

Spectrum 4

Process Multimeter for Knit Finishing



- MOISTURE •WET PICKUP
- NIP PRESSURES
- STRETCH/SHRINKAGE
- DUROMETER •TEMPERATURES

PLUG 'N READ

**INSTRUMENT RECOGNIZES PROBE,
CALIBRATES ITSELF!**

FOR EXTRACTORS, DRYERS, STENTERS, COMPACTORS

DOWNLOAD TO YOUR PC AND GET YOUR OWN PRINTOUT!



MOISTURE / WET PICKUP



NIP PRESSURE



STRETCH &
SHRINKAGE



DUROMETER



TEMPERATURES



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Spectrum 4

PORTABLE PROCESS MULTIMETER FOR KNIT FINISHING

On-line instruments just can't see into the nooks and crannies of knit finishing ranges like the SPECTRUM 4, which opens continuous finishing processes to regular audits. Take your measurements and download them into your PC for the kind of printout you've always wanted.

MOISTURE... Walk the Hand Roll, Type HR-20-S, across the open width fabrics. Look for side-center-side variations and wet and dry streaks. On tubular dryers, check moisture in each strand after drying. Check for wet edges and strands. On compactors, check moisture at machine entry for proper level for compaction. Check fleece fabrics at compactor exit to ensure good performance on the napper.

WET PICKUP... Use the Hand Roll, Type HR-20-S, to check high moisture content in fabric after wetting, dyeing and dampening. Find dry spots and uneven moisture profile across the width. Check the moisture between drying zones for proper drying gradient. Check wet pickup on hydroextractors and at dryer entry and more!

NIP PRESSURES... Between batches, use the Squeeze Roll Pressure Sensor, Type 8845, to get numerical pressure readings from side to side. The slightest misalignment makes a big difference in wet pickup profile. Watch out for wear. Know when to regrind the rolls.

STRETCH/SHRINKAGE... Walk the Speed Sensor, Type 8840, from the machine entry to exit, from let off to the padder, through drying, to take up. It memorizes each speed reading and automatically calculates stretch/shrinkage to the nearest tenth of a percent. Check overfeed on tenter frames and hot air dryers. Many fabrics tend to stretch after wetting and shrink after drying. Check the process section by section to ensure proper tension distribution. Check for proper stretching on hydroextractors. Check compactors to verify that the applied shrinkage is correct!

CONTACT TEMPERATURE... Immerse the Temperature Sensor, Type 8842, in the dye, wash and rinse boxes, touch the dry cans, also motors and gear boxes. It's a fast response contact temperature sensor.

NON-CONTACT TEMPERATURE... Use the radiation pyrometer, Infratemp, Type M-50, on inaccessible surfaces, especially when they are in motion. Get instant readings of fabric temperature, can surface temperatures, and the temperatures of motors and gear boxes.

AUDIT THE PROCESS... Use standard process audit forms to periodically review each process. Find process problems that your on-line instruments and your operators cannot see! Store the data in your PC and use trends to identify problems before they cause damage. Use the Spectrum 4 to develop process optimization strategies... and check them after implementation!

-SPECIFICATIONS-

POWER REQUIREMENTS... Battery operated 4 size AA, line powered 115/230 volts a-c, turns off automatically when not in use

WEIGHT... 0.57 kg (1.25 lb), sensors separately listed

DIMENSIONS... 216 mm (8.5") high, 112 mm (4.4") wide, 41 mm (1.6") deep

HOUSING... ABS plastic

KEYBOARD... Polycarbonate covered, tactile-feel

DISPLAY... Liquid crystal, 70 x 38 mm (2.75" x 1.5"), digital with analog bar graph

RECALL... Minimum and maximum readings, other recalls specified for certain sensors

MENUS... Keyboard selection

STORAGE... 100 data points for downloading to PC

OUTPUTS... RS-232 serial communications



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