

PERFECTING NIP ROLLER ALIGNMENT



The new Mini Sigma-Nip[®] is ideal for:

O Calender rolls

NEW for Smaller Nips

- **13** Hard rolls in the center press
- Any bone-hard, low durometer polymer or ceramic roll interface

DSIGMANIE

10 Rolls with circumferences smaller than 20" (51cm)

Mini Sigma-Nip[®] — an electronic nip analysis system, calculates and records nip width at multiple points across your rollers face length in real-time with unprecedented speed, accuracy and repeatability. The New Mini Sigma-Nip[®] system is not only more accurate, but can record narrower nip widths then ever previously attainable!

Mini Sigma-Nip[®] presents a revolution in quality control. Now, for the first time ever the technician is able to accurately, efficiently and economically measure roller profiles and alignment conditions. Mini Sigma-Nip[®] consists of a series of thin-film resistive ink transducers on a carrier sheet. As this carrier sheet is placed in between your rollers the Windows based software assimilates the readings into easily interpretable graphical images – all in real-time.

A REVOLUTION IN QUALITY CONTROL



WHAT IS MINI SIGMA-NIP[®]?

Mini Sigma-Nip[®] consists of a series of sensor elements that are placed in between two contacting rollers. Immediately upon the application of force, the sensor reveals the precise indication of nip contact width occurring – allowing you to instantaneously determine whether your rollers are aligned properly and are squeezing together sufficiently. Mini Sigma-Nip[®] is a real-time system. What that means is that your roller adjustments can be made WHILE the sensor is actually in the closed (but non-rotating) nip. This allows for unprecedented flexibility and speed.



DESIGNED FOR PRODUCTIVITY

Mini Sigma-Nip[®] comes complete with everything you need to quickly and accurately take nip impressions.

Mini Sigma-Nip[®] is designed with the intention of being used during routine maintenance or setup and is unfurled across the roller surface by just one person. The system is modular, portable and quickly connects to the USB port on any standard Windows laptop.



WHY USE MINI SIGMA-NIP[®]?

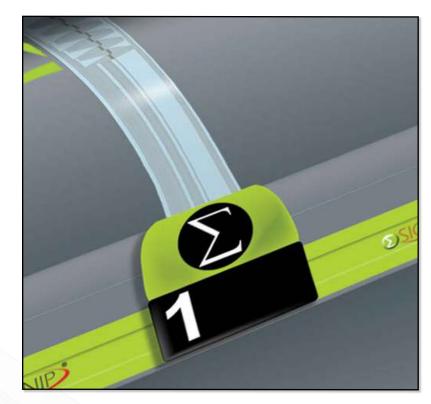
Proper roller alignment and nip force are necessary for optimal web control. An evenly loaded roller set is much less likely to cause costly web breaks and sheet "walking", wrinkles, or fold-overs. Additionally where felts are used, Mini Sigma-Nip[®] allows the user to greatly extend blanket life.



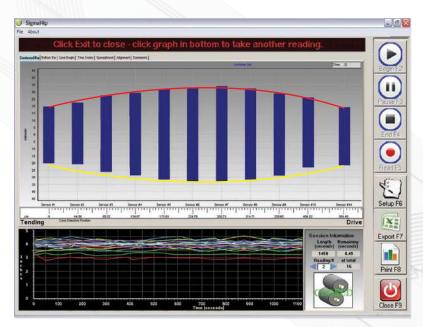
MINI SIGMA-NIP® TECHNOLOGY

Through the application of sophisticated mathematical algorithms, Mini Sigma-Nip[®] is able to discern the nip profile between nip rolls with a high degree of accuracy never before attainable. Each sensor is individually calibrated, serialized and carefully assembled to exacting tolerances. The sensor is designed to repeatedly withstand exposure to greases, solvents and crushing pressure.

SYSTEM SPECIFICATIONS		
Sensor Technology	Resistive Ink	
Cycle Speed	1 FPS	
Accuracy	± 6%	
Repeatability	± 98%	
Disk Space	200 MB	
RAM Size	128 MB RAM	
Connection	USB Port	
Compatibility	Windows [®] 2000/XP/Vista/7	

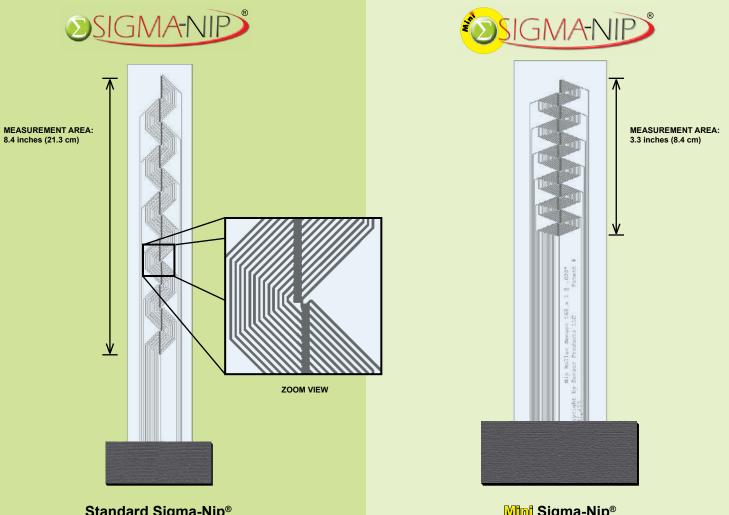


Close up view of single sensor node



Highly detailed information about your nip condition

A REVOLUTION IN QUALITY CONTROL



••••••	 •.g	

Mini Sigma-Nip®

SENSOR SPECIFICATIONS				
	Standard Sigma-Nip [®]	Mini Sigma-Nip®		
Active Sensor Area	8.4 in (21.3 cm)	3.3 in (8.4 cm)		
Sensor Thickness	15 mils (0.381 mm)	15 mils (0.381 mm)		
Temp. Range	0 to 300°F (-17.7 to 149°C)	0 to 300°F (-17.7 to 149°C)		
Resolution	0.05 in (0.13 cm)	0.02 in (0.5 mm)		
Nip Width Range	0.15 to 8.4 in (0.38 to 21.3 cm)	0.06 to 3.3 in (0.15 to 8.4 cm)		
Min. Pressure	40 PSI (2.8 kg/cm ²)	40 PSI (2.8 kg/cm ²)		
Max. Pressure	10,000 PSI (703 kg/cm ²)	10,000 PSI (703 kg/cm ²)		
Sensing Points	168	168		
Weight per Element	8 oz (226.8 gr)	4 oz (113.4 gr)		
Material	PET	PET		



Sensor Products Inc. 300 Madison Avenue Madison, NJ 07940 USA Phone: 1.973.884.1755 Fax: 1.973.884.1699 info@sensorprod.com

www.sensorprod.com