

Roll alignment made easy

Sensor Products Inc. has introduced a new device called **Mini Sigma-Nip**, an electronic nip analysis system which measures roller profiles and diagnoses roll alignment. While its "bigger brother" **Sigma-Nip** is suitable for the characterisation of profiles for large rolls, Mini Sigma-Nip provides a solution for measuring nip widths of rolls with circumferences smaller than 51cm/20". The company says, that for the first time ever large bone-hard rolls with narrow contact areas can also be characterised by an electronic system.

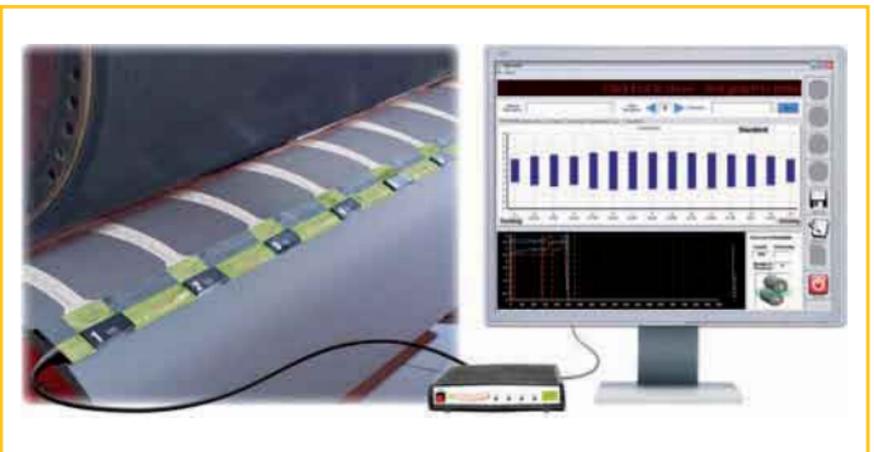
Mini Sigma-Nip's sensors capture data and record nip width readings while being viewed on a laptop containing its Windows-based software. Adjustments to load are made in real time while the sensors are in the closed, (non-rotating) nip. Problems with alignment, skewing, and crown deficiencies are quickly exposed. Software enhancements include a Comparison Mode, where up to three nip width readings can be viewed simultaneously, and an

Alignment Tool, which instantly draws a line to indicate nip width variations.

In Mini Sigma-Nip, the 168 microscopic sensor points that comprise each finger are densely packed within a smaller (8.4 cm/3.3 in) active sensing area. This yields nip measurements with 2.5 times the resolution of the larger Sigma-Nip, which is a powerful new diagnostic tool that is principally used for pulp & paper manufacture and some converting operations.

The device can be especially useful for continuous maintenance, as well as during equipment setup and shutdown. Data that has been stored can be easily reviewed. Blanket life is extended by virtue of routine tests. Web control is improved as evenly loaded roller sets are much less likely to cause web breaks and costly down time. Uneven material pulling, sheet walking, wrinkles, jams and print misregistration are greatly reduced.

Mini-Sigma Nip sensors and software provide detailed analysis of nip condition



Established in 1990 and headquartered in New Jersey Sensor Products Inc. is a specialist in the manufacture and distribution of tactile pressure sensing solutions. The devices are used in applications from tyre testing to semiconductor manufacturing, from R & D labs to space missions.