Courses-Plus Monitor



Courses-Plus Monitor INDICATING CONTROLLER, MODEL 1675

> An economical solution for all your process control needs.

INDICATING CONTROLLER, MODEL 1675 FOR KNIT FINISHING MACHINERY

## CONSTANT RESIDUAL SHRINKAGE AND FINISHED WIDTH YOU CAN CALL UP BY STYLE NUMBER!



LASER PICK/COURSE SENSOR TYPE 6307

A dynamic shrinkage control that takes into

account machine-state courses by style number minus an exact measure of the ones you inconsistently lose in processing. It gives you the *right* course count at *constant* residual shrinkage.

Real-time fabric width monitoring and control puts an end to excessive variations in finished width.

Expansion possibilities include monitoring of moisture, wet pickup, fabric density, overfeed, tension, surface temperature, dwell, exhaust humidity, seam detection and MORE!



## STRANDBERG ENGINEERING LABORATORIES, INC.

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## -GENERAL INFORMATION-

If you apply a constant percentage of shrinkage to fabric that has been stretched various percentages since it was knitted, you will get various percentages of residual shrinkage and course counts in your finished fabric.

But, if you apply a variable percentage of shrinkage based on the running difference between machine-state and on-line course counts, you will achieve virtually constant residual shrinkage and course count in your finished fabric.

The difference is phenomenal, like night and day!

The fact that you can set-point control these qualities and even call them up by style number is even more phenomenal. It absolutely maximizes your yield, while it gives your customer an advantage he has never had before.

It's called dynamic shrinkage control or "Courses-Plus", another Strandberg first.

It's easy to apply. Simply enter your target and machine-state course counts by style number. Then, call them up by style number on the job. The rest is automatic.

Strandberg's new, hermetically sealed and nitrogen gas filled Laser Pick/ Course Sensor requires only grazing contact with one side of the fabric. Its count is gated by one of Strandberg's precision displacement sensors, such as the one shown below, to display courses to the nearest tenth per inch or centimeter at top processing speeds. Robust sensor design allows installation in the harshest processing environments.



DISPLACEMENT SENSOR TYPE R-90-200

Strandberg's Fabric Width Sensor, with decades of proven performance, provides mesurement accuracy of 0.1-inch (2.5 mm). A vertically aligned array of optical sensors allows accurate width measurement unaffected by changes in fabric position.

Use the "Courses Plus" Model 1675, with trend graphics, on stenters and compactors or just about anywhere you want to monitor the course count going in and coming out, simultaneously. (Pushbutton recall of style-based set points for up to 24 measurement and control loops) Download your set points from a higher-level system running Strandberg's QC-Master Windows-95 Supervisory Software. Connect a printer to prove you did the job right.

## -SPECIFICATIONS-

Power Requirements	85-265 volts, 50/60 Hz
Weights and Dimensions	Indicating Controller, Model 1675 12.0 lbs. (5.5kg), 12.5" (318mm) high, 10.9" (277mm) wide, and 6.25" (159mm) deep
	Course Sensor, Type 6307 8.5 lbs. (3.9kg), 4.2" (107mm) high, 8.3" (210mm) wide, and 6.3" (160mm) deep
	Displacement Sensor, Type R-90-200 3.5 lbs. (1.6kg), 11" (280mm) long, and 7.6" (193mm) wide
	Interface, Type 6928 2.9 lbs. (1.3kg), 10.2" (259mm) high, 6.9" (175mm) wide, and 4.4" (112mm) deep
	Width Sensor, Series 2400 with Type WMI-240 Interface (various sensor configurations)
Housings	Indicating Controller, Model 1675, and Interface, Type 6928, fiber-glass NEMA- 4X with hinged cover for use in wet processing areas
	Sensor, Type 6307, cast aluminum/ stainless-steel face, water tight
Principle of Operation	Impulses from laser reflectance, gated by successive lengths
Range	0.0 - 200.0 or more courses per inch or centimeter
Control	Set points and tolerances in tenth course steps , step and PID corrections, Drive Speed Control, Type 6267, for AC and DC drives and Control Motor, Type CM-92, for PIV's, includes chain, sprockets, and override push-button station
Display	Liquid Crystal, 4.8" x 2.4" (120 x 60mm)
Outputs	0-10 volts and 4-20 mA d-c for recorders, etc., RS-232 for printers and other serial devices, and RS-485 for networking , 4-20 mA d-c proportional to skew angle
Accuracy	±0.1 course per inch or centimeter



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