

# CTWIST

## Circumferential Tread Wear Imaging System

The Bytewise CTWIST System enables tire wear and life projection analysis to be conducted with fast, accurate and operator-independent measurements. System applications include tire testing, OEM tire evaluation, and tire model development.

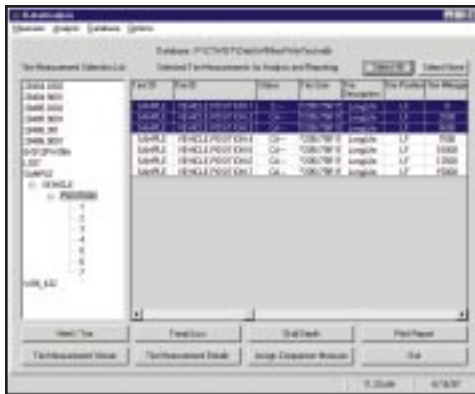


### Features & Benefits

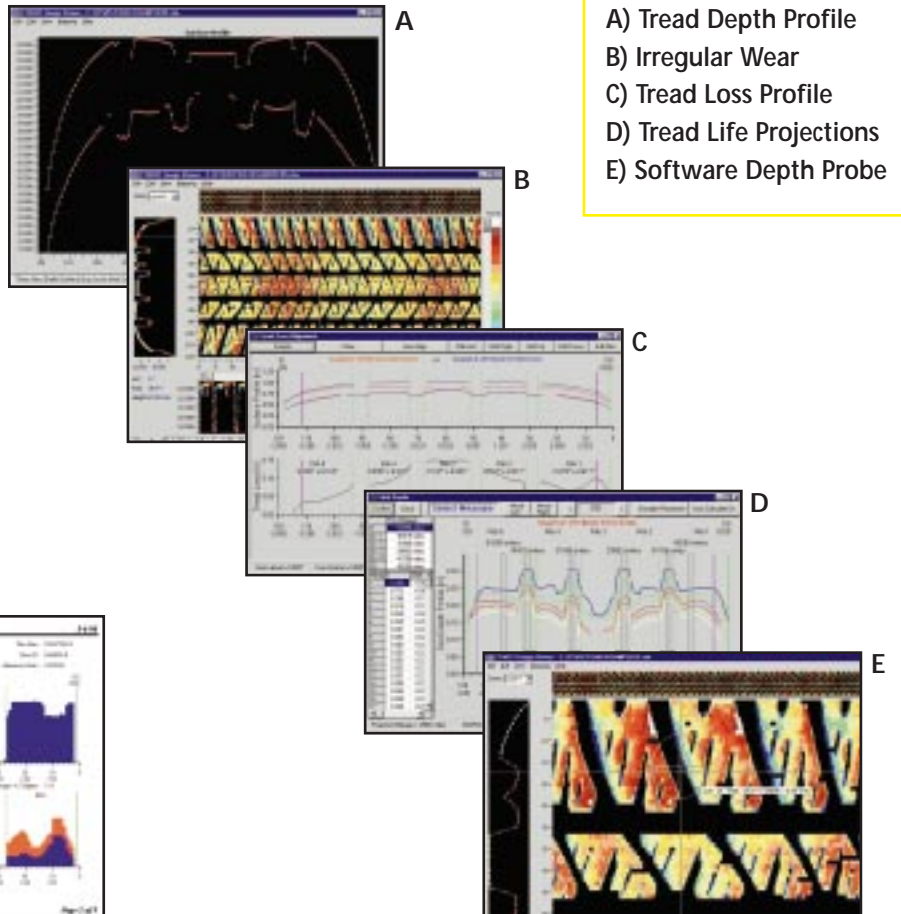
- Collects over 500,000 measuring points in less than 5 minutes.
- Utilizes high-speed laser triangulation sensor.
- Automatically calculates tire life projections from accurate measurements.
- Automatically calculates and displays regular and irregular wear indices.
- Provides graphical display of all wear types.
- Utilized by many leading automobile and tire manufacturers worldwide.
- Provides increased precision that enables rigorous data intensive wear calculations.
- Provides accurate, repeatable, non-contact measurements that are operator independent.
- Reduces analysis time and wear times requirements.
- Reduces analysis time and enables more thorough review of results.
- Provides excellent interpretation of wear patterns.
- Insures longevity and continual enhancements will be made as needed.

### Operational Overview

#### Data Manager

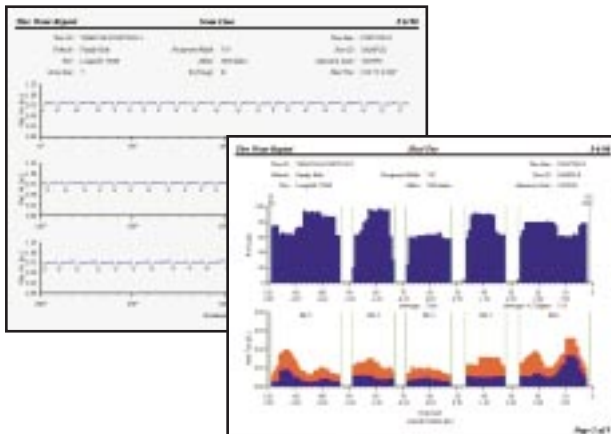


#### Imaging Information



- A) Tread Depth Profile
- B) Irregular Wear
- C) Tread Loss Profile
- D) Tread Life Projections
- E) Software Depth Probe

#### Screen or Paper Reports



### Specifications

|                       |   |                                     |
|-----------------------|---|-------------------------------------|
| System Specifications | Typical Measurement Time                  | 5 minutes                           |
|                       | Measurement Technology                    | Scanned Laser<br>Triangulation      |
|                       | Measurement Range                         | 32 mm                               |
|                       | Laser Standoff                            | 180mm                               |
|                       | Measurement Spot Diameter                 | .1mm                                |
|                       | Laser Classification                      | Class IIIb<br>Gallium Arsenide      |
|                       | Laser Resolution                          | <.008mm                             |
|                       | Data Signal                               | Digital with Invalid<br>Data Signal |
|                       | Data Points per Scan Line                 | 4096                                |
|                       | Typical Data File Size                    | 1Mb                                 |
|                       | Compatible Tire Radius Range              | 200 to 625mm                        |
|                       | Compatible Tire Widths                    | Up to 400mm                         |
|                       | Maximum Tire and Wheel<br>Assembly Weight | 100kg                               |
|                       | Maximum Tire Rotation Speed               | 120 RPM                             |
|                       | Machine Dimensions (WxDxH)                | 1000mm x 1150mm x 900mm             |