

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

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**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
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**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

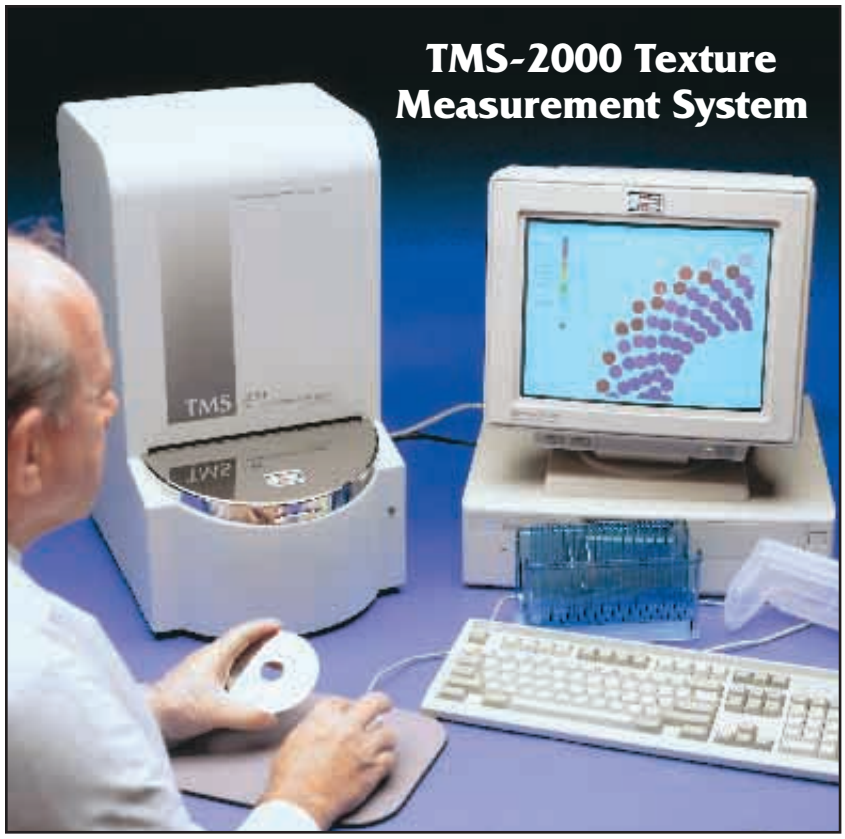
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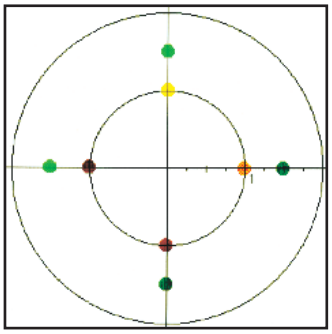
Find the *Schmitt Industries TMS 2000* at our website: ***Click HERE***

NEW

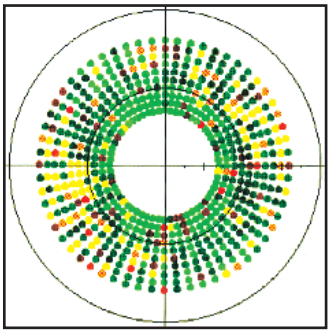
# The Ultimate Measurement System

## Non-Contact ▪ Fast ▪ Accurate ▪ Repeatable

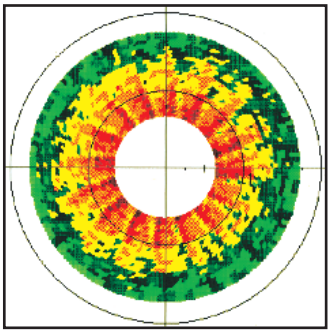


**PRODUCTION SCAN** - 8 Test Points
*In 8 Seconds*



**TEST SCAN** - 600 Test Points
*In 50 Seconds*



**FULL SCAN** - 6,000 Test Points
*In 200 Seconds*

### REVOLUTIONIZING DISK MANUFACTURING TECHNOLOGY

The fastest, most accurate, non-contact texture measurement system in the world. Laser technology of today for the future. Currently being used successfully by major disk manufacturers. Discover the ultimate solution to fast, accurate measurements in disk manufacturing.

### FEATURES:

- **NON-CONTACT MEASUREMENTS** cannot harm test surfaces
- **RESULTS** - RA, RMS roughness from 1Å to 1000Å
- **COST** - Lower costs than Profilometer, AFM or Interferometers
- **PRECISION** - Resolution of 0.1Å, reproducibility +/- 0.8Å or 1% and repeatability +/- 0.2Å
- **SPEED** - Typically 25 test points per second

### BENEFITS:

- Quadruple Production Throughput
- Measures Interrupted & Zone Textures
- Increase Performance/Quality
- Unaffected by outside environmental conditions
- Minimal operator training required
- Lowest cost per measurement of any system
- Correlates to other measurement instruments

SMS®
A New Light On Quality

**(503) 227-5178**
FAX (503) 227-5040

**Schmitt Measurement Systems, Inc.** ▪ 2765 N.W. Nicolai Street ▪ Portland, OR 97210

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

# The Ultimate in Texture Characterization

The fastest, highest resolution, most stable non-contact microroughness measurement system in the world. Advanced laser-based system ideally suited for quantifying and mapping full surface, interrupted, and zone textures. Now used by major disk and wafer manufacturers. Discover the ultimate answer to fast, reliable microroughness measurements in disk and wafer manufacturing, with systems that simplify lab to manufacturing correlation.

## Typical Specifications

*(At Factory Setup)*

### Measurements

**Source:** Class II Laser, 670 nm

**Spot Size:** ~1mm diameter

**Number of Spots:** Programmable
*(full sample to single test point)*

**Primary Results:** Ra or RMS (Rq) Microroughness

**Secondary Results:** P-V, RMS Slope, TIS, Diffuse Reflectance, Specular Reflectance

**Speed:** 25 Measurements per second*

**Range:** From 1Å up to 2000Å (RMS or RA)

**Resolution:** 0.1Å

**Repeatability:** ±0.2Å
*(same sample, same machine)*

**Reproducibility:** ±0.5Å or 1% *(whichever is greater)*
*(same sample, different machine)*

**Spacial Filtering Frequency:** *(wavelength)*

| | | |
|---|---|---|
| Low Band: | 0.026 to 0.129 $\mu m^{-1}$ | (7.8 to 38 μm) |
| High Band: | 0.129 to 1.14 $\mu m^{-1}$ | (0.88 to 7.8 μm) |
| Full Band: | 0.026 to 1.14 $\mu m^{-1}$ | (0.88 to 38 μm) |

* *varies with Scan and User Setup*

### Rotary Stage

**Repeatability:** ±0.01°
**Accuracy:** ±0.05°

### Linear Stage

**Repeatability:** ±0.0005 inch (±0.01 mm)
**Accuracy:** ±0.0010 inch (±0.03 mm)

### Data Generation

ASCII Data Files (Detailed), SPC Data Files (Production Statistics), Color Plots, Sample Statistics

### Computer

P90 Personal Computer – Optional Color Printer

### Sample – Holders

Standard Disks: 48mm, 65mm, 95mm, 140mm
Standard Wafers: 125mm, 150mm, 200mm

### Materials

Aluminum, NIckel, Silicon, and other reflective materials

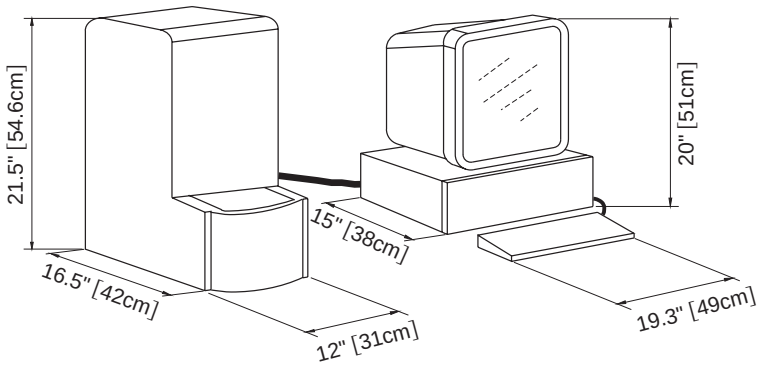
### Installation

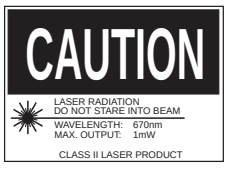
Electrical Requirements: 90-260 VAC – 50/60hz

### Shipping Weights

| | |
|---|---|
| Computer: | 70 lbs/ 32 kg |
| TMS-2000: | 70 lbs/ 32 kg |
| Total w/packing: | 156 lbs/ 71 kg |

**TMS-2000** **P90 Computer**




**Safety Considerations:** Complies with all applicable laws for the manufacture of laser devices. This system is classified by the Center for Devices and Radiological Health (CDRH) as a class II laser device. Class II systems: do not stare directly into the laser source or point the laser at another's eye.


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