

# Profilometer

The **Bytewise Profilometer** and the accompanying **Profile Viewer software** combine to offer tire manufacturers an ultra-precise, *non-contact*, extrusion profile measurement system.



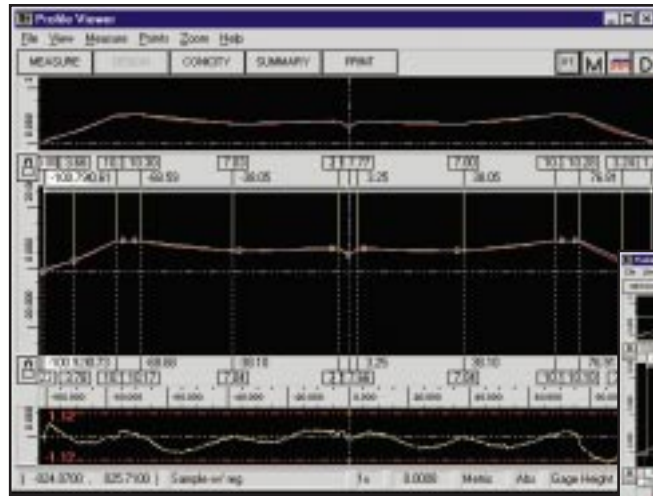
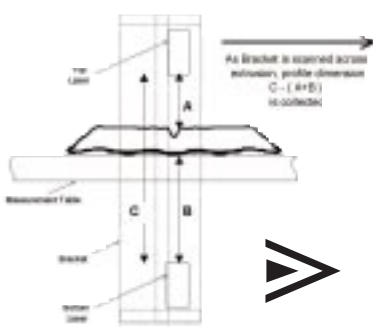
## Features & Benefits

- Overlays actual measurement onto extrusion design.
- Screen displays and reports compare design and actual measurements at any point on the extrusion.
- Conicity analysis allows accurate comparison of extrusion halves.
- Regional analysis allows detailed review of specific areas.
- Statistical analysis allows export of data for analysis in spreadsheet applications.
- Maintains the integrity of geometric extrusion profile with fewer die trials, conserving time and raw materials.
- Allows dies to be designed to increasingly tighter tolerances for materials that are more difficult to extrude uniformly.
- Identifies conicity problems early in the extrusion process, allowing for correction, and thus, saving time.
- Enables quick, easy and accurate detection of profile distortion, porosity changes, and weigh-scale drift.
- Improves quality assurance through extrusion process knowledge that can be quantified, not simply presumed.

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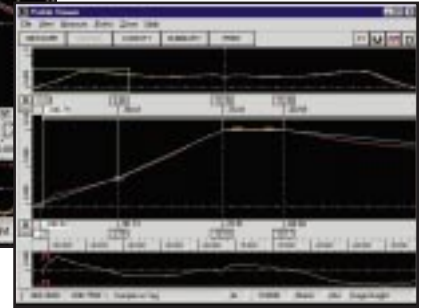
## Operational Overview

### How It Works



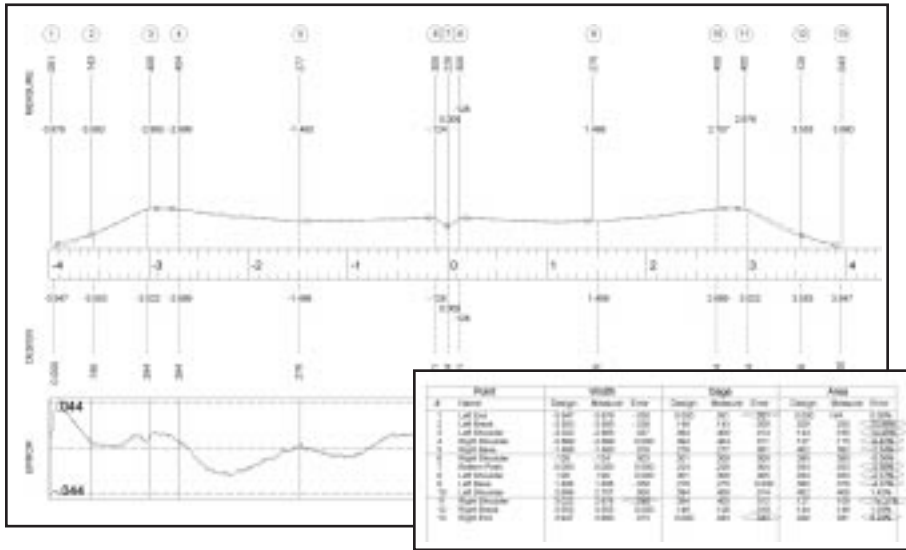
- A) Full Profile View
- B) Zoom View of Full Profile
- C) Graphical View of Conicity Effects
- D) Table View of Conicity Effects

A

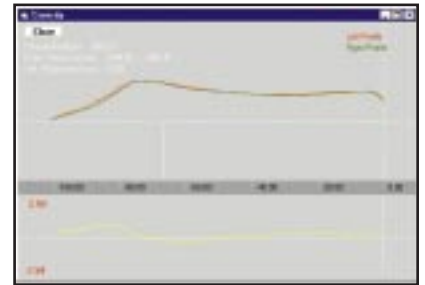


B

### Easy-to-Read Graphical Reports ...



... with measurement points summarized



C



D

## Specifications

Measurement Parameter	Car Tire Model	Truck Tire Model
Thickness Measurement Range	30mm	60mm
Width Measurement Range	600mm	900mm
Gage Repeatability on Flat Surfaces	<.0125mm	<.025mm
Gage Accuracy on Flat Surface	<.0125mm	<.025mm
Area Calculation Repeatability	<.25%	<.25%
Area Calculation Accuracy	<.25%	<.25%
Sample Interval (Width Resolution)	.1mm	.1mm
Measurement Spot Size	.3mm	.3mm
Dimensions (WxDxH)	1225 x 775 x 1400mm	1524 x 775 x 1400mm