AJR NDT CO., LTD

AJR NDT: ART300 Surface Roughness Gauge

Introduction:

AJR NDT: ART300 portable roughness measuring instrument is a new product of AJR NDT Co. Ltd. ART300 is a high accuracy surface roughness measuring instrument. It is applicable to the workshop testing station, laboratory, metrology room environmental detection. ART300 measurement meets international standards of the United States, Germany, Japan and is compatible with Britain and other industrial developed country standards. Measurement results can be shown on digital LCD display. The result can be also output to the printer.

Functions and features:

- Electromechanical integration design, small volume, light weight, easy to use;
- Using DSP chip to control and data processing, high speed, low power consumption;
- Large range, parameters RX, Ra, Rz, Rq, Rt, Rp, Rv, R3z, R3y, RzJIS, Rsk, Rku, Rsm, Rmr;
- 128 x 64 OLED dot matrix display, digital / graphic display; highlight no perspective;
- Display information rich, intuitive, can display all the parameters and graphics;
- Compatible with ISO, DIN, ANSI, JIS national standards;
- Built-in lithium rechargeable battery and a charging control circuit, high capacity without memory effect;
- Residual battery quantity indicator icon can reminder user to charge and understand the battery charging degree.
- Machine can work more than 20 hours continuously
- Large capacity data memory, can store 100 groups of original data and waveform.
- Real-time clock settings and display, convenient data recording and storage
- Low power consumption design.
- Reliable circuit and software design can avoid system halted.
- Measurement display, menu prompt information, incorrect information and switch machine information and other tips information;
- ART300 can be connected to a computer and printer;

- Various optional transducers, measuring platform, mini printer, extension rod and other accessories.
- Plastic shell, inspired by "TRANSFORMERS" stylish design, portable, high reliability.
- Optional bluetooth function.

Technical parameters：

Item	Specification
Product Model	ART300
Testing parameters	Ra, Rz, Rq, Rt, Rp, Rv, R3z, R3y, RzJIS, Rsk, Rku, Rsm, Rmr, Rx;
Measuring range (um)	Ra: 0.005-16.000 Rz: 0.02-160.00
Sample length (mm)	0.25, 0.80, 2.50
Evaluation length(mm)	(1-5)L
Maximum drive stroke	17.5mm/0.7inch
Indication accuracy	0.001
Indication error	±(7-10)%
Variability	<6%
Data Storage	100 groups
Power	Rechargeable li-battery
Working temperature	-20℃～40℃
Relative humidity	<90%
Size	158mmx63.5mmx46mm
Weight of Host	0.3kg

Standard Accessories

No.	ITEM	QTY.
1	ART300 Main Machine	1
2	Standard Transducer	1
3	Calibration Block	1
4	Level Adjusting Support	1
5	Power Adapter	1
6	USB cable	1
7	Data Software	1
8	Screw Driver	1
9	Transducer Protect Cover	1
10	Block Plate	1
11	Carrying Box	1
12	Operation Manual	1
13	Product Certificate	1
14	Packing List	1
15	Warranty Card	1

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Optional Accessories:

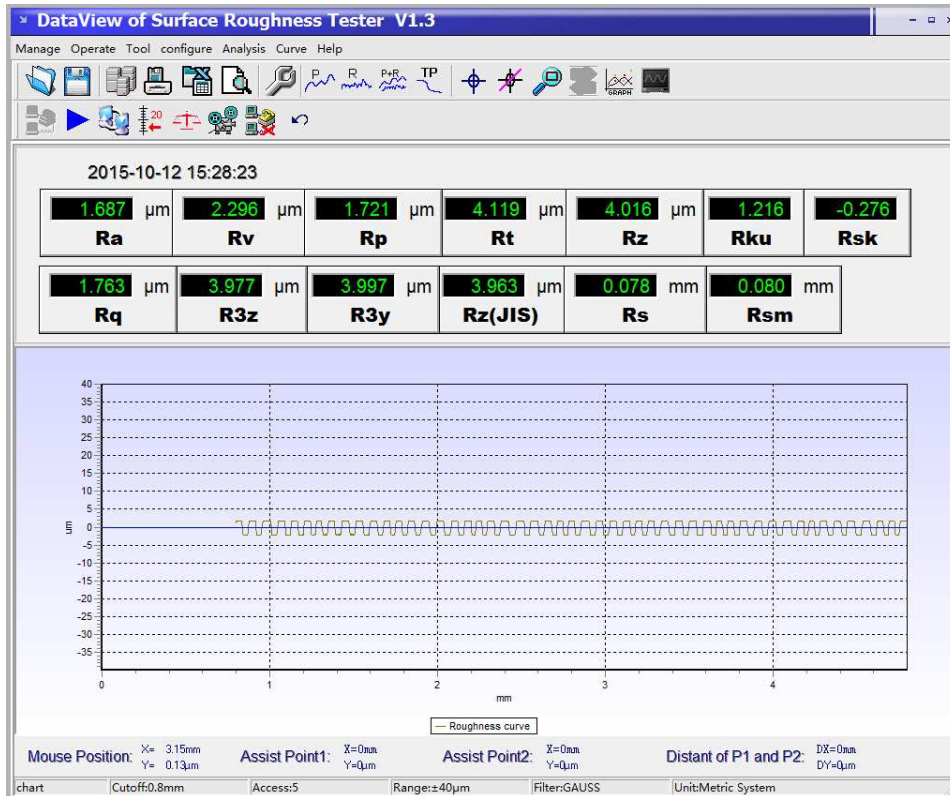|	
	AD55 -**Extension rod.** Used to extend length of sensor when testing deep hole (55mm)
	AD90 -**Right angle** measuring mechanism.
	AD100 -**standard sensor,** plane & shaft & inner surface of hole>6mm, depth <22mm
	AD120 -**small hole sensor**, cylindrical& plane &inner surface of hole>2 mm, depth <9mm
	AD110 -**sensor for curved surface** & plane, cylindrical, curvature radius>3 mm, work with platform AD620
	AD131 -**sensor for deep groove,** cylindrical & plane & groove width>3 mm, depth<10mm work with platform AD620
	AD520 -**Metal working platform**, elevating, convenient and stable for test process.
	AD620 -**Marble substrate working platform**, elevating, V groove, high accuracy to test tiny work piece.
	Roughness comparison block High quality comparison block of surface roughness Strict anti-rust treatment process 30 comparison block/set
	Mini Pinter External printer for ART300

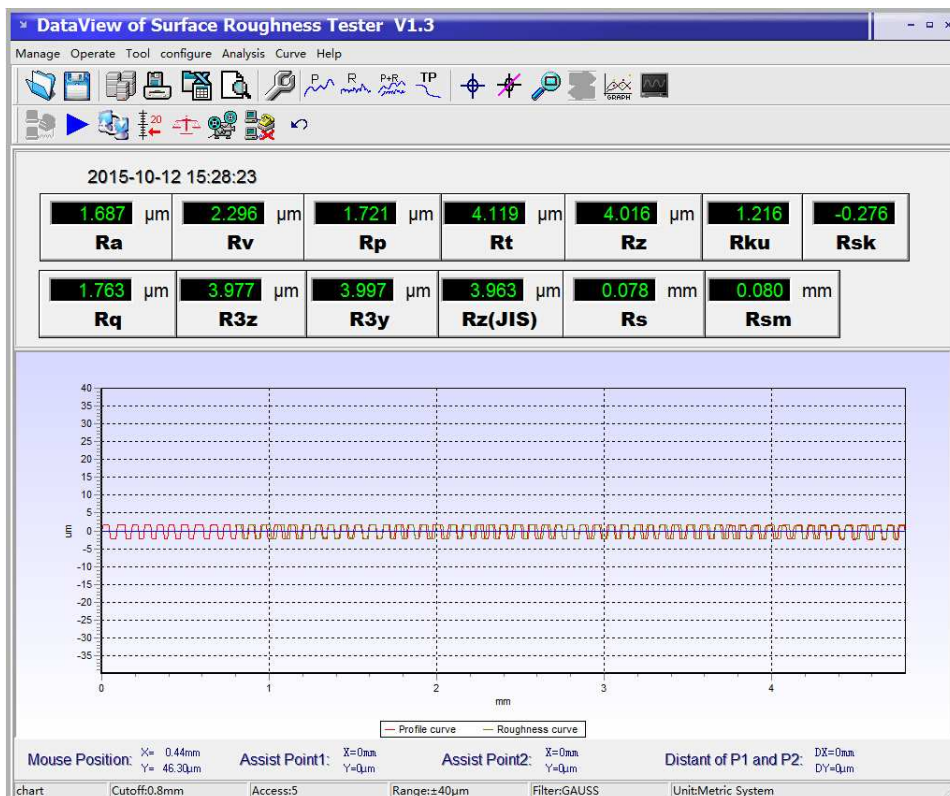# Data Software Screen

1. Profile Curve Screen
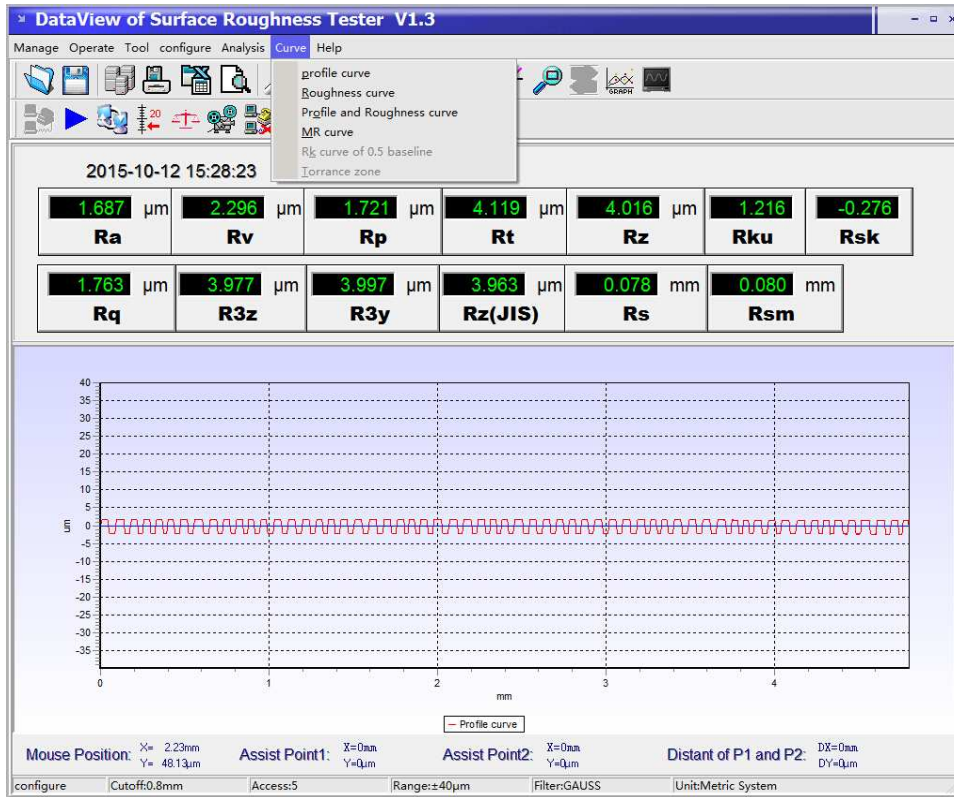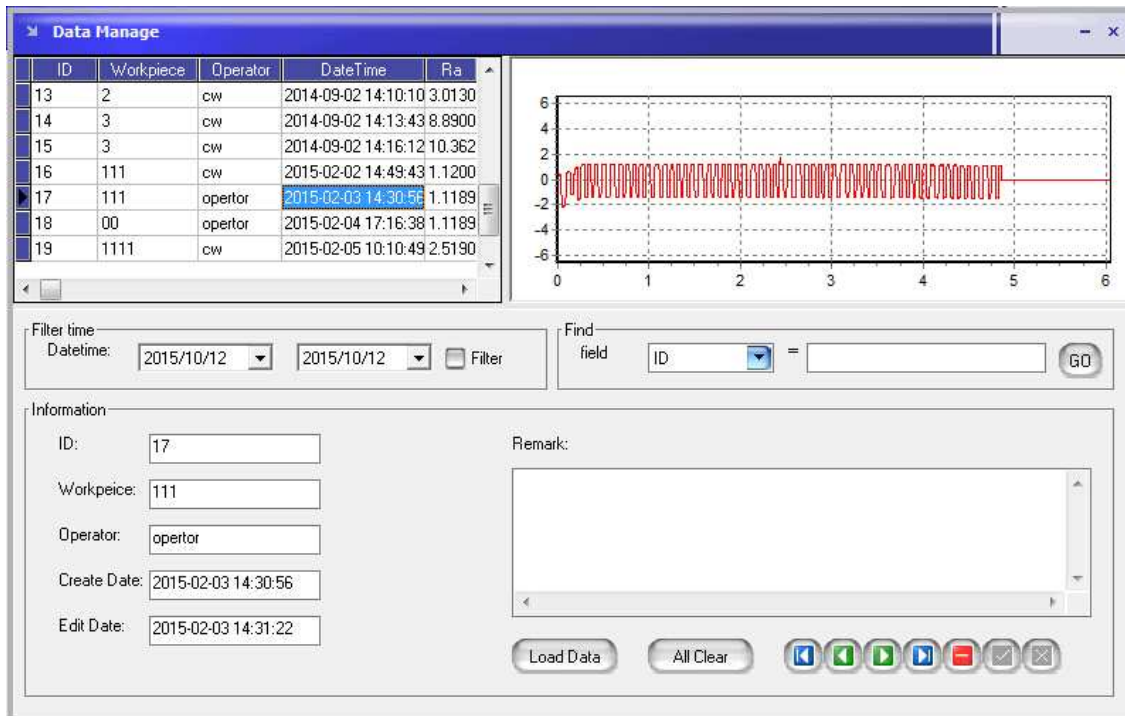

2. MR Curve Screen
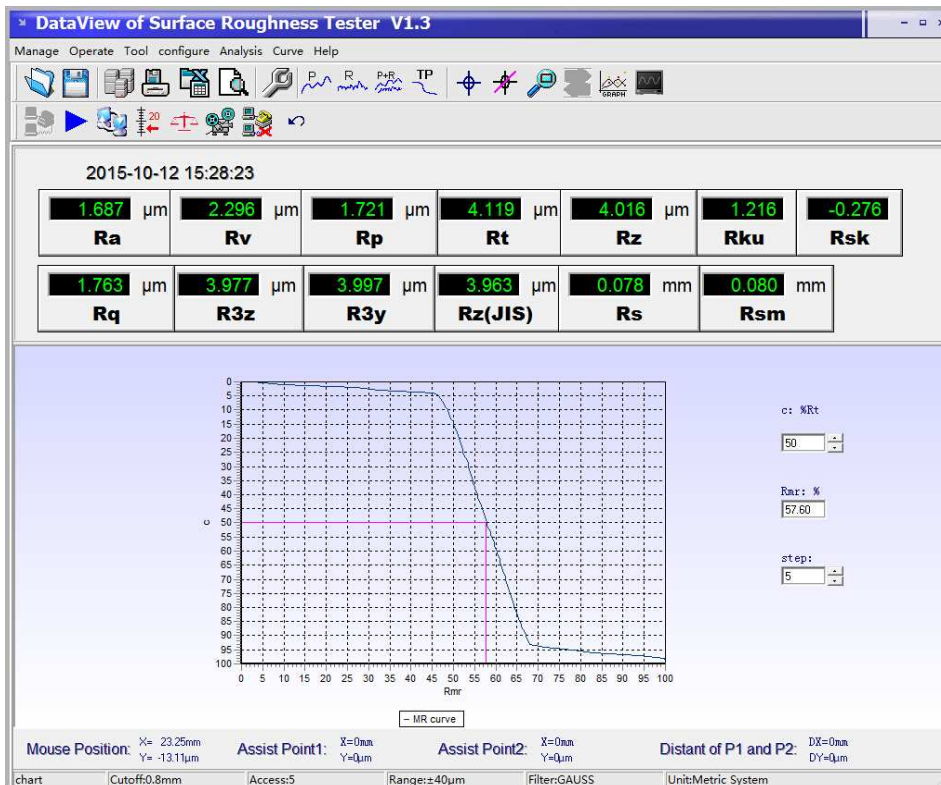
3. Roughness Curve Screen

DataView of Surface Roughness Tester V1.3

Manage Operate Tool configure Analysis Curve Help

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1.687 µm	2.296 µm	1.721 µm	4.119 µm	4.016 µm	1.216	-0.276
Ra	Rv	Rp	Rt	Rz	Rku	Rsk

1.763 µm	3.977 µm	3.997 µm	3.963 µm	0.078 mm	0.080 mm
Rq	R3z	R3y	Rz(JIS)	Rs	Rsm

— Roughness curve

Mouse Position: X= 3.15mm Y= 0.13µm   Assist Point1: X=0mm Y=0µm   Assist Point2: X=0mm Y=0µm   Distant of P1 and P2: DX=0mm DY=0µm

chart   Cutoff:0.8mm   Access:5   Range:±40µm   Filter:GAUSS   Unit:Metric System

4. Profile and Roughness Curve

DataView of Surface Roughness Tester V1.3

Manage Operate Tool configure Analysis Curve Help

2015-10-12 15:28:23

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1.763 µm	3.977 µm	3.997 µm	3.963 µm	0.078 mm	0.080 mm
Rq	R3z	R3y	Rz(JIS)	Rs	Rsm

— Profile curve   — Roughness curve

Mouse Position: X= 0.44mm Y= 46.30µm   Assist Point1: X=0mm Y=0µm   Assist Point2: X=0mm Y=0µm   Distant of P1 and P2: DX=0mm DY=0µm

chart   Cutoff:0.8mm   Access:5   Range:±40µm   Filter:GAUSS   Unit:Metric System

4. Data Memory Screen

5. Data Memory Screen