

# **SURFOMETER**<sup>®</sup>

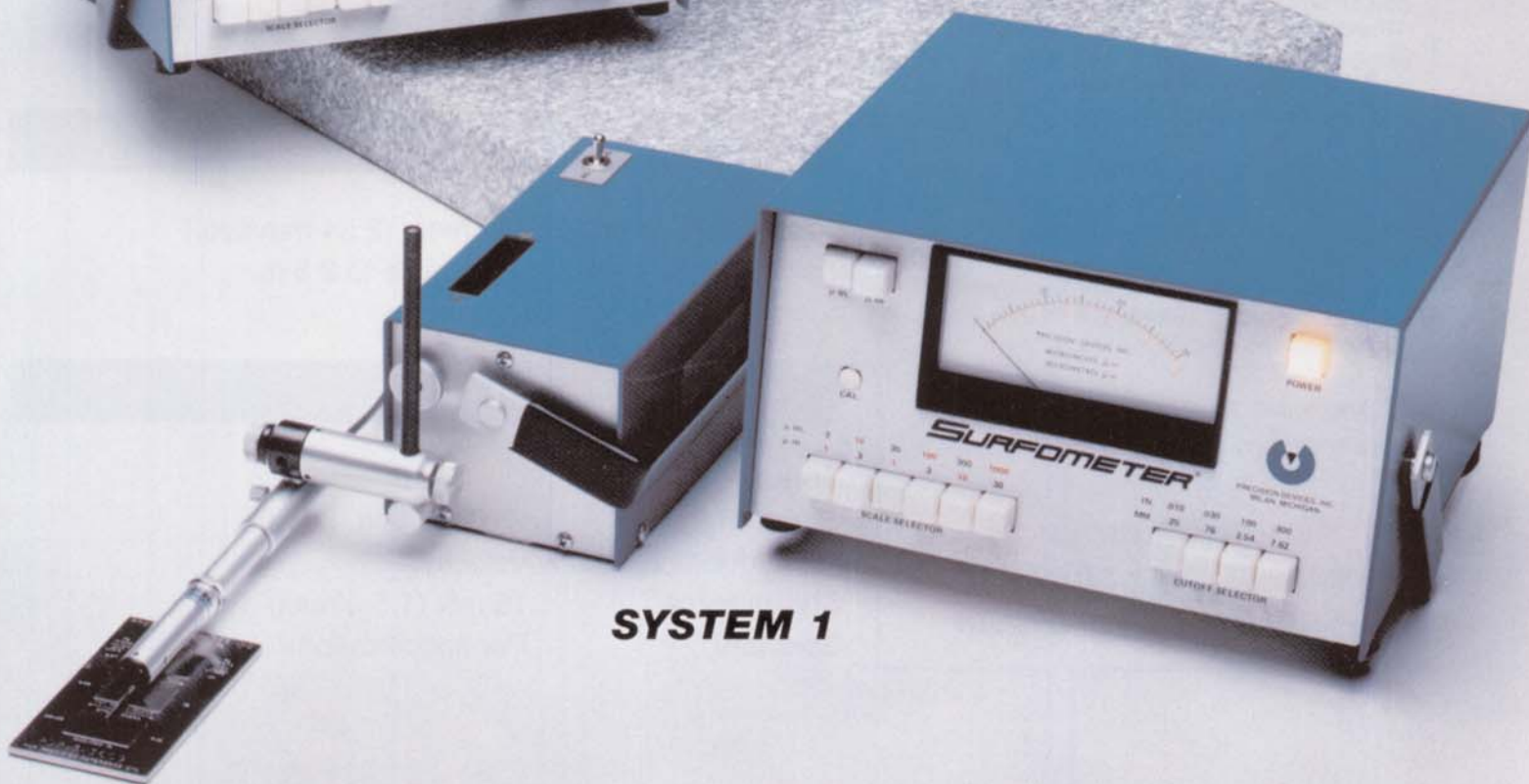
SURFACE MEASURING SYSTEMS

## **SYSTEM 3**



- Large analog display
- Selectable cutoffs
- Selectable scales

## **SYSTEM 1**



**PRECISION DEVICES, INC.**

## SYSTEM 1

PDA ANALOG AMPLIFIER  
PDD MOTOR DRIVE  
PDL LITE-TOUCH LINKARM  
PDR REFERENCE STANDARD  
PDK TRACER

### W/SMT SKIDMOUNT

For checking I.D.s & O.D.s from 1/8 in. (3.2 mm) to flat

or

### PDM TRACER

### W/SMA SKIDMOUNT

For checking O.D.s & I.D.s from 3/4 in. (19 mm) to flat — Min. I.D. 1-13/16" (46 mm)

## SYSTEM 3

PDA ANALOG AMPLIFIER  
PDP MOTOR DRIVE  
PDR REFERENCE STANDARD  
PDG SKIDLESS TRACER  
PDS STYLUS ASSEMBLY

**SURFOMETER SYSTEM 1** is a skid-referenced instrument for measuring  $R_a$  (roughness average). The analog system continuously averages the  $R_a$  value over the selected tracing length.

**SURFOMETER SYSTEM 3** is a skidless measuring instrument designed to check the roughness average for small, difficult-to-reach surfaces. The motor drive is mounted on a granite base to minimize vibration and to provide a level, stable surface for locating the workpiece.

*Systems 1, 1A & 3 replace Giddings & Lewis Groups 6L, 6M and 10 Instruments*

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## TECHNICAL DATA

### AMPLIFIER

Parameter	$R_a$
Readout	3" x 5" Analog Meter
Cutoff Values	.010, .030, .100, .300 in. (.254, .762, 2.54, 7.62 mm)
Dynamic Range	≈5000 $\mu$ in. peak to valley
Calibration	3-patch Precision Reference Standard
Ref. Std. Accuracy	+/- 2.5% of indicated value
System Accuracy	+/- 2% of full scale reading
Power Supply	110 V AC 50/60 Hz. 250 V., 2 A., 3AG slow blow fuse
Temperature Range	Operation— 10-30°C Storage— 0-40°C
Relative Humidity	10-90% non-condensing

### PDD MOTOR DRIVE (skid referenced)

Traversing speed	.3 in./sec. (7.63 mm/sec.)
Traversing Length	Adjustable to 2.5 in.

### PDP MOTOR DRIVE (skidless)

Traversing speed	.1 in./sec. (2.54 mm/sec.)
Traversing length	Adjustable to 2.5 in.

### TRACERS

Stylus Tip	Diamond
Stylus Radius	.0004 in. std. (10 $\mu$ m.)
Transducer type	Velocity
Stylus force	15 mN (1.5 gfmax)
Specials	Per specifications



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