

PWT/Schönthaler Roll Calipers RollTrack® Recording Systems

A complete line of roll calipers and recording systems

Results:

Maximum Height: in @ Location: in
Measured Crown: in
Measured Taper: in

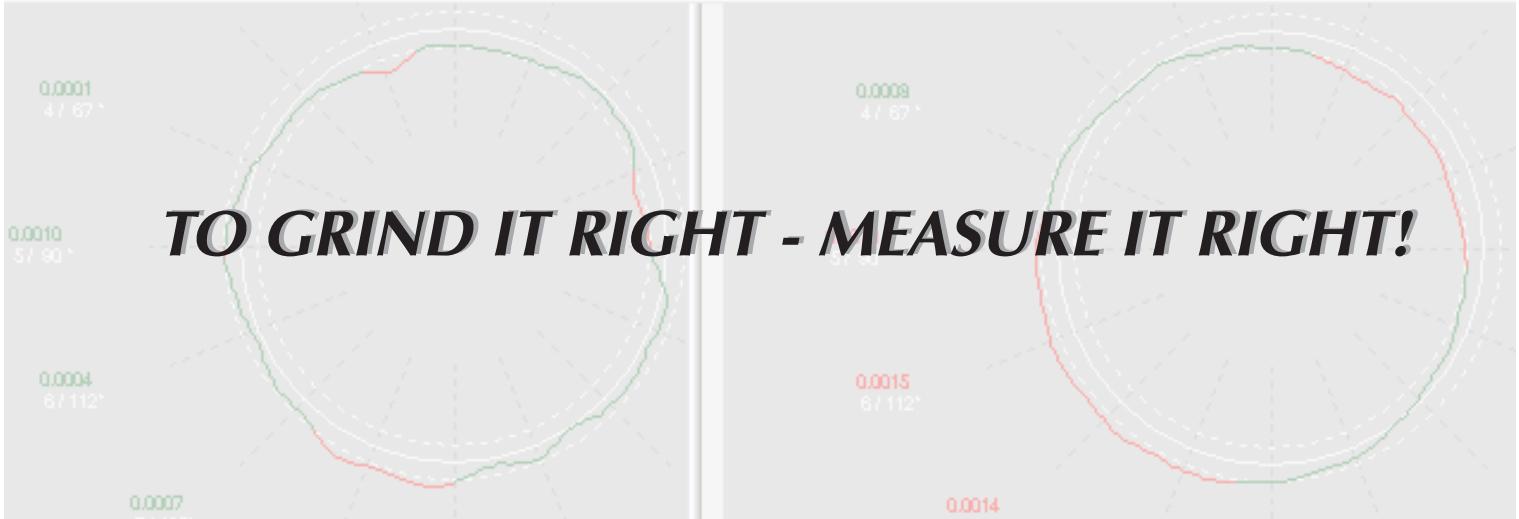
All PWT/Schönthaler roll calipers and RollTrack® recorders have been designed to meet the customer quality and tight mechanical accuracy requirements, and repeatability specs. The top of the line recording systems also are user friendly.

PC based recording system displays measurement results graphically and the reports can be printed with entered or saved roll and customer data. High resolution graphs are great tools for diagnostic analysis.

Results:

Maximum Deviation: in @ Location: in
Minimum Deviation: in @ Location: in
Maximum Difference: in
Measured Taper: in

TO GRIND IT RIGHT - MEASURE IT RIGHT!



PWT/Schönthaler RollTrack®

General

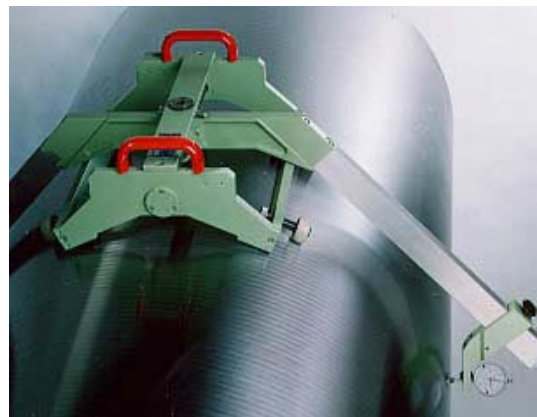
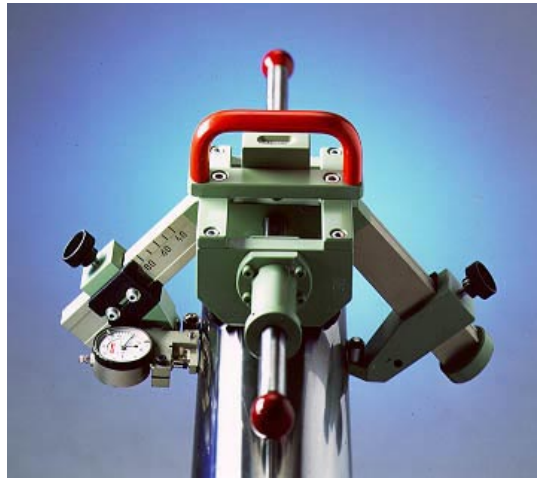
The end users of paper, steel and aluminum are continuously tightening the profile tolerances of the product sheet they are using in their processes. The speeds of the production lines are increasing. The machines also are bigger and wider. These are some of the reasons rolls have to be maintained within tight, consistent tolerance bands.

Paper, steel and aluminum makers use roll nips to form a good sheet profile. A roll profile, roundness, and the rotation of the surface of the roll, are most important to create a uniform nip. The goal is as straight or uniform a nip as possible in operating conditions. The mill operators have to define the target shapes of rolls in various positions. And equally importantly, they have to know reliably how close to the targets the rolls are reground by the roll grinding operation.

The rolls have to be measured accurately before, during, and after grinding. Proper measuring equipment helps roll grinder operators in regrinding the rolls more accurately and faster. Roll cover life can be prolonged considerably by removing less stock by controlling the roll grinder better due to better measuring capability.

Preventative maintenance

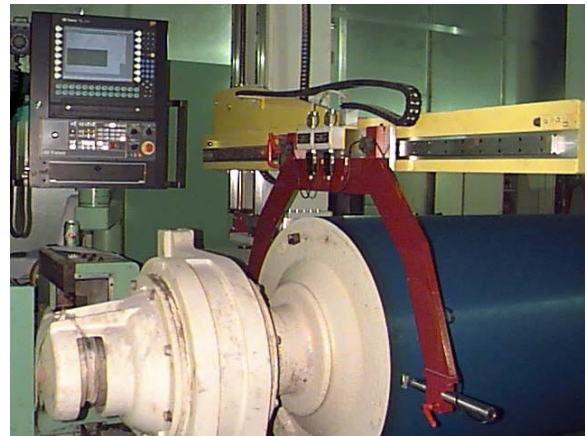
The top of the line RollTrack® recording systems are great diagnostics tools for trouble shooting paper machine, roll wear, and bearing problems. E.g., measurement results of worn rolls taken from a machine can easily be compared on the display, or using print-outs, to shapes after grinding, to saved previous shapes, and to saved or real-time roll rotation graphs. The problems can be correlated to their sources. Likewise, roll grinder problems, such as misalignment of ways can be detected analyzing continuous measurement graphs.



Manual saddle mikes

There are a total of fourteen standard caliper sizes from 4" (100mm) up to 90" (2200mm) in roll diameter. Special attention has been given to a rigid design, and tight position and rotation tolerances of the wheel assembly making it easy to keep the caliper level when traversing it across a roll. The precision base design has proven that repeatability of roll measurements need not be operator dependent.

Dial indicators, electronic gage heads with digital displays, and PC based recording systems can be used to record measurement results.



Machine mounted roll calipers

PWT/Schönthaler machine mounted models take the last possibilities of human errors out of roll measurement. Measurement accuracy is even better than that of saddle mikes due to a two probe measurement principle. All machine made recording and reporting guarantee reliable measurement reports. The measurement modes are: two-point profile, two-point crown, two- or one-point roundness, and one-point T.I.R (concentricity) measurements.

The post/arm assembly type of a roll caliper is usually mounted on the carriage of a single wheel roll grinder. Motorized, two-speed vertical movement, anti-friction slide base, and ease of handling are some of the features of the machine mounted models.



Special design brackets with the RollTrack® recording system for mounting on the Farrel two-wheel roll grinders were designed by customer demand. The brackets mount right on the wheel guards of the wheel head assemblies using the swing-rest of the Farrel roll grinder as a "measurement arm". Any inaccuracies from the ways of a roll grinder are eliminated by a two-point measurement principle. This principle applies to the post/arm models, too.



RollTrack®

Measurement Info:

Report Data:

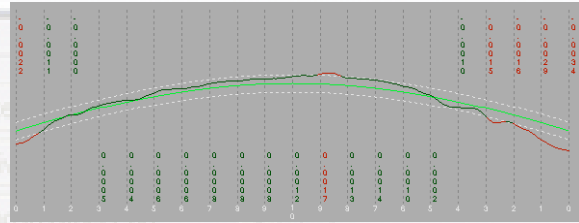
RollTrack® is a PC based recording system which can be used with any type of the previously described roll calipers. It displays the measured results both in graphic and numeric forms. The elaborate reports can be saved on a hard disk, and can also be printed out. The system keeps track of the roll data by roll numbers as well as measurement results to create a manufacturing data base for quality and process control, and diagnostic purposes.

The software has an extensive array of parameters providing the user with tools to customize both measurement related and general environment information, such as installed hardware, etc.

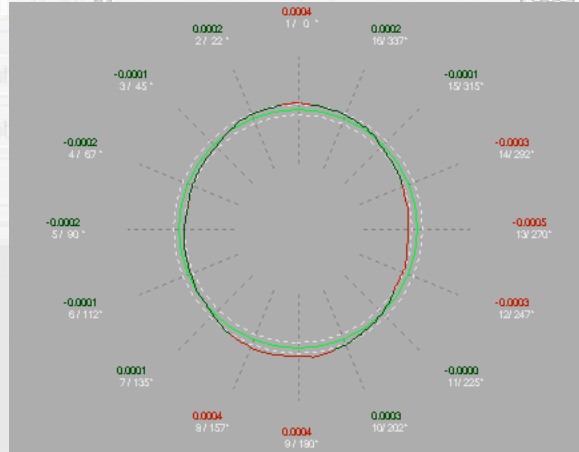
RollTrack® software includes the following measurement modes: Profile, Crown, Compound Crown, Concentricity, and Roundness. Taper, maximum difference or total crown with high and low values and their locations are recorded automatically.

A measurement graph with target and tolerance lines are displayed. Tolerance band, scale and number of stations can be altered before or after saving a report. A measurement pass can start from the roll center or end, making it possible to reach both roll ends of a roll regardless of the type of roll caliper in use.

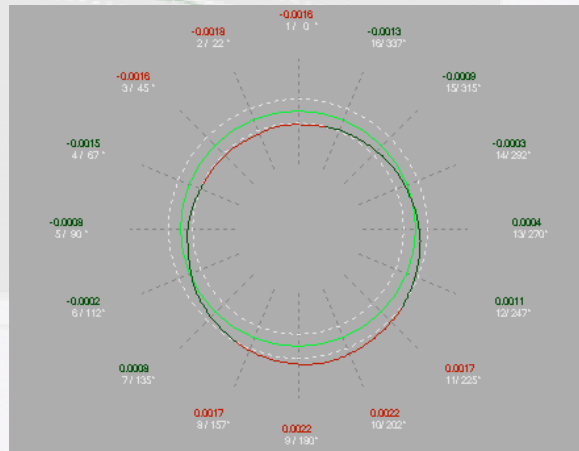
One RollTrack® recording system can be used with two roll grinders, if they are situated relatively close to each other. A portable model with a data acquisition computer can be used in off-grinder, portable applications. A special measuring head is available for barring measurements.



Crown report graph.



Roundness report graph.



Concentricity report graph.

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