

# PRO-MIC

Electronic Roll Measurement Systems

## PRO-MIC Mini-Z TRUE End-to-End System II

The PRO-MIC Mini-Z TRUE End-to-End provides the state of the art in roll profiling technology -- for Sendzimir Mill rolls.

This exclusive version of our all new miniature mechanical designs is intended specifically to measure the small diameter mill rolls quickly and reliably - from End-to-End.

Mini-Z systems are hand held and portable so rolls can be measured anywhere: in the grinder, in racks or stands, just before installation or just after a roll change.

The PRO-MIC Mini-Z uses the same tried and proven PRO-MIC electronics in use in more than 500 locations world wide, but with a convenient off-board configuration.

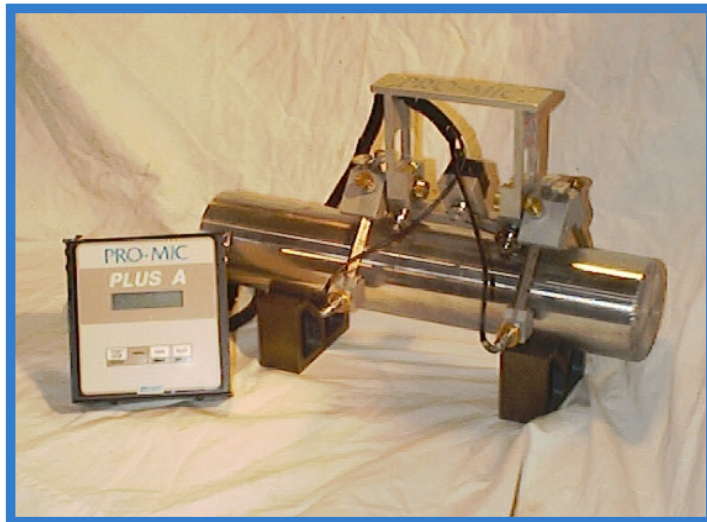
Mini-Z standard size ranges are: 1" to 4", 1.5" to 7" and 2.5" to 9". Custom sizes are available.

All PRO-MIC units measure change in diameter up to 10 times per inch of travel with a resolution of 0.000020" and repeatability of  $\pm 0.0001$ ". High Resolution packages are available.

On-board Roll Model shape analysis will give you the ability to separate your profiles into four distinct elements: TAPER, CROWN, SYMMETRY and SHAPE and help you diagnose roll grinder problems.

Computer based systems provide instant profile storage and recall, track the history of each stored roll and allow multiple profiles to be displayed and compared simultaneously. Analysis using sine, parabolic, taper-flat-taper and CVC shapes will compare a roll's ground shape to the perfect target profile for that grinding.

If you have questions, or would like to see a PRO-MIC Mini-Z demonstrated in your own shop, on your own rolls, call us. We will be happy to talk with you about our systems.



**1" to 4" PRO-MIC Mini-Z Saddle  
TRUE End-to-End Design  
Shown on 2.5" O.D. Roll**

# PRO-MIC Mini-Z TRUE End-to-End

## System Description

The PRO-MIC Mini-Z Systems are miniature versions of the industry standard PRO-MIC TRUE End-to-End designed to measure profiles of small diameter mill rolls (<1" to 9" OD).

These PRO-MIC Systems are saddle micrometer based, and measure change in diameter 5 times per inch of travel along the roll face to a standard resolution of 0.000020".

All PRO-MIC Systems are based upon Reliability, Repeatability and 3-Button routine operation which makes them an easy addition to any quality conscious rollshop.

## System Components

1. Precision PRO-MIC Saddle Micrometer.
2. PRO-MIC TRUE End-to-End electronics package.
3. PRO-MIC Charger/Interface.
4. Lesmark Optracolor 45 printer for color output.
5. 500 copies of Roll Profile Report.
6. Set of wrenches required for assembly.
7. ISOBAR surge protector.
8. Six month Electronic Maintenance Contract.
9. Instruction manual with calibration data.
10. Full 6-month defect and performance guarantee on all components excluding LVDTs.

## Physical Data

**System Design:** PRO-MIC TRUE End-to-End X-Caliper -- Miniature Version.

Diameter Range	Weight	Probe Spacing	Track	Roll Length Range
1" to 4" (25 to 100mm)	4 lbs. (9 kg)	6" (152mm)	0.9" (23mm)	12" to 500" (330 to 20000mm)
1.5" to 7" (38 to 178mm)	5 lbs (11 kg)	6" (152mm)	1.4" (36mm)	12" to 500" (330 to 20000mm)
2.5" to 9" (64 to 228mm)	6 lbs. (13 kg)	6" (152mm)	2.4" (61mm)	12" to 500" (330 to 20000mm)

## Electronic Data

**System Design:** PRO-MIC TRUE End-to-End Electronics Package  
Series 5000  
Hand Held Version

**Probes:** Measurement Range: +/- 0.040" (0.080" total)  
Resolution: 0.000020" (optional to 0.000005")  
Repeatability: +/-0.0001"

**Measurement Frequency:** 0.2" standard, 0.1" optional, 0.5" optional

**Output:** Direct to Lexmark OpraColor 45.  
Optional transfer to personal computer.  
8.5" x 11" Full graphical and 21 station data outputs available.

## System Options

**PRO-MIC PRO-FILER:** Hand held memory unit for temporarily storing groups of profiles.

**Computer Systems:** Store and retrieve profiles electronically; create a paperless rollshop.

**PRO-MIC System II.5:** Diagnose grinding machine problems by separating profiles into Taper, Crown, Symmetry and Shape.

**Switchable Probes:** Switch between standard measurement probes and high-resolution or long-throw probes using one electronics.

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