MR200

Surface Roughness Measuring Instrument

OVERVIEW

The MR200 surfaces roughness measure instrument is suitable for shop floor use and also as convenient handheld instrument due to it's compact size. The operation is simple and fast with good accuracy & repeatability.. The MR200 is capable of evaluating surface textures with a variety of parameters according to various national standards and international standards. The measurement results are displayed digitally/graphically on the LCD and can be sent to a printer.

Features

15 parameters including the following

Ra、Rq、Rz、Rt、Rp、Rv、RS、RSm、Rz(JIS)、Ry(JIS) 、RSk、R3z、Rmax、RPc、Rmr;

High accuracy inductance pickup;

Four filtering methods of RC, PC-RC, GAUSS and D-P;

Compatible with four standards of ISO, DIN, ANSI and JIS;

Can store 15 sets of measurements results

128×64 dot matrix LCD displays all parameters and graphs;

DSP chip is used to control and process data with high speed and low power consumption;

Built-in lithium-ion re-chargeable battery and control circuit have high capacity, without memory effect. Consecutive work time is more than 20 hours;

The unit has been designed to be small, light weight and easy to use.

Can be connected to printer to print all parameters and graphs;

Built-in standard RS232 interface enables communication with PC;

Automatic switch off, memory and various prompt instructions;

Optional printer, analysis software and measurement platform available

Standard Configuration

Name	Qty
MR200 main unit	1
Standard pickup	1
Roughness specimen	1
AC adapter	1

Technical Specifications

Name		Content
Measuring range	Z Axis（Vertical）	160μm
	X Axis（Horizontal）	17.5mm
Resolution	Z Axis（Vertical）	0.01μm/±20μm
		0.02μm/±40μm
		0.04μm/±80μm
Measurement	Parameters	Ra、Rq、Rz、Rt、Rp、Rv、RS、RSm、Rz(JIS)、Ry(JIS) 、RSk、R3z、Rmax、Rpc、Rmr;
	Standard	ISO,ANSI,DIN,JIS
	Graphic	Roughness profile，Material ratio curve，Direct profile
Filter		RC,PC-RC,Gauss,D-P
Sampling length (*lr*)		0.25,0.8,2.5mm
Assessment length *l*n）		$Ln= lr \times n$ n=1~5
Pickup	principle	Differential inductance
	Stylus	Natural Diamond, 90B cone angle, 5μm tip radius
	Force	<4mN
	Skid	Ruby，Longitudinal radius 40mm
	Traversing speed	*lr*=0.25, Vt=0.135mm/s
		lr=0.8, Vt=0.5mm/s
		lr=2.5, Vt=1mm/s
		Return Vt=1mm/s
Accuracy		Less than or equal to ±10%
Repeatability		Less than or equal to 6%
Power supply		Built-in Lithium-ion battery，AC adapter 8.4V,800mA
L×W×H		119×47×65㎜
Mass		± 380g