



Intelligent Robotic Testing and Inspection System
Developer and Manufacturer For Paint, Coating & Ink



www.bevsinfo.com



Company Profile

BEVS Industrial Co.,Ltd is a leading manufacturer that specializes in coatings, ink, paint, resin testing instruments and laboratory whole solution.

Moreover, we are also the only one in the world to research and study on the technology of intelligent robotic testing and inspection system to cater to the needs of the competitive and technological industry.

We offer the complete and unique products in this field to meet customer's challenging demands of today and tomorrow, our products are of compliance with the ASTM,ISO,DIN,BS etc.international standards.

With strong supports and hard work by lots of end-users and worldwide agents, BEVS become more and more famous in the world and provides more competitive values for our customers.

Mission

Efficiency, Precision & Stability

Ideal

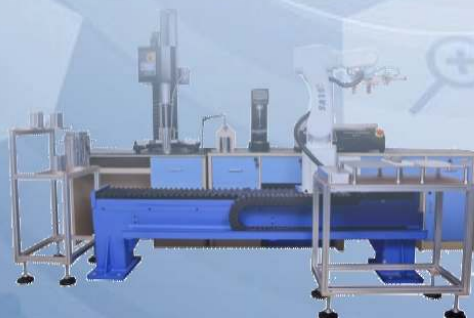
Continuous effort in becoming the industry leader

Spirit

Team, enterprising, change & make strong

Value

Win by quality, credit by sincerity



PREFACE

With the constantly upgrading in industry 4.0, the robot and internet of things play the more and more important role in technology revolution and industry upgrading for the traditional industry such as manufacturing etc. The traditional manual testing and inspection are also replaced by robot.

In order to greatly improve the competition and capacity of research, production and manufacturing. The work related with labor intensity, cost, time, efficiency etc. could be completed freely by robot during the process of daily research, testing, production and manufacturing.

Intelligent robotic testing system is applied to university, research institute, inspection organization, enterprise etc. User could customize the unique configuration upon different requirements to achieve the intelligent remote control and testing report output automatically and completed unmanned operation.

Intelligent robotic inspection system is applied in the quality control in the daily production and manufacturing such as the coating surface inspection of 3C products and automobile, precision machining parts inspection, product defect inspection etc.

BEVS Intelligent System Features:

1. Cost-saving and efficiency-increasing:

Shorten the research and testing period, reduce the human error, improve the production efficiency and decrease the labor cost etc.

2. Wide application:

Cover almost all the coating classification, idea for user to choose freely.

3. Full test:

Complete the testing automatically from sampling to original status, application performance, mechanical property and resistance weathering aging. User could choose the testing project upon the request.

4. Automatic QC inspection:

The combination between robot and testing equipment to achieve the automatic QC control.

5. Intelligence:

Remote control, sharing, mobile APP control and review.

6. Digital:

Output multi-analytic report and chart, more visual and more accurate analysis.

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1. Film Formation Testing Instruments

1.1 Laboratory Mixer

■ Introduction :

BEVS 2501 series Laboratory Mixer adopts frequency -adapter to adjust speed with the advanced touch -screen control design . Enable to disperse , mix and grind by changing different impellers . Through the touch -screen to set the speed (RPM) and the time of disperse , mix and grind . It's the best choice for R & D , laboratory and spot testing .



■ Application :

This Laboratory Mixer is applicable to the high -speed stir , dissolution and dispersion of liquid and solidification material in coating , paint , ink , pigments , cosmetic , foodstuff resin , adhesive , latex , medicine , petroleum and other fields .

■ Technical Specification :

Touch -screen control technology and emergency switch

Time Adjustable

Maximum Speed : 9000 rpm

Electromotor : Frequency modulation motor adoption

Lifting System : Manual or automatic lift

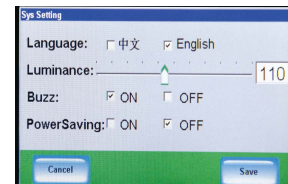
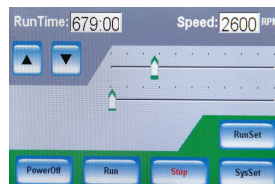
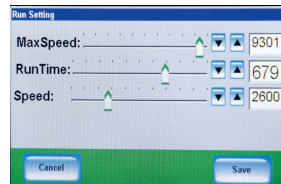
Milling disc is available



Order Information :

Order No .	Motor Power (w)	Speed (rpm)	Lifting Distance (mm)	LiftingType	Vessel Available (L)
BEVS 2501/1	550	30 -9000	250	Manual	0.5, 1.5
BEVS 2501/1L	550	30 -9000	250	Manual	0.5, 1.5
BEVS 2501/2L	750	60 -6000	280	Manual	0.5, 1.5
BEVS 2501/2A	750	60 -6000	280	Automatic	1.5, 3, 5
BEVS 2501/3A	1100	60 -5500	330	Automatic	3, 5, 10
BEVS 2501/5A	1500	300 -6000	400	Automatic	5, 10, 20

Standard equipped with 4 discs.



Order Information of Accessories :

Order No . of Accessories	Disc Dia . (mm)
BEVS 2510 /1	35
BEVS 2510 /2	50
BEVS 2510 /3	60
BEVS 2510 /4	80
BEVS 2510 /5	100
BEVS 2510 /6	120
BEVS 2510 /7	150
BEVS 2510 /8	200



Order No . of Accessories	Double Wall Stainless Dispensing Vessel(L)
BEVS 2511 /1	0.5
BEVS 2511 /2	1.5
BEVS 2511 /3	3
BEVS 2511 /4	5
BEVS 2511 /5	10
BEVS 2511 /6	20

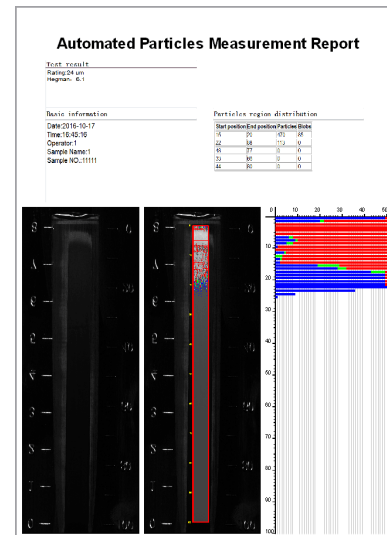
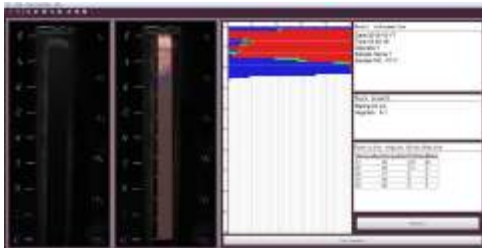
1.2 Automated Particle Analyzer

Introduction :

Paint, coatings and chemical manufactures know that insufficiently or over-ground material will cause loss of production time, higher costs. People are used to inspect the fineness by a traditional manual method, it is difficult to observe the fineness result correctly for a same sample under different operators because the fineness is micron level and causes difference between true particles and air bubbles or erroneous matter.

With technology innovation and improvement, BEVS developed the advanced Automated Particle Analyzer which can automatically draw down the sample on the grind gauge, generating the image by a high resolution camera under the light source, the image is processed by using customized software to generate the rating on the touch screen.

BEVS Automated Particle Analyzer can be ensured that repeatability and accuracy for the testing result, avoiding human errors and greatly improving production efficiency.



Technical Specification :

Measurement range: 0-200 μ m

Measurement accuracy: \pm 5%

Control method: Large touch screen

Memory: 10GB (expandable)

Cycle measurement time: 2 minutes

Supports: Single channel grind gauge
(0-25 μ m, 0-50 μ m, 0-100 μ m)
Standard equipped with one gauge(Optional)

Operation temperature: -10 ~+ 40

Connection port: USB, VGA

■ Features :

- Automatically analyze fineness to avoid human errors
- Automatically draw down coatings to avoid operation errors
- Built-in computer operating system
- Simple operation by touch screen
- Easy to analyze particle distribution
- Easy to view image
- Big database to save parameter setting of various coatings
- Quickly take a photo in 5 seconds to avoid sample dry
- VGA port available to connect other display screen

■ Standard :

ISO 1524



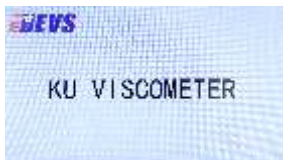
■ Order Information :

BEVS 3168 Automated Particle Analyzer

1.3 Intelligent Krebs Viscometer

■ Introduction :

BEVS1112 is a advanced touch screen control automatic viscometer of leading industry, the most suitable for measuring the non-newtonian fluid such as coating, paint, adhesives, pulp, printing ink etc.



■ Technical Specification :

Range :40 ~ 141KU /27-5274cp /32-1099g

Resolution :0.1KU /5cp /1g

Accuracy: ± 1% of full scale

Repeatability : ± 0.5% of full scale

Rotation speed :200rpm±1rpm

Power consumption :Max.35W

Power :200 ~ 250V or 100-120V



■ Feature :

Automatic measuring

The spindle automatic lift

Touch-screen operation

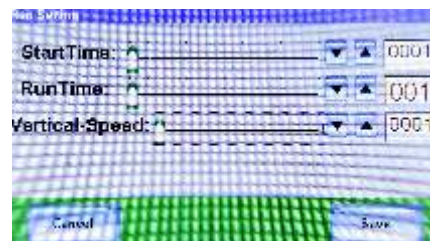
Measurement Unit : KU,g,cp

Start test time and stop time can be preset

Real-time display measurement graph

Measurement report output available

With temperature probe



■ Application :

Paint, coating and ink

Food Industry

Pharmaceutical Industry

Auto Industry

Laboratory

■ Order Information :

BEVS 1112 Intelligent Krebs Viscometer

1.4 Automatic Film Applicator

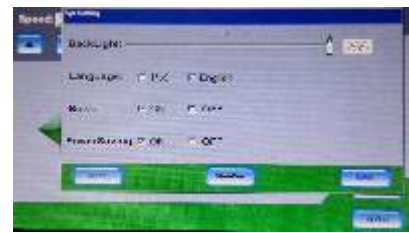
Introduction :

BEVS Automatic Film Applicators are made with high precision machined components, sturdy mainframe and heavy duty power train assembly, to ensure long term reliable operation. Consistent drawdown conditions such as speed, flatness, combined with applicator gap and geometry are essential to obtain perfectly reproducible samples, eliminating human error and uncertainty.



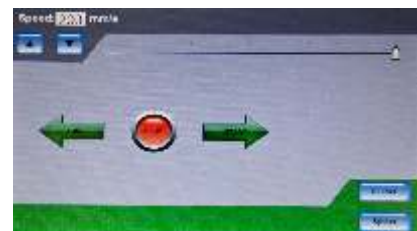
Software Introduction:

Advanced touch screen technology

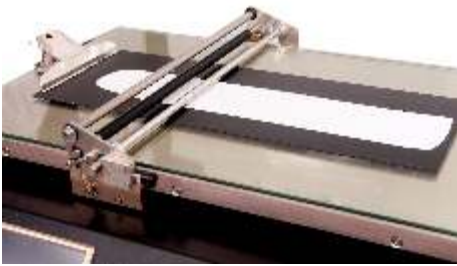
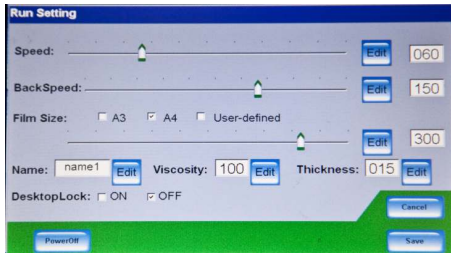


Film size: A4, A3 and User Defined

Adjustable speed



Report output: tab in the coating's name, viscosity, thickness for the report to be output.



■ Technical Specification :

Model	BEVS 1811/1	BEVS 1811/2	BEVS 1811/3
Speed	50 -300mm /sec	50 -300mm /sec	50 -300mm /sec
Stroke Length (Max)	360mm	360mm	360mm
Test Panel	420 x 300mm	420 x 300mm	420 x 300mm
Test Platform	Glass bed with clamp	Vacuum bed	Heated vacuum bed
Bar Coater	Diameter	10- 13mm	10- 13mm
	Length	320mm	320mm
Capacity	320mm	320mm	320mm
Standard	ASTM D823/C	ASTM D823/C	ASTM D823/C
Power	230 ± 10% ,50 /60HZ	230 ± 10% ,50 /60HZ	230 ± 10% ,50 /60HZ

Electrically Heated Vacuum Bed

BEVS automatic vacuum applicator is also available with an electrically heated vacuum bed. The bed temperature can be set from ambient +5°C to + 150°C and temperature is uniform over the whole bed.

Minimum temperature: Ambient + 5°C

Maximum temperature: + 150°C

Temperature accuracy: 1°C

■ Order Information :

BEVS 1811 /1	Automatic Film Applicator (with glass bed)
BEVS 1811 /2	Automatic Film Applicator (with vacuum bed)
BEVS 1811 /3	Automatic Film Applicator (with electrically heated vacuum bed)

1.5 Drying Time Recorder

■ Introduction :

BEVS Drying Time Recorder is used for the test of drying time or gel behavior of a variety of paints and coatings. It has the characteristics of intuition and good reproducibility, and can accurately evaluate drying time in all stages.

Initiative design of touch screen control, customized user-defined start time and test time, make the operation more intuitive and simple.



■ Technical Specification :

Dimension: 550 × 530 × 200 mm

The number of tracks :10

Length of strips: 300 mm

Driver :5 sets of motors, 2 track / motor

Drying Time:

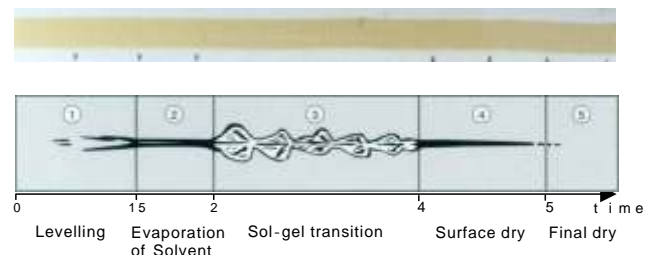
-Standard track: 6, 12, 24, 48 hours;

-Customized track (track 1):

Except the standard time, the user can customize the start and test time.

Function reset during the testing:

During the test, user can change the test time and re-start again.



■ Standard :

ASTM D5895

■ Order Information :

BEVS1815 Drying Time Recorder



■ Accessories Order Information :

BEVS 1815/P/003 Glass Strip Holder

BEVS 1815/P/004 Weight, set of 10, 5 grams per weight

BEVS 1815/P/005 Glass strip

BEVS 1805/1 Cube Applicator

1.6 Oven Chamber

■ Introduction :

BINDER drying chambers with natural convection or forced convection are renowned for their high quality and reliability. Thanks to their extensive redevelopment, these all-rounders are now even more firmly focused on addressing the requirements involved in drying or heating samples. What's more, in addition to the new design, convenient operation and efficiency of these units, the latest APT. line™ technology offers outstanding temperature accuracy to give this new generation of incubators real appeal.



■ Features

Temperature range (model 56; model 260): ambient temperature plus 5 °C to 300 °C

Temperature range (model 115): ambient temperature plus 6 °C to 300 °C

Natural convection

Controller with LCD display

Electro mechanical control of the exhaust air flap

Class 2 independent temperature safety device (DIN 12880) with visual temperature alarm

Excellent temporal and spatial temperature accuracy and high energy efficiency

■ Order Information :

Model	Housing dimensions not incl. fittings and connections - W x H x D (mm)	Internal dimension W x H x D (mm)	Interior volume (L)
ED 56	560 x 625 x 565	360 x 420 x 380	57
ED 115	710 x 735 x 605	510 x 530 x 425	114
ED 260	810 x 965 x 760	610 x 760 x 550	255

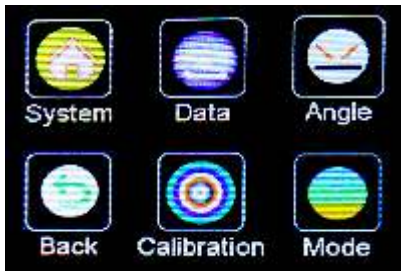
2. Appearance Testing Instruments

2.1 Intelligent Glossmeter

Introduction :

This BEVS portable intelligent glossmeter has a wide range of applications from matt to high gloss measurements, with advanced touch screen technology and ideal for production and laboratory.

Samples can be measured separately at each angle or at 2 or 3 angles simultaneously and effectively processed using the powerful built-in software.



Continuous-Mode			
Max:	85.9	83	23.4
Min:	84	82.1	23.4
Avg:	85	82.5	23.4
Pass:	0%	0%	0%

Technical Specification :

Angle: 20°, 60°, 85°

Measurement range: 0-2000GU

Repeatability: ± 0.2 (0-199.9GU), $\pm 0.2\%$ (200-2000GU);

Reproducibility: ± 0.5 (0-199.9GU), $\pm 0.5\%$ (200-2000GU);

Precision: 1GU

Measuring area(mm): 10x10 (20°), 9x15(60°), 5x38(85°)

Display resolution: 320 x 240

Control: Touch screen with one key measurement

Memory: Basic mode: 3000 batches

Statistics mode: 3000 batches

Continuous mode: 1000 batches

Data port: USB & blue tooth

Standard :

ISO 2813, ASTM D523, DIN 67530

Order Information :

BEVS 1503 Intelligent Tri-Glossmeter (20°/60°/85°)

BEVS 1503/1 Intelligent Glossmeter (20°)

BEVS 1503/2 Intelligent Glossmeter (60°)

BEVS 1503/3 Intelligent Glossmeter (85°)



2.2 Bench Glossmeter

■ Introduction :

This small, portable instrument is made for measuring the gloss of curved surface, small pieces ,specially shaped surface of small products, application in the area of coatings, automobiles, toys, furniture, plastics, banknotes, teeth, ceramics etc.



■ Features :

- Automatic calibration
- One button operation
- Colorful touch screen displaying readings , statistics and calibration procedure status.
- Calibration can be done automatically within one second
- Up to 3000 readings stored.
- Convenient measurement with infrared sensor switch
- Footswitch available for simple measurement



■ Standard :

ASTM D523, DIN 67530

■ Order Information :

BEVS 1506 Bench Glossmeter

■ Technical Specification :

- Angle :60°
- Range :0 -2000GU
- Repeatability: ± 0.5 GU (0-199.9GU)
- Precision :1GU
- Measurement area :2x2mm
- Display resolution :320 x 240
- Control :Touch screen with one key measurement
- Memory :3000 readings
- Operation temperature: -10 ~ +40
- Port :USB
- Dimension :220 x 190 x 85mm (L x W x H)
- Weight :3kg



Footswitch

■ Other Information of Accessories:

- BEVS1506 /P /001 Standard Calibration
- BEVS1506 /P /002 USB Databable
- BEVS1506/P/003 Footswitch
- BEVS1506 /P /004 Optical Sensor Switch



Sensor Switch

2.3 Colorimeter

■ Introduction :

Colorimeter, which combining with advanced electronic hardware and software capable of analyzing the color spectrum, provides not only high precision color data or difference, but also spectral graphs and values which useful for light source simulation.

It also evaluates metamerism and can perform computerised color matching and many other advanced features.



■ Features

Exclusive illumination system:

- Excellent short & long term stability
- Long calibration intervals (every 3 months)
- Temperature stable measurement 10° to 40°C
- Simple maintenance

Available geometries: 45/0° or d/8° SPIN , Ø11 mm aperture

Built-in 60° gloss meter, 5 x 10 mm aperture for both versions

Output to PC (Easy-link software included)

■ Technical Information :

Colour Spectral Range: 400-700 nm, 10 nm interval

Precision/Repeatability: 0.01 ΔE^* , 1 (10 measurements on white tile)

Inter-instruments agreement: 0.2 ΔE^* , 1 (on 12 BCRA tiles)

Colorimetric systems: CIEL ab/Ch, Lab(h), XYZ, Yxy

Differences: ΔE^* , $\Delta E(h)$, ΔE_{CMC} , EFMC2, E94, E99, E2000, and $\Delta L^*a^*b^*$, $\Delta L^*C^*h^*$ and Δ of other components

Indices: - YIE 313, YID 1925, WIE 313, CIE , Berger - Opacity, Metamerism - Colour strength

13 illuminants: A, C, D50, D55, D65, D75, F2, F6, F7, F8, F10, F11, UL 30

Observer: 2° or 10°

Gloss Angle: 60°

Gloss Range: 0-180GU (Gloss Unit)

Repeatability/reproducibility: 0.2/1.GU

Measuring area: 5 x 10mm (0.2"x 0.4")

■ Standard :

Standards	Colour	Gloss
ASTM	D1925, 2244, E308, E313, 1164	D523, 2457
DIN	5033, 5036, 6174	67530
ISO	7724	/
EN, ISO	/	7668
DIN, EN, ISO	/	2831



■ Order Information :

GV281 Spectromatch Gloss 45/0°

Gv282 Spectromatch Gloss d/8° - SPIN

2.4 Color Assessment Cabinet

Introduction :

To avoid reducing the assessment error when performing color contrast, it is easy to simulate different light sources to compare color difference via touch screen panel. Idea application for the graphic arts, photographic, textile, dyeing, packaging, printing, leather, inks, knitwear, plastic, automotive and ceramics industries.



Features:

- Up to 6 lights sources
- Easy to operate via touch screen
- Automatically alternating among lights sources

■ Illuminants:

Light Source	Description	Color Temperature	Power
D65	International Standard Artificial Daylight	6500K	18W
TL84	Applied to stores in Europe, Japan and China	4000K	18W
CWF	(Cool White Fluorescent) American Standard	4150K	18W
F	"Sun -setting Light Yellow "incandescent light source (imitation of sunset)	2700K	40W
UV	Viewing under ultraviolet light to detect and evaluate optical brighteners or fluorescent pigments	365nm	18W
U30	Warm White Fluorescent, American Standard	3000K	18W

■ Order Information :

Model	D65	TL84	CWF	F	UV	U30	Voltage	Size (L x W x H)
BEVS1201/5	2	2	2	4	1	0	220V/50Hz	710x405x570 mm
BEVS1201/6	2	2	2	4	1	2	220V/50Hz	710x530x570 mm

3. Physical Testing Instruments

3.1 Automatic Cupping Tester

■ Introduction :

BEVS Automatic Cupping Tester is an advanced technology to efficiently assess the elasticity and cupping resistance of various coatings, with a new generation micro - electro and CCD technology, also has strong functions such as can be video or photo the deformation process or result that can be copied the image to U disk and then connect with PC to analyse the various factors between coating performance and substrate etc.

Customized design software operation system and provide the USB port for mouse and U disk and camera, best choice for R & D and QC people.

The test is either used as a "pass /fail " test by preset to a specified depth or defining the minimum depth at which a coating fails by gradually increasing the indentation, or carry out the deformation by indentation under standard conditions.



■ Technical Specification :

- Stroke length: 0-15mm ,accuracy: ± 0.01 mm
- Indenter speed: 0.02-0.4mm/s,accuracy: ± 0.5 mm
- Control: Automatic
- Camera: Colorful CCD
- Light source: LED light source
- Cupping result: Digital (resolution 0.001mm)
- Interface: USB port for mouse & U disk & CCD
- Max. panel width: 70 mm
- Max. panel thickness (steel): 1.25 mm (Standard Speed 0.2mm/s)
- Max. panel thickness (aluminum): 3mm (Standard Speed 0.2mm/s)
- Max.cupping force: 15KN
- Power supply: 230 VAC-50 Hz (110V-60Hz option)



■ Order Information :

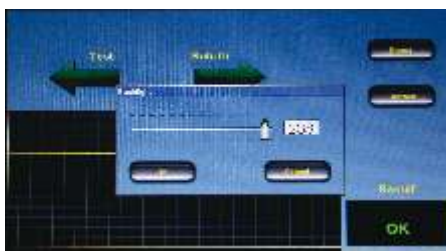
BEVS 1606 Automatic Cupping Tester

3.2 Automatic Scratch Tester

For product surface coating , such as coil coating , can ink , 3C ink and automobile surface coating etc .It is necessary to test its scratch resistance performance with the BEVS 2801 Scratch Tester .

The Scratch Tester of BEVS is complied with the standards of ISO1518, BS3900.

Enable to display the graph of scratch on the screen in real time and show the test result on the screen, it will directly display "OK " or "NG "



■ Features :

- Big LCD design , touch -screen operation
- Adjustable work platform - - -More convenient
- High Hardness Scriber - - -More durable
- Show the testing procedure with real time graph
- Display the test result on the conductive substrate
- Special design for sample clamp - - -Equipped with ruler

■ Technical Specification :

- Scratch Speed: 30 -40 mm /sec
- Moving Distance: 65 mm
- Power: 220 V /50 Hz or 110 V /60 Hz
- Stylus: Tungsten carbide hemispherical stylus, diameter: 1mm
- Metallic test panel size:
100x150x0.2mm (LxWxH)



■ Introduction :

Scratch Tester is applied to the scratch resistance performance evaluation of single coating or complex coating system in insulated color coated sheet . It will be known the coating scratch resistance performance by evaluating whether the coating is scratched by tungsten carbide hemispherical stylus with a certain weight or the maximum load of the coating which can not be scratched .



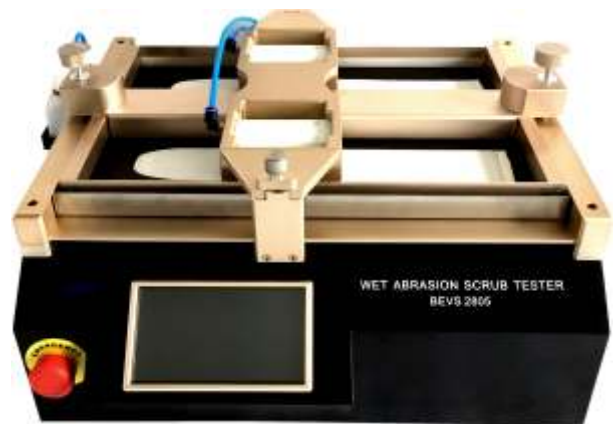
■ Order Information :

- BEVS 2801 Scratch Tester
- BEVS 2801/P/001 Tungsten carbide hemispherical stylus, diameter: 1mm

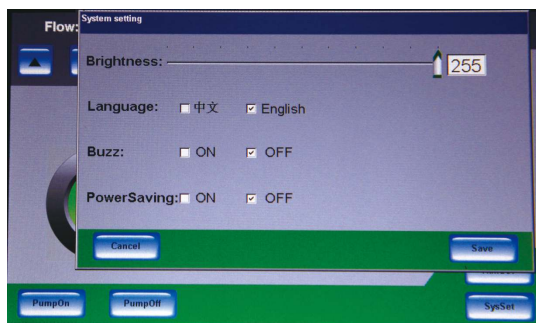
3.3 Wet Abrasion Scrub Tester

Introduction :

This machine is used to test the abrasion , scrub and washability performance for many kinds of materials, do the abrasion scrub test in wet and dry condition; touch screen control . It is widely used in water -based coating field .



Big LCD design , touch -screen operation
 Operating Menu : Chinese or English
 Testing fluid flow is controlled by peristaltic pump



Technical Specification :

- Scrub rate : 37±1 cycles /min
- Maximum setting of abrasion times :9999
- Sample thickness : 0 -25 mm
- Test panel thickness range :0 -25 mm (Adjustable)

Standards :

- ASTM D2486 ,D3450
- DIN 53778

Order Information :

BEVS 2805

Wet Abrasion Scrub Tester
 With one standard accessory

Accessories: (Optional)

BEVS 2805 /1



Standard: DIN 53778
 Carriage assembly with pump, applied weight 250g , 2 brushes with natural bristle

BEVS 2805 /2



Standard: ASTM D2486
 Carriage assembly with pump, applied load 454g, 2 nylon brushers , 2 rubber pads with 325X12.7X0.25mm brass shim

BEVS 2805 /3

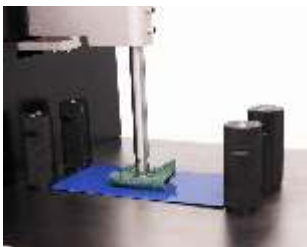


Standard: ASTM D3450
 Carriage assembly with pump, applied weight 1500g , 2 sponges

3.4 Linear Abraser

■ Introduction :

It is designed according to the American Dupont standard and applied to the abrasion resistant test for all kinds of nonconductive coating layers. Judge the abrasion degree of samples by using rubber ,artificial sweat , steelwool or alcohol to scrub the surface of the samples .



■ Features:

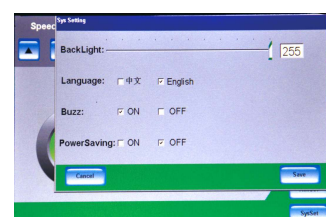
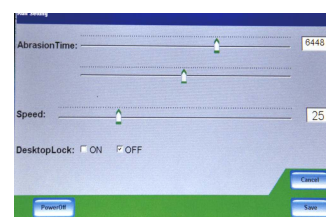
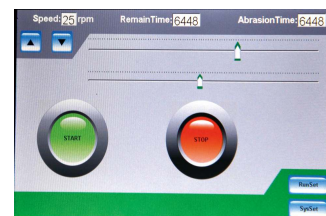
- Big LCD design , touch -screen operation
- Operating Menu : Chinese or English
- Adjustable speed intelligent system , ensure the accuracy of sample measurement
- Universal fixture to fix the sample in different shape & size

■ Technical Specification :

- Humanized Screen , touch -screen control
- Rubbing Frequency : No sections and adjustable speed frequency
- Adjustalbe rubbing cycle times : 0 – 9999
- Adjustable stroke length : 20 -99 times /min
- Adjustable rubbing distance : 10 – 50 mm
- Test platform : 350×400mm (LxW)

■ Order Information :

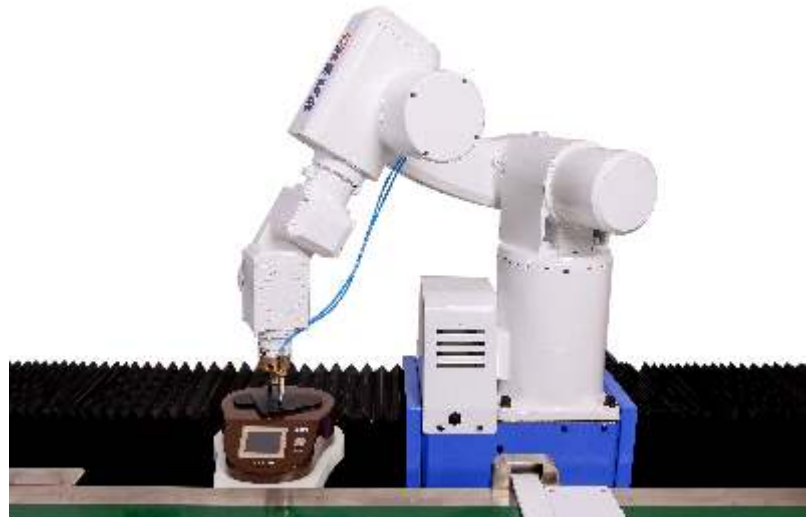
BEVS 2803 Linear Abraser





4. Industrial Robot

Our multi-joint robot with high speed, precision and universality, the effective loading range is 1Kg to 100Kg, the moving range of robotic arm is 540mm to 2000mm,enable to use in laboratory, dust free, explosion proof etc. conditions, applied in the automated operation of intelligent testing, inspection, spraying, assembly etc. and meet customers' different demand.



4.1 Parameter



BEVS R800



BEVS R850



BEVS R900



BEVS R950

Model		BEVS R800	BEVS R850	BEVS R900	BEV R950
Freedom Degree		6	6	6	6
Effective Load		6KG	25KG	50KG	6KG
Repositioning Resolution		±0.02mm	±0.08mm	±0.08mm	±0.08mm
Movement Angles	Axle S	-170°/+170°	-165°/+165°	-180°/+180°	-151°/+151°
	Axle L	-65°/+150°	-50°/+105°	-110°/+75°	-85°/+110°
	Axle U	-136°/+155°	-129°/+161°	-143°/+215°	-120°/+63°
	Axle R	-190°/+190°	-145°/+145°	-200°/+200°	-145°/+145°
	Axle B	-135°/+135°	-55°/+235°	-120°/+120°	-120°/+120°
	Axle T	-360°/+360°	-360°/+360°	-360°/+360°	-360°/+360°
Maximum Speed	Axle S	376°/S	165.5°/S	125°/S	99°/S
	Axle L	350°/S	108.4°/S	105°/S	99°/S
	Axle U	400°/S	225°/S	110°/S	148.8°/S
	Axle R	450°/S	180°/S	120°/S	225°/S
	Axle B	450°/S	250°/S	135°/S	225°/S
	Axle T	720°/S	360°/S	200°/S	360°/S
Allowable Inertia(GD ² /4)	Axle R	0.3KG*m ²	1.05KG*m ²	28KG*m ²	0.99KG*m ²
	Axle B	0.3KG*m ²	1.05KG*m ²	28KG*m ²	0.27KG*m ²
	Axle T	0.1KG* m ²	0.75KG*m ²	11KG*m ²	0.1KG*m ²
Weight		27KG	370KG	550KG	180KG
Environment Condition	Temperature	0-45°C	0-45°C	0-45°C	0-45°C
	Humidity	20-80%RH (Non-condensate)	20-80%RH (Non-condensate)	20-80%RH (Non-condensate)	20-80%RH (Non-condensate)
	Vibration	Less than 4.9m/s ²	Less than 4.9m/s ²	Less than 4.9m/s ²	Less than 4.9m/s ²
	Other	Avoid ignitable and corrosive gas liquid			
		Avoid water, oil and powder			
Avoid the electromagnetic gas					
Power Capacity		2.3KVA	9.2KVA	10.1KVA	3.0KVA

*ABB, KUKA, FANUC, EPSON etc Robots are available upon request.

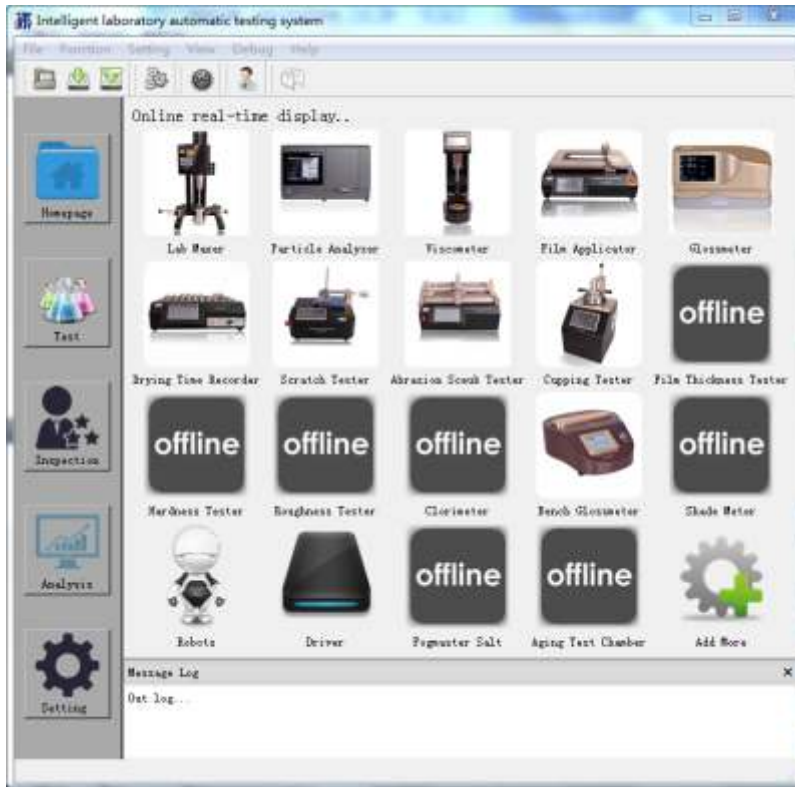
5. Intelligent Control and Analyze Software

BEVS Intelligent control system as a bridge to communicate robot with instruments in order to achieve the full automatic control. Our multi-joint robot with high speed, precision and universality is able to replace human labor totally to achieve the testing movement under the command of system control center, such as moving the testing material and rotating flexibly.

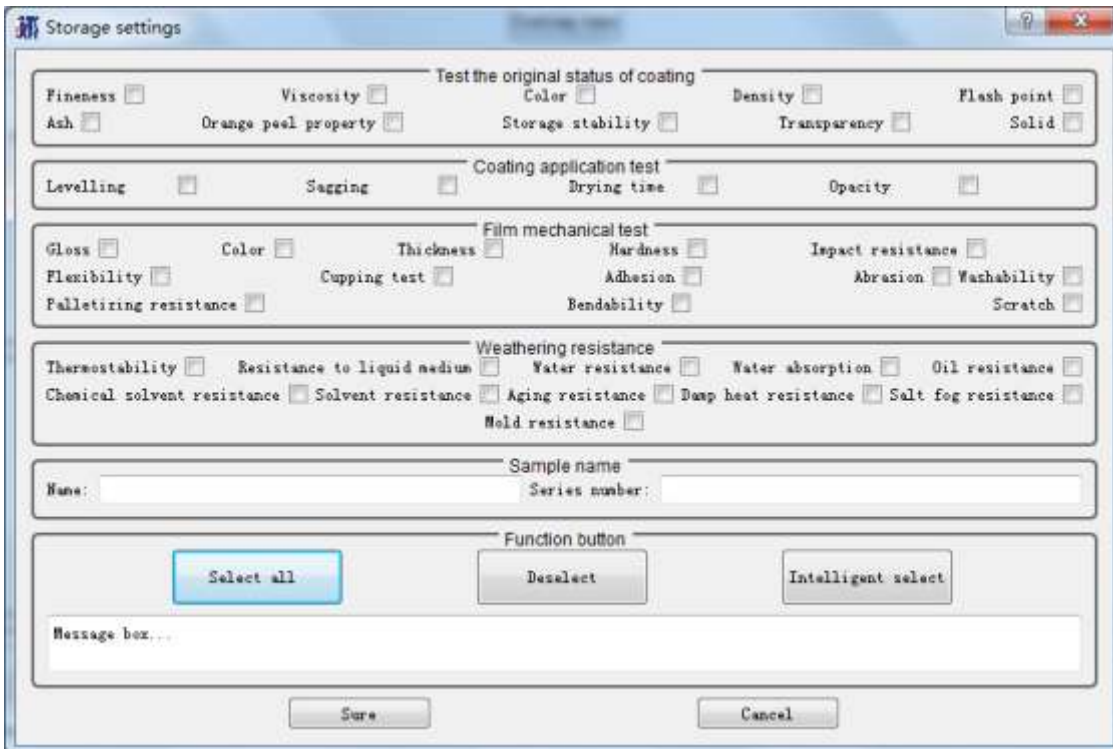
BEVS Testing instruments with its unique advanced and revolutionary touch screen technology could perfectly combine with intelligent control system and achieve the data transmission and exchange.



Unique control interface



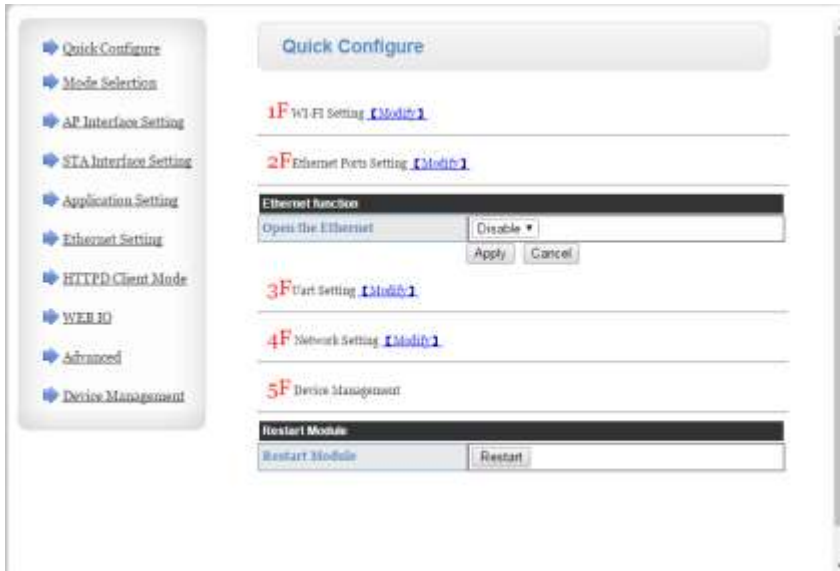
Testing process could be freely combined



5.1 Remote Control and Function

1. System communication adopts the network communication technology, all equipment are able to connect to the internet and the user could achieve the system remote control thru the different terminal device such as PC, Pad and Phone.

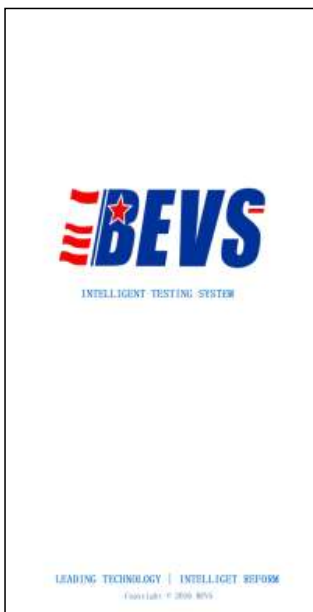
Remote Control Setting



2. Mobile APP

System supports the data control and review in IOS and Android mobile system.

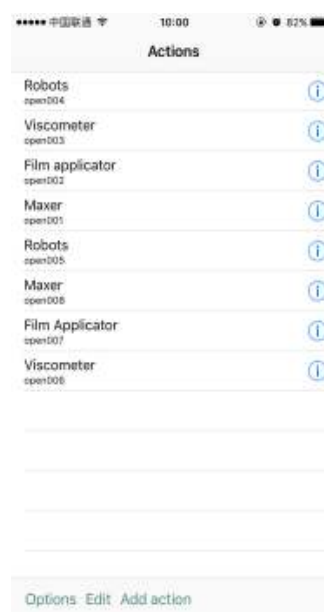
App Interface



Operation Interface

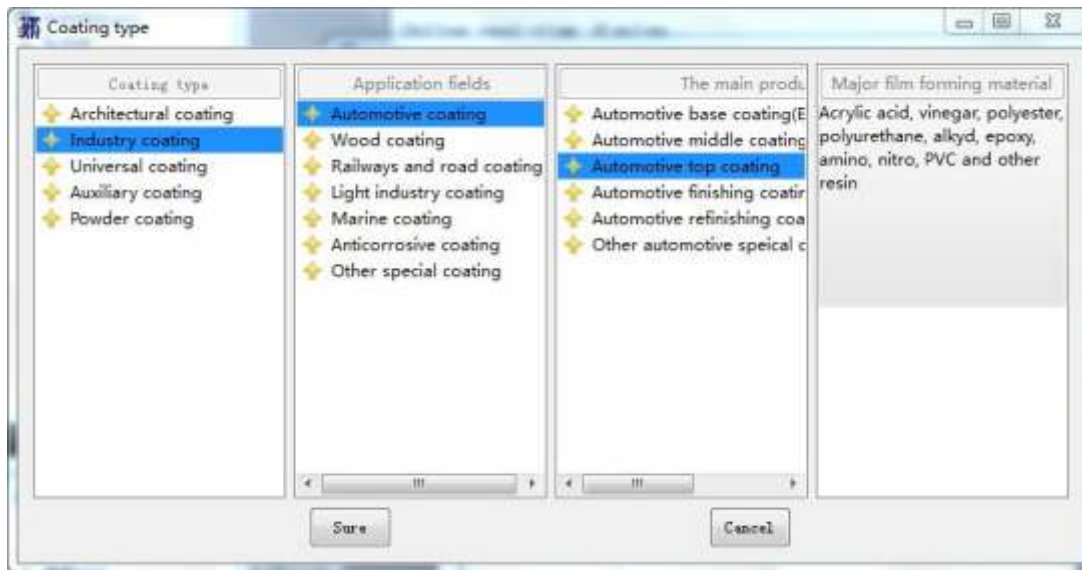


Setting Interface

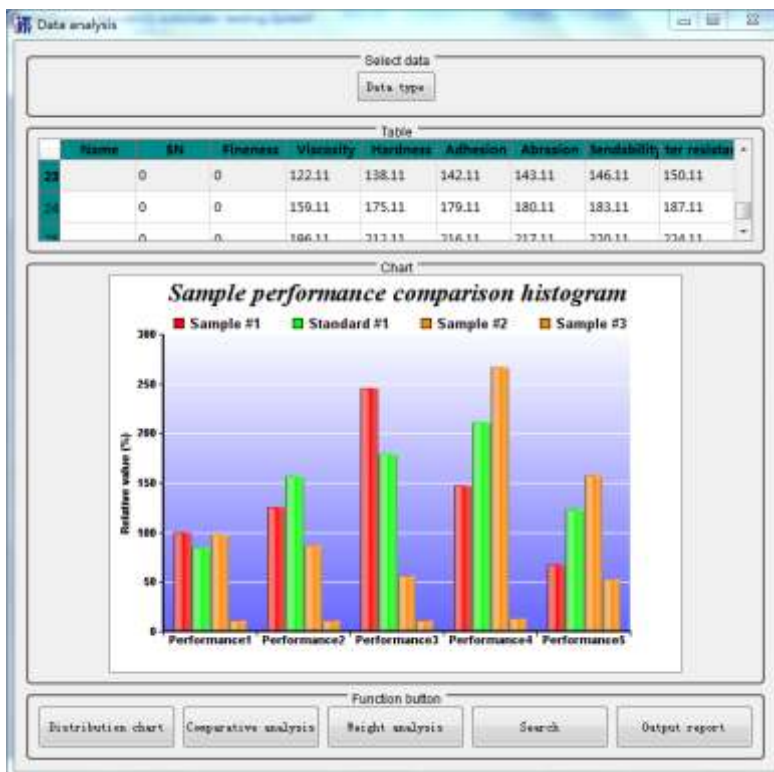


5.2 Application Range

1. This system covers the different coating types and testing performance database and enables to obtain the testing process and method automatically according to the different coatings. This system also contains the coating sample testing in all performances from sampling to original status, application performance, mechanical property and resistance weathering aging. User could test the different sample performances according to the practical requirement.



Learn all the performances in one interface



2. Formula Record

System provides the formula database and enables to record the formula composition in the database. The data is only available to the user for postmortem formula analysis and product performance adjustment. The system could have the feedback on the formula constitution according to the difference of performance data in order to revise the related parameter.

The screenshot shows a software window titled "Formulation" with a standard Windows-style title bar. The window is divided into several sections for data entry:

- Binder:** Four rows, each with a label (Binder A, B, C, D), an input field, and a "wt%" label with an input field.
- Pigments and fillers:** Four rows, each with a label (Pigment A, B, C, D), an input field, and a "wt%" label with an input field.
- Solvent(dispersive media):** Four rows, each with a label (Solvent A, B, C, D), an input field, and a "wt%" label with an input field.
- aids:** Four rows, each with a label (aids A, B, C, D), an input field, and a "wt%" label with an input field.
- Sample name:** A section with three input fields labeled "Name:", "SN:", and "Mass:".

At the bottom of the window, there are two buttons: "Sure" and "Cancel".

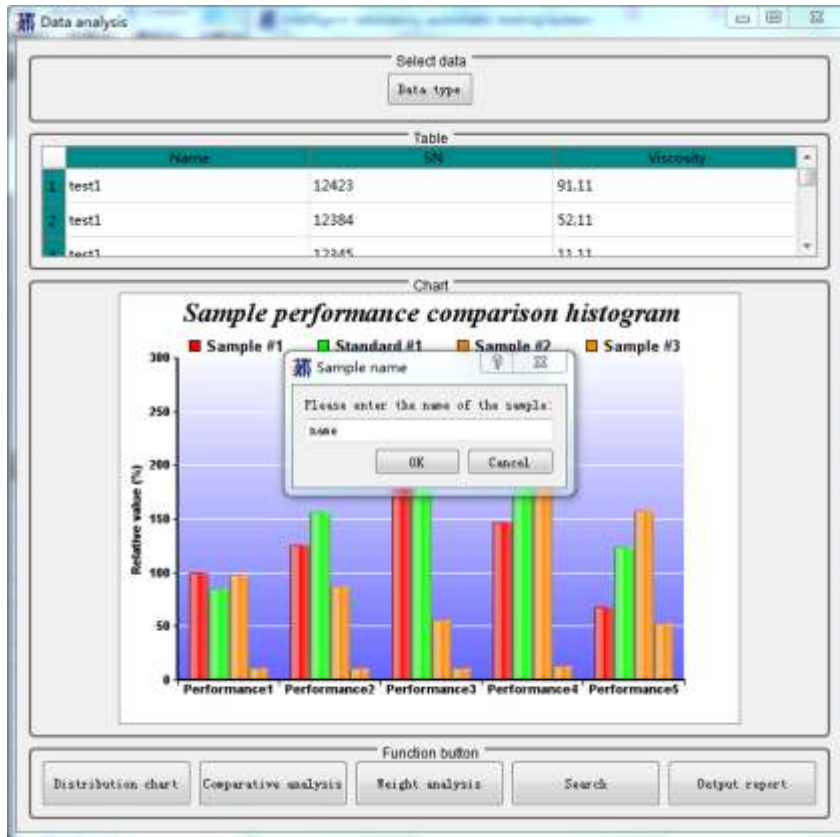
5.3 Output Analysis and Result

All the testing data will be stored in the database, user could review and analyze the data according to the different conditions (sample batch, SN code, QR code etc.).The contrast profile and histogram could be shown with the data. System could output the professional testing report and print it out directly.

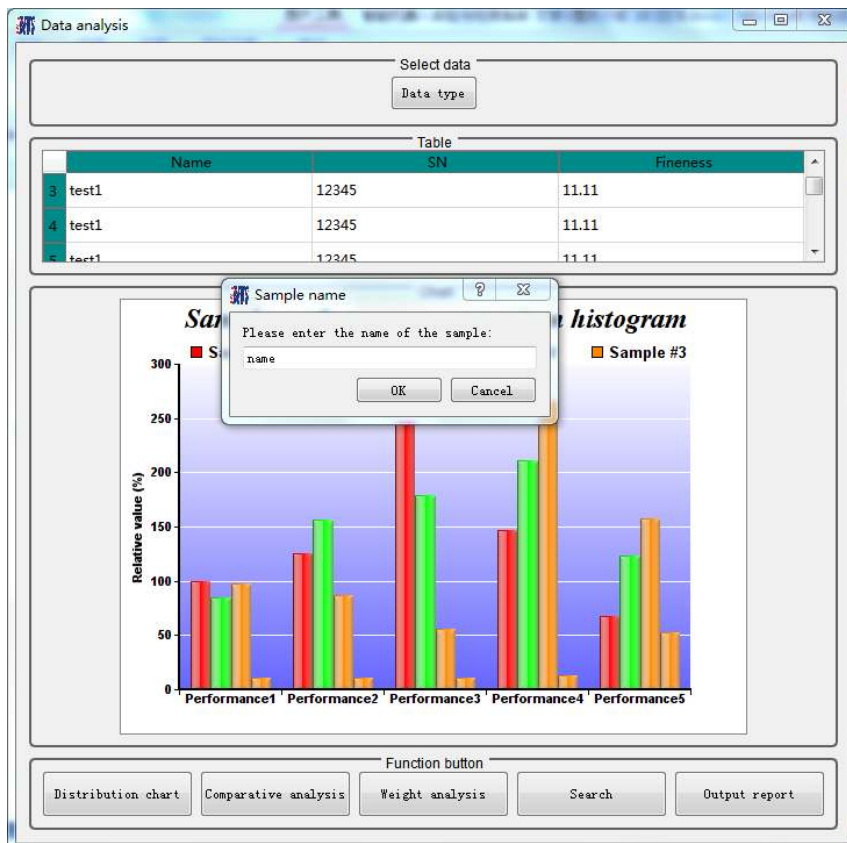
A. Sample performance comparison



B. Comprehensive analysis



C. Search function





D. Print report

Test Rrport								
SN. #0063			Plant xx			Department QC		
Sample name Test1			Operator xx					
Description : The standard value can be changed in the software system								
NO.	Fineness(um)	Standard value	Viscosity(cp)	Standard value	Gloss(Gu)	Standard value	Thickness(um)	Standard value
1	14.00	15.00	2000.00	2500.00	68.00	66.00	52.00	50.00
2								
3								
4								
5								

Deviation column chart

Parameter	Deviation (%)
Fineness	6.6
Viscosity	20
Gloss	3
Thickness	4

6. Intelligent Robotic Testing and Inspection System

6.1 Intelligent Robotic Testing System

With the constantly upgrading in industry 4.0, the robot and internet of things play the more and more important role in technology revolution and industry upgrading for the traditional industry such as manufacturing etc. The traditional manual testing and inspection are also replaced by robot.

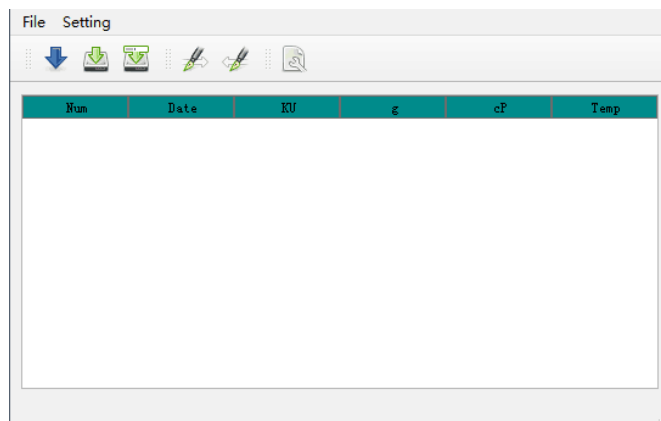
In order to greatly improve the competition and capacity of research, production and manufacturing. The work related with labor intensity, cost, time, efficiency etc. could be completed freely by robot during the process of daily research, testing, production and manufacturing.

Intelligent robotic testing system is applied to university, research institute, inspection organization, enterprise etc. User could customize the unique configuration upon different requirements to achieve the intelligent remote control and testing report output automatically and completed unmanned operation.

1. Robot with Mixer to achieve monitor the dispersion.



2. Robot with KU Viscometer to achieve online measurement.



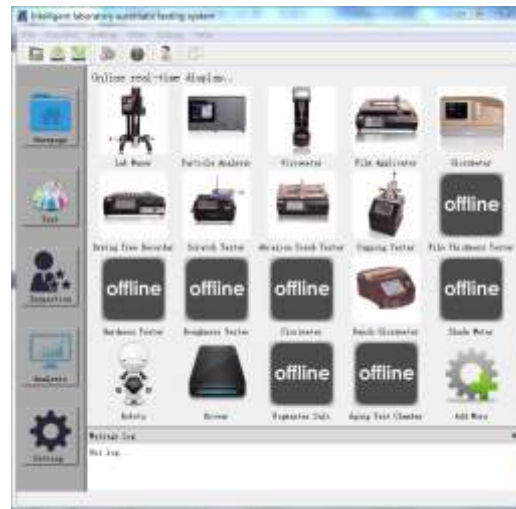
3. Robot with automatic film applicator to quickly achieve the batch and precision film.



Name	Speed	Back Speed	Film Size	Viscosity	Thickness
1 Sample1	50	50	200	3000	100
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

4. Robot with multi-instruments to achieve automatic testing.

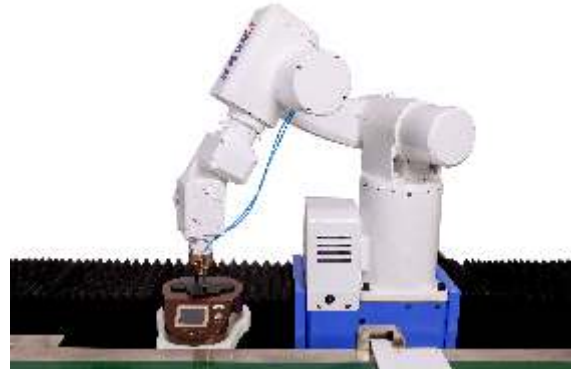




6.2 Intelligent Robotic Inspection System

Intelligent robotic inspection system is applied in the quality control in the daily production and manufacturing such as the coating surface inspection of 3C products and automobile, precision machining parts inspection, product defect inspection etc.

1. Robot with Intelligent online inspection



Date	Time	30'Data(Su)	60'Data(Su)	85'Data(Su)	Standard30'	20'UpperDev	20'LowerDev
2016-11-09	14:13:10	88.4	95.7	102.5	88.0	0.5	0.5

2. Robot with colorimeter online measurement



Test Rrport							
Part id. #046				Plant xx			
Batch #0062				Department QC			
Description xx				Operator xx			
NO.	L*	a*	b*	dL*	da*	db*	dE*
1	54.45	-30.46	-41.55	-0.01	0.06	-0.08	0.1
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							

3. Robot in production line

