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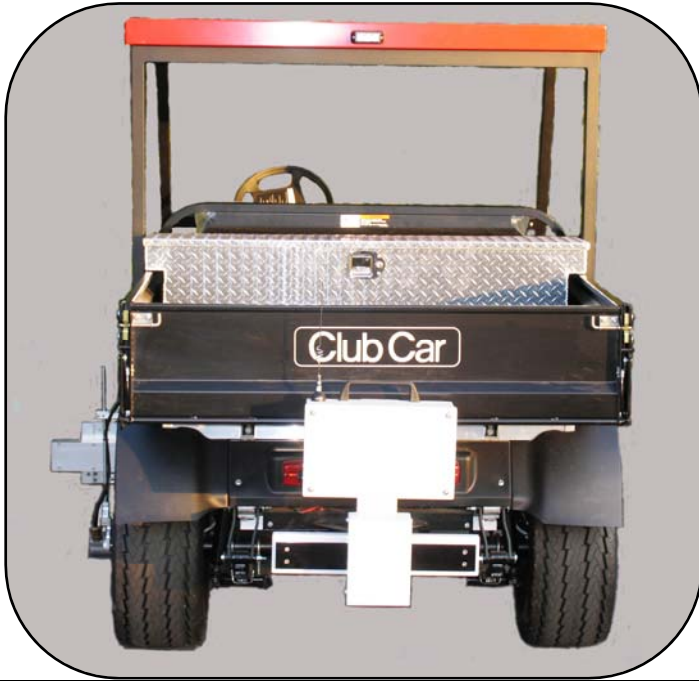
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SURFACE SYSTEMS & INSTRUMENTS, LLC
Custom Test Equipment • Mobile Technology Solutions

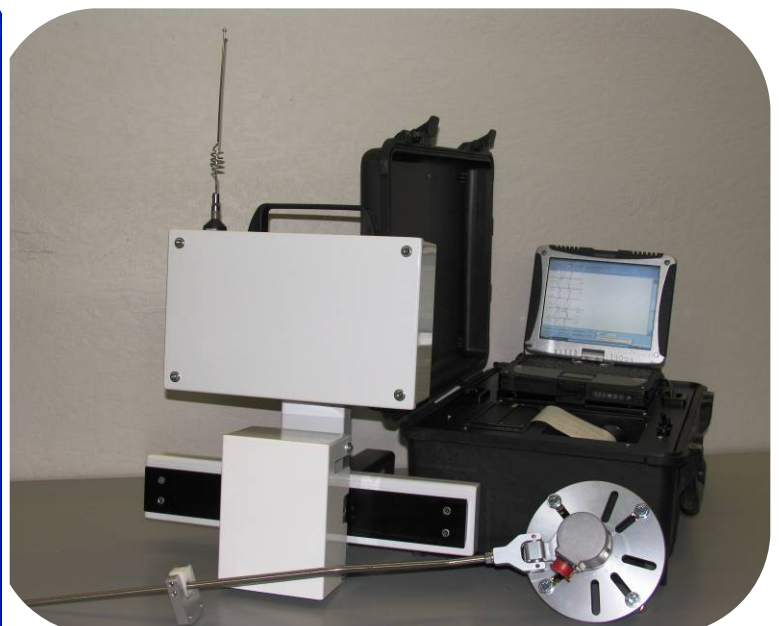
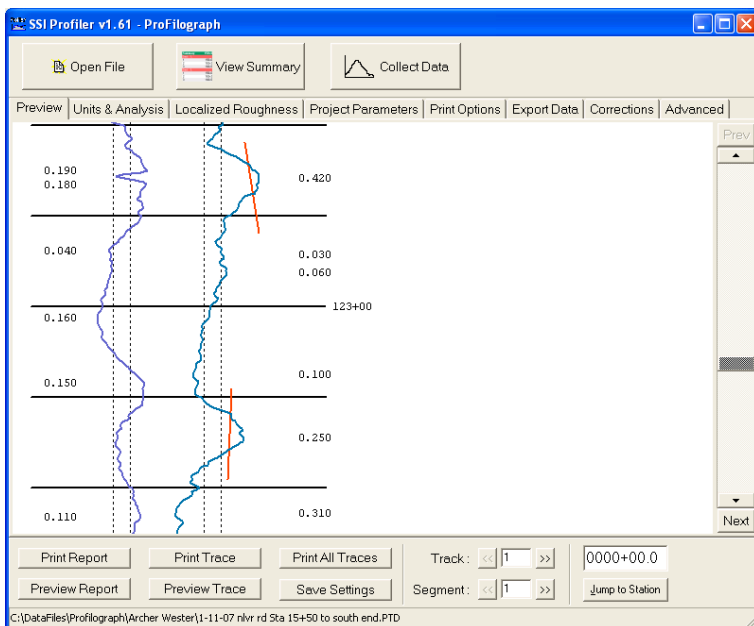
www.smoothroad.com

CS9400 Simple Profiler



Creates a Lightweight or High Speed Surface Profiling System in Minutes

A Simple, Cost Effective, Portable Solution for Precision Smoothness Testing



▲ Feature Rich Windows Software Reports Dual Wheel Paths ▲

▲ Compact Kit Package: Ships Easily and Stores Safely ▲



HARDWARE FEATURES	SOFTWARE FEATURES
<ul style="list-style-type: none"> • Portable profiling system attaches to lightweight or high speed vehicles (requires a 2 inch towing receiver and 12V power supply). • Sensor module adjusts vertically/laterally for maximum flexibility. • Ultra-compact profiling system components. All electronics and sensors smaller than Toughbook laptop used to operate the system. 	<ul style="list-style-type: none"> • Feature rich Windows software for calibration, data collection and analysis software run on touch-screen Toughbook computer. • On-Screen user's manual and instructions for profiling software. • Real time diagnostics continually monitor health of profiling system and facilitate prompt resolution of support issues.
<ul style="list-style-type: none"> • 100% Non-contact inertial system—no sensors touch road surface. • Core components field installable and available by express shipping • Rugged suitcase enclosure for notebook computer, on-board printer (with power assisted paper spooling). • AC/DC power supplies. 	<ul style="list-style-type: none"> • Instant test results and on-screen view of profile traces and reports. • Collection system pauses if vehicle slows <5mph or when stopped. • Add new profile data to existing data files for comparison of original condition with constructed surfaces.
<ul style="list-style-type: none"> • Professionally engineered vibration free sensor mounts. • Panasonic Toughbook 19 military specification notebook computer with daylight readable Touchscreen controls. • Optional RF radio kit for wireless transmission of profile data. 	<ul style="list-style-type: none"> • Profile reports and traces available on-screen, one-touch PDF images, hard copy from on-board printer, or in electronic format. • Colorized traces and highlights of bonus/penalty profile areas. • One-touch data export to ERD, PPF, and Excel templates (supplied).
<ul style="list-style-type: none"> • Single or dual track systems available. (Note: single track systems have patented ability to report dual track profiles). • All-in-Cab operation—collect/analyze data without leaving vehicle. 	<ul style="list-style-type: none"> • Unmatched precision in detecting surface features exact dimensions of localized roughness—<i>Proven and Guaranteed!</i> • Localized roughness reports predict dimensions of grind/fill areas.
<ul style="list-style-type: none"> • Wide range of speeds (~5 mph to 70 mph). • Multiple data collection methods allow versatility and cost savings: (1) SSI reverse direction trigger collects exact stations without pre-marking test sections, (2) electric-eye sensor triggers by reflective tape, and (3) touchscreen push button trigger for start/stop. 	<ul style="list-style-type: none"> • Profile data reported under various profile indices [International Roughness Index (IRI), Profilograph Index (PI), Ride Quality Index (RQI), Half Car Ride Index (HRI), Ride Number, etc.] • User-selectable data collection and analysis parameters (project details, filtering methods, blanking band, bump/dip templates, etc.).
<ul style="list-style-type: none"> • Optional wide footprint sensor configurations reduce impact of tinning, grooving and coarse textures on profile index and localized roughness values. (Multiple single point or RoLine sensors available) 	<ul style="list-style-type: none"> • Multiple profile trace reporting for lateral surface analysis. • Simulation routines for estimating ride index and localized roughness after corrective grinding or overlays.
<ul style="list-style-type: none"> • GPS subsystem (optional) with real-time display of GPS position, GPS correlation with profile stations, and Google Earth integration. • Surveying subsystem with high resolution RTK corrections available with integrated site design and machine control options. 	<ul style="list-style-type: none"> • Industry leading Windows software designed by PhD engineers with decades of profiling industry experience. • Desktop software supplied for viewing, analyzing, printing and emailing of profile data.
<ul style="list-style-type: none"> • Buy or Rent. 	<ul style="list-style-type: none"> • Encrypted raw data for infinite reanalysis with variable parameters.

▼ Industry Leading Windows Profiling System Software ▼

Segment	Start	Station	End	Track 1	Track 2	Average	Track 1	Track 2
Summary	0+00.0	317+44.5	141.3	140.8	141.0	72	66	
1	0+00.0	5+28.0	210.1	184.2	197.1	5	2	
2	5+28.0	10+56.0	179.4	179.9	179.6	1	2	
3	10+56.0	15+84.0	246.0	198.8	222.4	5	4	
4	15+84.0	21+12.0	249.3	230.1	239.7	12	4	
5	21+12.0	26+40.0	219.4	204.1	211.7	6	8	
6	26+40.0	31+68.0	220.3	191.6	206.0	8	7	
7	31+68.0	36+96.0	185.9	152.0	168.9	1	5	
8	36+96.0	42+24.0	324.1	293.9	309.0	9	6	
9	42+24.0	47+52.0	137.3	125.4	131.4	2	2	
10	47+52.0	52+80.0	143.0	127.7	135.3	0	0	
11	52+80.0	58+08.0	114.1	107.6	110.8	0	0	
12	58+08.0	63+36.0	105.0	168.7	136.8	0	0	
13	63+36.0	68+64.0	92.5	92.6	92.6	0	0	
14	68+64.0	73+92.0	106.5	95.3	100.9	0	0	
15	73+92.0	79+20.0	121.1	160.3	140.7	0	0	
16	79+20.0	84+48.0	108.2	119.5	113.9	0	0	
17	84+48.0	89+76.0	156.6	142.4	149.5	1	3	
18	89+76.0	95+04.0	153.3	109.6	131.4	0	0	
19	95+04.0	100+32.0	106.8	79.6	93.2	0	0	
20	100+32.0	105+60.0	126.5	109.6	118.1	0	0	
21	105+60.0	110+88.0	164.7	148.4	156.6	2	1	
22	110+88.0	116+16.0	249.0	194.3	221.7	3	2	
23	116+16.0	121+44.0	91.8	74.9	78.3	0	0	
24	121+44.0	126+72.0	106.4	179.7	143.0	0	1	

▲ Computer Instructed Data Collection and Calibration Routines ▲

▲ Immediate Results with Advanced Data Analysis Features ▲

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