

Accessories & Options

Spider



Bolzoni Auramo Spider electronically measures variations in the radius of paper rolls, to determine the degree of out-of-roundness.

The Spider utilizes state-of-the-art microprocessing ultrasonic technology. It is used to quickly and accurately measure the roundness of a paper roll, without destroying the roll or the roll wrapping.

The test results can be viewed on an LCD display, or they can be directed to a computer for further analysis.



Spider - out of roundness measuring device

The Out-of-roundness Problem

Out-of-roundness is one of the most costly types of damage that a paper roll can be subjected to during its journey from paper mill to end-user. What makes this especially costly is that often the damage is not discovered until the roll has been positioned on a high-speed, web-fed printing press. At this point, the print run must be stopped and the damaged roll returned.

Transport Quality

As the international quality standards are being universally adopted within the world-wide paper industry, paper mills will soon be required to assure the quality of their paper roll products throughout the transportation chain - from mill to end-user.

Printers are also being compelled to set tolerance limits for out-of-roundness and to perform random inspections of incoming paper to verify roundness.

Until now, no accurate and easy-to-use device has been available for onsite measurement of paper-roll roundness.

The "Spider" Solution

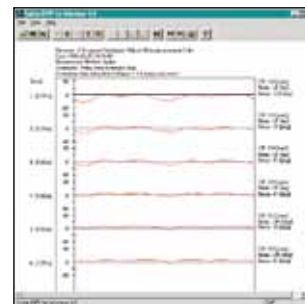
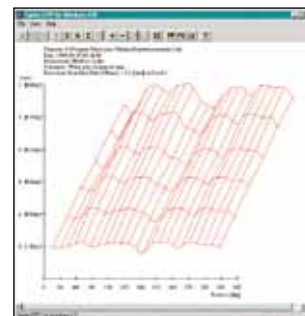
Finally, there's an answer, Bolzoni Auramo's all-new Spider utilizes state-of-the-art microprocessing and ultrasonic-sound technology to quickly and accurately measure the roundness of a paper roll, without destroying the integrity or the roll wrapping. The test results can be viewed on an LCD display-on-site or directed to a printer or a computer disk for further analysis.



The measurement process, utilizing the light-weight, compact Spider, is extremely easy. The Spider's aluminum frame is placed on top of the paper roll and secured with three extendable "legs", without damaging the wrapping. Precise positioning is not critical. Any misalignment between the center line of the roll and the Spider will be compensated automatically by the analysis program. After properly positioning the ultrasonic transducer, the power is switched on and the transducer is rotated 360° around the roll. During this rotation, the distance from the transducer to the roll is measured and stored in the memory of the control unit at four-degree intervals at an average accuracy of 0.0039".

A total of 10 levels can be measured from one paper roll.

When the desired number of levels have been measured, the stored data is analyzed with just a push of a button. The out-of-roundness information at each measurement level is then displayed on the Spider's LCD display.



Once the stored data has been downloaded into a standard PC for further analysis and printing, a graphic representation of the surface profile is displayed at each measurement level, with calculated values of maximum out-of-roundness deviations.

Technical Specifications:

Maximum Roll Diameter Range	23.6" - 63"
Roll Width Range	11.8" - 72.8"
Maximum Measurement Levels/Roll	0.39" at 7.87" intervals
Measuring Method	Ultrasonic sound
Measuring Accuracy	0.0079"
Output Devices	Internal LCD display, External PC/graphics display, Printer
Power Source	Rechargeable 12-volt battery
Battery Duration	8 hours of continuous operation
Optional Requirements	Windows 95, Windows 98 or Windows NT 4.0, Spider Data Processing Program (DPP)
Accessories Included	User licence for the DPP, Cable for optional external PC, Portable battery charger, Carrying case & User manual
Options	Core probe