

Electronic Roll Profiling Systems

Reliability, Repeatability and 3-Button Routine Operation

PRO-MIC Rolling Caliper

The **PRO-MIC Rolling Caliper** is a special approach to roll profiling using an opposed measurement probe configuration.

This new generation of PRO-MIC Systems is designed around the two ideals that matter most to our customers - **Light Weight and Repeatability**.

Using the new PRO-MIC Digital Electronics in a special **Opposed Probe** configuration and an all new mechanical design, PRO-MIC has put together a system that is truly <u>light weight and easy to use</u>.

Our test roll measurement results show repeatable measurements as good as 50 millionths of an inch. (That's 0.000050" across a profile of nearly 400 measurements.)

The Rolling Caliper's short $4^{"}/100$ mm wheelbase lets it measure as close as $2^{"}/50$ mm to the ends of the roll.

The PRO-MIC measures change in diameter up to 10 times per inch with a resolution of 0.000020" and a guaranteed repeatability of +/-0.0001". Crowns up to 0.400" can be easily measured. The High Resolution upgrade provides 0.000005"/0.0001mm resolution.

In metric mode, the standard PRO-MIC measures change in diameter up to each 2mm of travel with a resolution of 0.0005mm and a guaranteed repeatability of +/-0.0025mm.

Upgrades provide a host of optional features including:

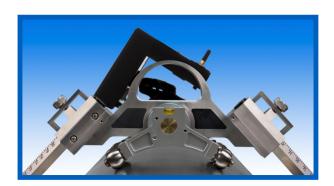
Bluetooth Wireless Communication Roll Temperature Measurement Concentricity measurement Roll Shape Analysis

The System can be connected to any one of PRO-MIC's software systems for electronic storage and recall of profiles, SPC Analysis, Shape Analysis, Target Shape comparisons and roll wear analysis.

Call us, or call any one of the more than 950 satisfied PRO-MIC users. Any of us would be happy to talk with you about our Systems.



8" to 32" PRO-MIC Rolling Caliper **Weight: 11 lbs.**4" Wheelbase



8" to 32" PRO-MIC Rolling Caliper Side view showing new Arc-Handle

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PRO-MIC Rolling Caliper System II

System Description

The PRO-MIC Roll Profiling systems are the industry standard for portable electronic roll profiling equipment. More than 950 PRO-MIC systems are in use worldwide each day.

The PRO-MIC Lightweight Series systems are saddle micrometer based, measuring change in diameter up to 10 times per inch (2mm) of travel along the roll face to a standard resolution of 0.000020" (0.0005mm).

All PRO-MIC Systems provide reliability, repeatability and 3-button routine operation making them an easy addition to any quality conscious roll shop.

System Components

- 1. Precision PRO-MIC Rolling Caliper Frame
- 2. PRO-MIC Digital Opposed Probe Electronics package.
- 3. PRO-MIC Charger/Interface.
- 4. Printer for hard copy output.
- 5. Set of wrenches required for assembly.
- 6. ISOBAR surge protector.
- 7. Instruction manual with calibration data.
- 8. Full 6-month defect and performance guarantee on all components excluding Digital Probes.

Physical Data

System Design: PRO-MIC Rolling Caliper

Diameter Range	Weight	Wheelbase	From End of Roll
4" to 22" (100 to 560mm)	8.0 lbs (3.6 kg)	4" (101mm)	2" (50mm)
8" to 32" (200 to 800mm)	9.0 lbs (4.0 kg)	4" (101mm)	2" (50mm)
8" to 40" (200 to 1015mm)	10.0 lbs (4.5 kg)	4" (101mm)	2" (50mm)
16" to 48" (400 to 1200mm)	19.0 lbs (8.6 kg)	4" (101mm)	2" (50mm)
16" to 64" (400 to 1600mm)	20.0 lbs (9.0 kg)	4" (101mm)	2" (50mm)
20" to 68" (500 to 1725mm)	29.0 lbs (13.0 kg)	6" (152mm)	3" (76mm)

Electronic Data

System Design: PRO-MIC Digital Electronics Package Series 6000

User selectable inch or millimeter units.

Probes: Measurement Range: +/-0.200 (0.400" max) / +/-5.0mm (10mm max)

 Resolution:
 0.000020" / 0.0005mm

 Repeatability:
 +/-0.0001" / +/-0.0025mm

 Optional Resolution:
 0.000005"/0.000125mm

Measurement Frequency: User Selectable: 0.1", 0.2", 0.25", 0.5" (2mm, 5mm, 10mm, 20mm)

System Options

Bluetooth Wireless: Provides wireless Bluetooth Communication between the PRO-MIC and your PC. (TN-023BT)

PC Software Systems: Store and retrieve profiles electronically; analyze roll shapes and grinding accuracy.

PRO-MIC Quantum Software. TN-007T

PRO-MIC Shape Analysis: Diagnose grinding machine problems by separating profiles into

Taper, Crown, Symmetry and Shape. TN-010

High Resolution Option: Switch between standard measurement probes and high-resolution (0.000005"/0.000125mm)

using one electronics.

Transferable Electronics: Share one PRO-MIC electronics between two mechanical systems.