



TURN-KEY SYSTEM

SQM600W is a fully integrated 3-D color graphics data acquisition system. The standard SQM600W system includes a late model desk top computer, a motorized linear/rotary scanning stage, 2-Axis controller, Color Printer and an SQM200W Surface Quality Monitor. All scanning and data acquisition is controlled by ROTOSCAN™ software.

The system can be used to scan a cylindrical sample surface and acquire data using any analog sensing device. It displays graphics in both color map and 3-D Topo map formats, with the ability to print out a color hard copy. The data can also be printed out, in a matrix format, listing the linear/rotary position and associated signal value.

SOFTWARE FEATURES DESCRIPTION

SCANNING

Enables the user to scan any inside or outside surface of a cylinder, acquire data and display a color map on the

monitor. The user can define the number of readings around the circumference, the number of steps and the stepsize in the linear (Z) direction. These scan parameters are automatically saved and recalled to scan additional parts or re-scan the same part after some surface treatment. The feature is helpful in visualizing the effect of any treatment/changes to the surface.

COLOR GRAPHICS DISPLAY

An interactive color graphics mode allows rapid visual analysis of the data. In this mode, the user has the ability to PAN and ZOOM onto a portion of the color map. The ZOOM portion can also be saved as a file. Two color maps can be displayed simultaneously to visually compare the two scans. This enables the user to visually analyze the effect of any treatment or the variation in two parts. Another feature is the ability to normalize, i.e., subtract point-by-point, one file from another. The resultant file is displayed in a 3-D type format.

A 3-D Topo map of the data can also be displayed on the screen. In this display mode, the user has the ability to tilt and rotate the image and set the Z-scale factor to visually enhance differences in the surface characteristics.



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SOFTWARE FEATURES DESCRIPTION (CONT'D.)

ANALOG TO DIGITAL CONVERSION

An analog input of 0-5 VDC is standard input for the system. Other ranges of DC signal can be accepted with a minor modification, done at no additional cost. The SQM600W can accommodate any instrumentation that has an output which ranges within the standard or modified analog signal range.

REPORT GENERATION

Any graphic image displayed on the screen can be printed on the color printer, which comes complete with the system. All scan parameters are also printed automatically. It is possible to print a list of all sensor data values, along with their corresponding linear/rotary position. The high, low, mean and standard deviation of the scan are also printed out.

DETAILED PRODUCT SPECIFICATIONS

Linear/Rotary Scanning Stage:

- 6" Diameter Rotary Table (θ - Axis),
6" Z - Axis Travel with Sensor Holder*
- Manually operated radial placement of sensor. A 1" travel micrometer allows for the fine adjustment

Model SQM200W System:

- Surface Quality Monitoring System

Desk Top Computer:

- Late Model Computer System
- Late Model Color Printer
- Color Monitor
- Keyboard

ROTOSCAN™ SOFTWARE:

- Scanning Routines for defining number of readings around the circumference, the number of steps and the step size in the linear (Z) direction
- File saving and management routines
- Color Graphics Display routines with Pan & Zoom capability. Displays as a Color Map or Topographic Map
- Displayed Screen Printing Capability
- Data File printing capability

OPTIONS

- *Larger R and/or θ travel Rotary table diameter and/or linear travel
- Replace SQM200W Surface Quality Monitoring System with SQM300W or any other analog surface characterization sensors

Contact factory or area representative for demo software diskette.

REPRESENTED IN YOUR AREA BY:

Specifications subject to change without notice.



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