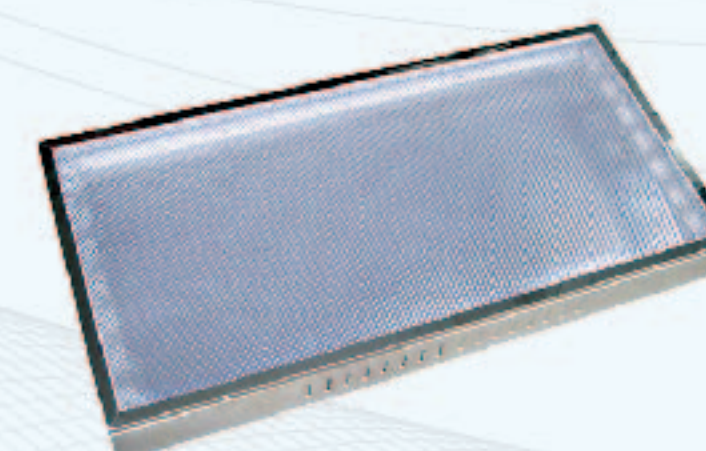## JN-B Series High Precision Torsion Balance

Application: JN-B Series High Precision Torsion Balance is used to precisely weigh tiny materials in some industries, such as illumination, textiles.

Parameters

Model No.	JN-B-5	JN-B-10	JN-B-50	JN-B-100	JN-B-500	JN-B-1000
Measuring range	5mg	10mg	50mg	100mg	500mg	1000mg
Measuring precision	0.01mg	0.02mg	0.1mg	0.2mg	1mg	2mg

D75 Standard Light Box for Classifying Cotton

Application: D75 Standard Light Box for Classifying Cotton provides a standard and stable light source to classify cotton.

Related Standards: GB/T 13786, ISO 4911, etc.

Parameters

Light source	D75
Lamp power	40W
Color temperature	7500K
Number of lamps	4 or 6
Color rendering index	93.5
Power supply	AC220V 50Hz

FanYuan Instrument

Fiber

DW040 Ginning Machine

Application: DW040 Ginning Machine is widely used for cotton procurement department to determine lint percentage of raw cotton, and for scientific research unit to inspect cotton varieties, make material standard for saw ginned cotton, etc.

Parameters

Blade diameter	Φ280mm
Blade number	18
Blade speed	518rpm
Brush wheel diameter	Φ286mm
Brush wheel speed	1320rpm
Dust cage diameter	Φ280mm
Dust cage speed	27rpm
Power supply	AC380V 50Hz

YG041 Trash Analyzer

Application: YG041 Trash Analyzer is used to determine the percentage of trash content in lint cotton, cotton lap, and cotton sliver and cotton-type chemical fibers.
Related Standards: GB/T 6499, etc.

Parameters

Machine breadth	490mm
Diameter of feed roller	Φ57.15mm
Speed of feed roller	0.9rpm
Diameter of take-in	Φ238.76mm
Speed of take-in	900rpm
Space between feeding plate and take-in	0.18~0.23mm
Space between mote knife and take-in	0.53~0.61mm
Space between fairing plate and take-in	0.15~0.23mm
Power supply	AC380V 50Hz

FY111F Fiber Crimp Tester

Application: FY111F Fiber Crimp Tester is used to determine crimping performance of man-made staple fibers and natural fibers.
Related Standards: GB/T 14338, etc.

Parameters

Force measuring range	0~200(10^{-3}cN)
Force resolution	0.1(10^{-3}cN)
Force accuracy	≤±1%
Gauge length	20mm
Max. stroke of lower clamp	40mm
Length resolution	0.01mm
Power supply	AC220V 50Hz

YG981B Series Rapid Oil Extraction Apparatus

Application: YG981B Series Rapid Oil Extraction Apparatus is used to quickly extract the greases or finished oil out of wool or synthetic fibers and then calculate the oil content.
Related Standards: GB/T 6504, GB/T 6977, FZ/T 20002, etc.
Parameters

Model No.	YG981B-3	YG981B-4
Number of working positions	3	4
Temperature range	RT~250°C Settable and LED display	
Temperature accuracy	±1°C	
Timer range	1~9999min Settable and LED display	
Pressurizing method	Adding weights	
Power supply	AC220V 50Hz	

Y412B Lint Cotton Moisture Regain Tester

Application: Y412B Lint Cotton Moisture Regain Tester is used to determine the moisture regain of lint cotton.
Related Standards: GB/T 6102.2.
Parameters

Measuring range	Upper layer 7%~12% Medium layer 4%~7% Lower layer 9%~15%
Test pressure	735N±49N

SK-100 Portable Moisture Content Meter

Application: SK-100 Portable Moisture Content Meter is used to determine the moisture content of various textile raw materials, such as cloth, yarn, wool, leather, feather and/or down, etc.

Parameters

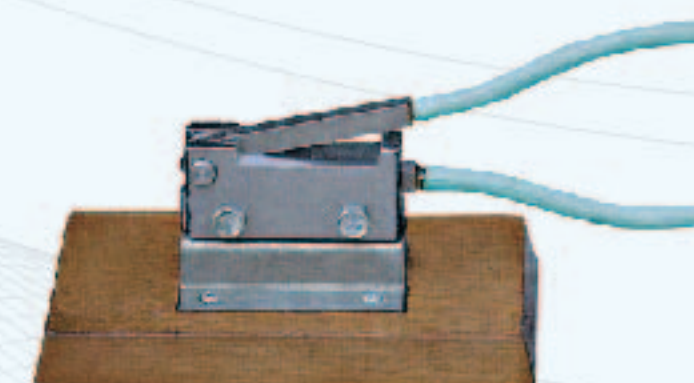|	
Moisture measuring range	0.0~80.0%
Moisture accuracy	0.1%
Measuring grade	1~15
Moisture adjustment	0~±5.0%
Power supply	DC9V battery

MBS-I Cotton Package Moisture Meter

Application: MBS-I Cotton Package Moisture Meter is used to quickly check the moisture content of cotton fiber, wool, cashmere package. It is digital display, portable and easy to operate.

Parameters

Measuring range of temperature	-40°C ~+50°C
Moisture measuring range	3~15%
Moisture accuracy	≤0.2%
Power supply	6×1.5V

Y171 Series Fiber Cutter

Application: Y171 Series Fiber Cutter is used to cut a specified length of fiber. Associated with JN-B torsion balance, it can be used to determine the fiber's linear density.
Related Standards: GB/T 14335, GB/T 14336, GB/T 6100, BISFA, etc.
Parameters

Model No.	Y171A	Y171B	Y171C	Y171D
Width of blade	10 mm	20 mm	25 mm	30 mm
Length of blade	45 mm			
Dimensions	200×110×120mm			
Instrument weight	0.6 kg	0.85 kg	1 kg	1.1 kg