

## QC Devices for Consumer Electronics - Screen Printing

### Printed Electronics

#### AQUA CHECK

The only stencil moisture meter, the TQM Aqua-Check determines when the stencil is dry enough to expose. Our exclusive TQM Aqua-Check meter detects hidden moisture instantly. It is a fast and accurate measurement that prevents you from taking chances with your stencil. The battery-operated contact meter provides direct readings of the residual moisture content in coated (and dried) screens to ultimately prevent pinholes and premature stencil breakdown. If a screen is not dried thoroughly before exposure, it will not harden effectively, and is therefore vulnerable to these deficiencies. The Aqua-Check's modest cost can save you big outlays in press downtime and stencil remakes. For use on polyester and nylon screen mesh. There is no guesswork. Simply hold it against the emulsion or film surface and press the "READ" button for 2 seconds. Look at the dial. Red for trouble ahead. Orange for risky. Green for go!

#### NEWMAN ST-METER® 1-E

A uniquely constructed, heavy-duty mechanical tension meter that assures durability and long-term accuracy in monitoring screen tension. It is the only meter in the world with all stainless steel hardened gears, shock-proof industrial grade internal gear movement and all jeweled sapphire bearings. A screen tension meter of exceptional quality, it will last longer and produce consistent readings every time. (All other mechanical meters have non-compound softer brass gears and bushing, greatly reducing their shock-resistance, long-term accuracy and life.) The crystal is shatterproof and curved to avoid glare. The heavy-duty protective aluminum housing is the most durable meter made anywhere. The modular construction assures easy and inexpensive repairs, if necessary.

#### TQM™ ELECTRONIC THICKNESS GAUGE®

TQM Electronic Thickness Gauge (ETG) is the only thickness gauge that calculates the difference between the fabric and emulsion thicknesses automatically. It is the choice for the screen printer looking for a practical, compact and easy-to-use thickness gauge for quality control purposes. Its uses include screen mesh and stencil measurements, as well as substrate and cured ink film measurements. The ETG works on the principle of magnetic induction, and is used in conjunction with a small, hand-held test plate. The coated mesh sample is placed between the measuring probe and the test plate. The micron or mil measurement is displayed immediately. The TQM ETG unit does not normally require calibration before use. However, the unit is supplied with calibration shims to confirm instrument accuracy or to measure unusually thick or curved samples. For those requiring conformance to very tight quality controls, the TQM ETG can be ordered with an optional Certificate of Calibration to NIST standards.

#### POCKET SURF III ROUGHNESS METER

The Pocket Surf III Surface Meter is a pocket-sized, battery-operated roughness gauge for measuring stencil and substrate surface roughness parameters in Ra, Rmax and Rz with digital readout. The Pocket Surf III is solidly built with a durable cast aluminum housing for years of accurate surface measurements. Its digital display is conveniently located on top of the device for optimum visibility.

### **SAATI 21-STEP SENSITIVITY GUIDE**

This is the exposure guide of choice for accuracy, ease of use and all-purpose application. With the SAATI guide, there is no guesswork or complicated interpretation. It is a more precise tool than the gelatin/density type exposure calculators, and unlike competitive products, it can be used on all stencil types and all mesh counts (other exposure guides are not compatible with pure photopolymer stencils, and do not perform as well on coarse mesh). Our 21-step guide is also much smaller (1/2" x 5 1/4"), so it can be used on all production screens. The SAATI Sensitivity Guide is a film containing a transmission type density scale with 21 steps ranging from transparent to opaque.

### **SAATI EXPOSURE CALCULATOR**

Optically clear litho positive film for determining the correct exposure time for any particular type of photostencil emulsions or capillary films.

It contains five identical columns of fine detail graphics. Four of these are covered with a neutral density filter with a different light transmission value, in order to obtain five different exposure times from one single exposure process.

With this all-in-one film, it is very easy to identify the correct exposure time for future stencil production and it substitutes the traditional, time consuming step wedge exposure process.

### **VIVIDIA PORTABLE DIGITAL HANDHELD MICROSCOPE**

The Vividia 3R-500UV Portable Handheld Digital Microscope has 3.5" LCD screen, up to 200x magnification, both white and UV LED lights, and 5MP sensors. Images and videos are saved on SD cards, and the microscope can be used on a PC through USB cable connection and included software. Vividia 3R-500UV are widely used in printing, forensic science, education, medical, manufacturing, electronics, hobby et

