



**California**

501 Park Way  
 Mill Valley, California 94941  
 Telephone: (415) 383-0570  
 Facsimile: (415) 358-4340

**Kansas**

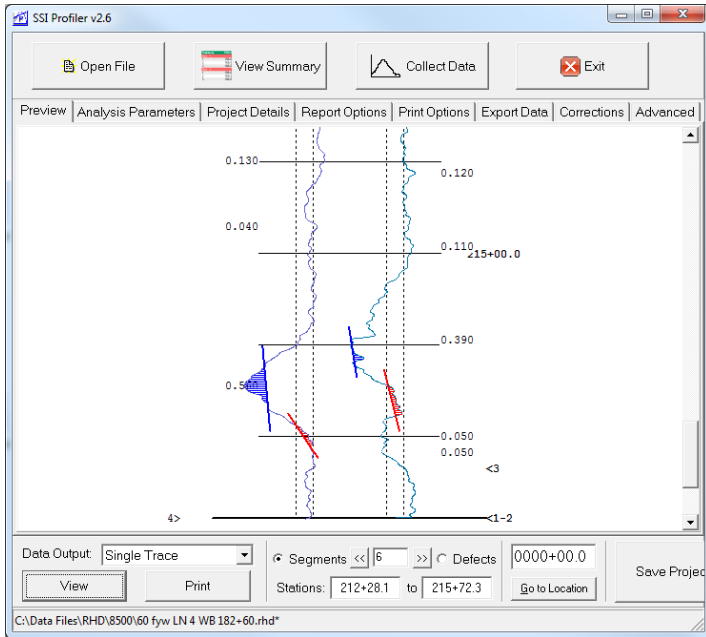
307 Plymate Lane  
 Manhattan, Kansas 66502  
 Telephone: (785) 539-6305  
 Facsimile: (415) 358-4340

**SURFACE SYSTEMS & INSTRUMENTS, INC.**

[www.smoothroad.com](http://www.smoothroad.com)

Custom Test Equipment • Mobile Technology Solutions

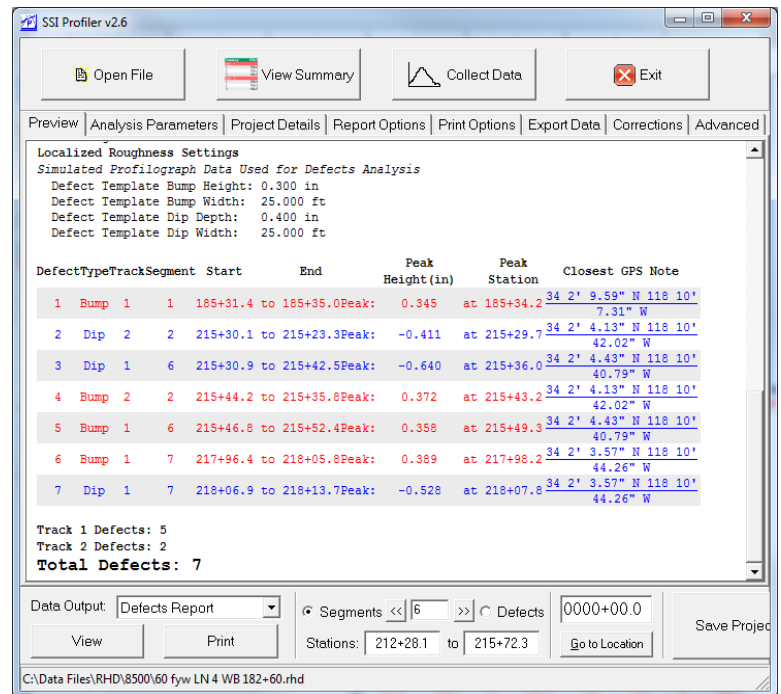
# CS8500 PROFILOGRAPH UPGRADE



▲ Installs on Existing Frame Hardware ▲

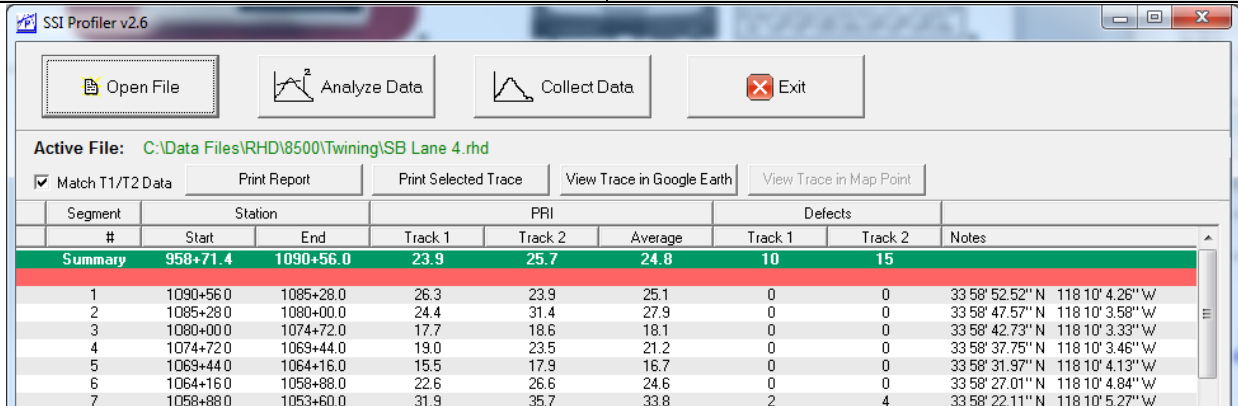
▲ COLLECT & REPORT DUAL WHEEL PATHS ▲

- Upgrade Existing Profilograph Hardware to CS8500 Operating System.
- Guaranteed Compliance with Specifications (ASTM E1274, DOT, Transport Ministry, FAA, and USACE).
- Outputs PRI, IRI, Localized Roughness, PDF, ERD/PPF (for ProVal) and Excel Reports
- Collect Profile Data in Either Direction and Report Dual Wheel Paths with Results Averaged.
- Real Time Display of PRI and Must-Grind Bumps
- Embedded GPS with Coordinates Inserted with Profilograph Positioning for Easy Re-Location of Bumps, Dips or other Events of Interest.
- Supplied with Same Features as New CS8500.



▲ Bump Reports with Exact Dimensions and GPS Locations ▲

HARDWARE FEATURES	SOFTWARE FEATURES
<ul style="list-style-type: none"> <li>The original and <i>only</i> true California type system. (CS8500 is the new/replacement system for Cox and McCracken branded systems).</li> <li>Guaranteed compliance with agency and ASTM specifications.</li> <li>Professionally engineered hardware refined over 50 years.</li> </ul>	<ul style="list-style-type: none"> <li>Easy to learn, easy to use Windows software programs.</li> <li>Multiple profile Indexes supported (PRI, IRI, HRI, RN).</li> <li>Computer instructed calibration and data collection routines.</li> <li>Feature rich, mature data analysis software.</li> </ul>
<ul style="list-style-type: none"> <li>One-person assembly and operation.</li> <li>Components configure and operational within minutes.</li> <li>Portable operator control housing with AC/DC power supplies.</li> </ul>	<ul style="list-style-type: none"> <li>Collect dual wheel paths in either direction.</li> <li>Dual wheel paths test results on one trace with results averaged.</li> <li>Two trace reports allow assessment of profile across lane.</li> </ul>
<ul style="list-style-type: none"> <li>Bi-directional frame operation (with optional reversible steering hardware).</li> </ul>	<ul style="list-style-type: none"> <li>English or Metric data collection and reporting.</li> <li>Real time display of stationing, PRI, bumps and profile trace.</li> </ul>
<ul style="list-style-type: none"> <li>Panasonic Toughbook computer with Touchscreen controls.</li> <li>Toughbook computer is Mil-Spec (&lt;1.5% annual failure rate).</li> <li>Lightweight generator for AC power. • Optional DC battery.</li> </ul>	<ul style="list-style-type: none"> <li>Must-grind bumps/dips display in real time with audible alarm.</li> <li>Customized localized roughness reports display dimensions and peak magnitude for each bump and dip.</li> </ul>
<ul style="list-style-type: none"> <li>GPS subsystem displays of GPS position, integrates coordinates with profile stations, localized roughness, and Google Earth.</li> </ul>	<ul style="list-style-type: none"> <li>Profile reports and traces on-screen, in PDF images, or hard copy.</li> <li>Raw data exports to multiple formats (Excel, ERD/PPF for ProVal).</li> </ul>
<ul style="list-style-type: none"> <li>All major spare parts stocked and available by expedited delivery.</li> <li>Warranty on all individual and integrated system components.</li> <li>Worldwide customer support.</li> </ul>	<ul style="list-style-type: none"> <li>Raw profile data encrypted for maximum security.</li> <li>Profile data infinitely re-writable with different parameters.</li> <li>Parameters adjust comply with all commonly used agency specifications (e.g. ASTM, DOT, Transport Ministry, FAA, and USACE).</li> </ul>
<ul style="list-style-type: none"> <li>Optional on-board printer for field printing traces and reports with power assisted paper take-up for auto-scrolling of profile traces.</li> </ul>	<ul style="list-style-type: none"> <li>Add new data to existing profile data files</li> <li>Software updates by internet download (self-extracting).</li> </ul>
<ul style="list-style-type: none"> <li>Bridge configuration available (e.g. CalTrans Test 547).</li> <li>Buy or Rent (equipment only or with trained operator).</li> </ul>	<ul style="list-style-type: none"> <li>Software license for field and desktop computers.</li> <li>On-site operator training and certifications available worldwide.</li> </ul>



▲ Main -Screen Summary View of Test Results, Defects and GPS Coordinates ▲



▲ Detachable Operator Housing with AC/DC Power Supplies ▲



▲ Toughbook 19 Rugged Computer with Touchscreen ▲

## Surface Systems & Instruments, Inc.

### California Division

501 Park Way, Mill Valley, California 94941  
 Tel: (415) 383-0570 • Facsimile: (415) 358-4340  
[www.smoothroad.com](http://www.smoothroad.com)

### Kansas Division

307 Plymate Lane, Manhattan, Kansas 66502  
 Tel: (785) 539-6305 • Facsimile: (415) 358-4340  
 Email: [info@smoothroad.com](mailto:info@smoothroad.com)

