SURFACE SYSTEMS & INSTRUMENTS, INC.

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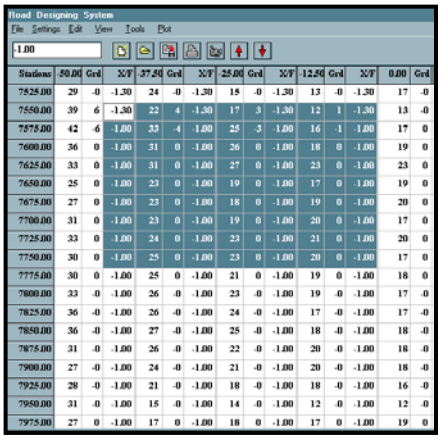
smoothroad.com

SCAN•DESIGN•CONTROL

CS9350 Profiler for Surveying and Smoothness Testing

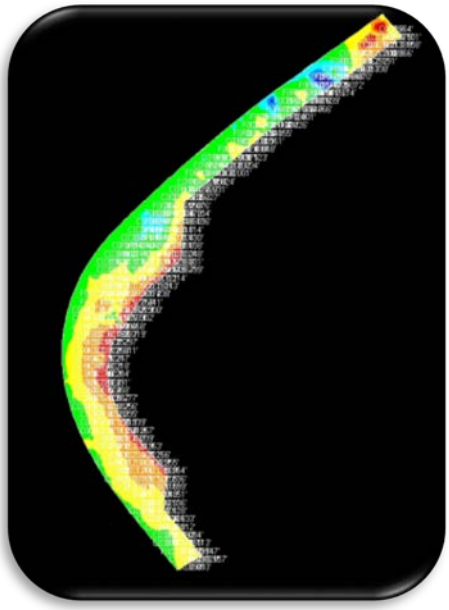


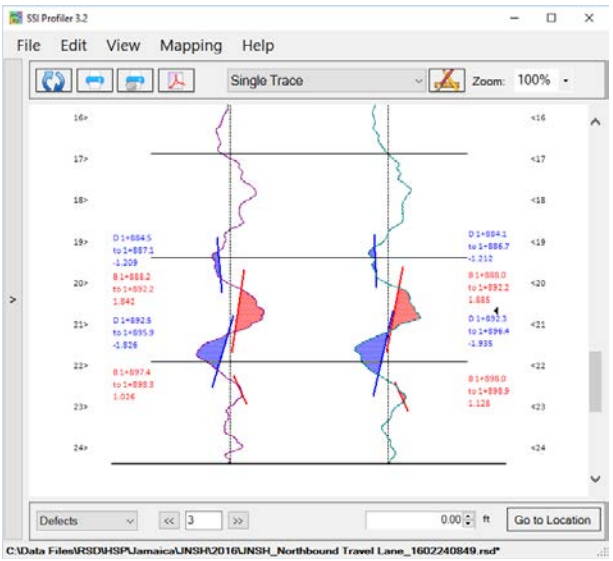
Optimize Surface Design Using Profile and Slope Data

Variable Depth Mill & Paver Control for Smoothness

2D/3D Mobile Surveyor & Profile Optimization Software

Survey, Design, Pave & Test for Smoothness

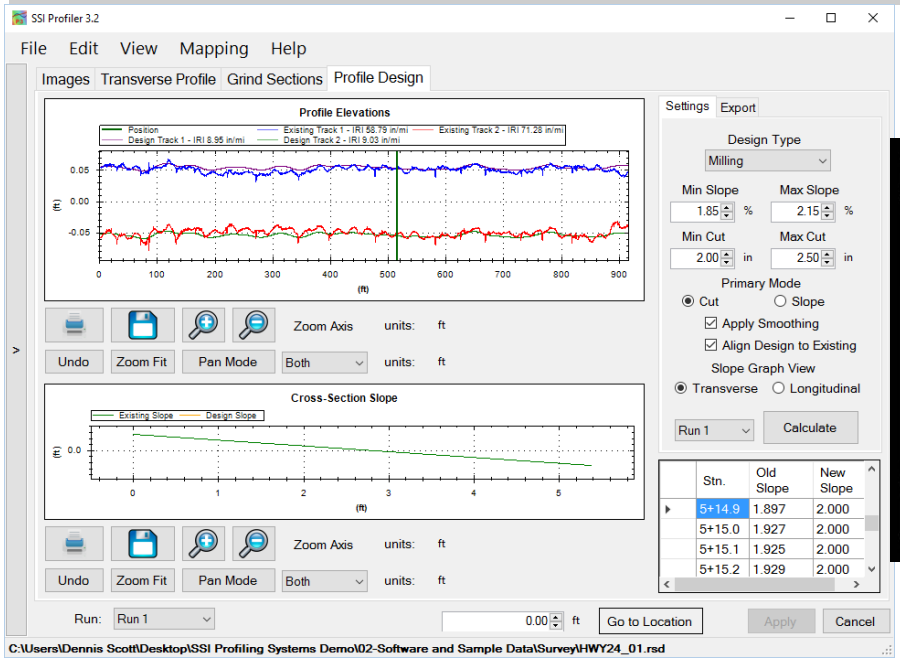


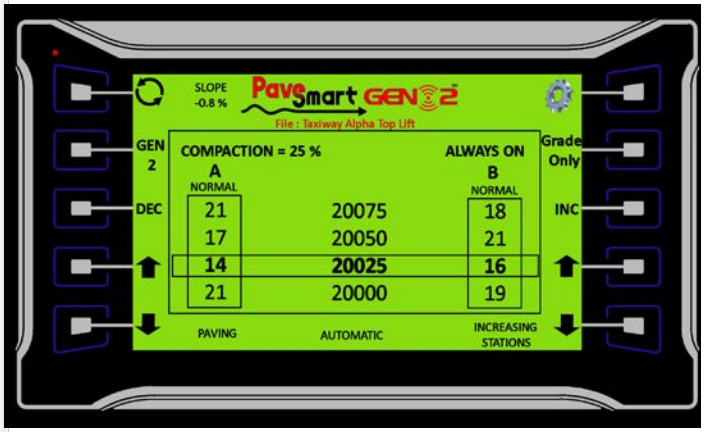


- Quickly Collect Dense Surface Scans
- In-Vehicle Rugged Computer
- Certified Profiler for DOT Smoothness Testing

Optimizing Smoothness: SSI Survey Profiler

HARDWARE FEATURES	SOFTWARE FEATURES
• Quickly generate dense, open area 2D or 3D surfaces. • Highest resolution pavement scan using unique merger or inertial profiler, tactical grade IMU and corrected GPS data sets. • Tighter, more accurate data than RTK survey instruments alone.	• Inertial profiling system data combined with slope for 2D survey and corrected GPS for 3D survey. • Dense surface data for better designs. • Create a design file with 2D or 3D survey data in conventional survey formats, but with higher resolution.
• Multiple configurations available; examples: •2-paths profile and cross-slope outputs 2D relative profile. •3 paths profile with cross-slope and RTK GPS for 3D Topo.	• Use surface data in SSI Profile Design module to analyze existing surface and optimize design for best smoothness values. • Configurable design parameters for slope, cut/fill and smoothness. • Data also compatible with third-party CAD design software.
• Choice of vehicle platforms: • High speed system attaches to front or rear of host vehicle. • Lightweight configuration on Polaris Ranger 570 EFI.	• Design flexibility—resurvey surface to assess changes as project build progresses. *Build based on the True Surface Profile.* • Surface designs work with both milling and paving machines.
• One setup for multiple passes, slopes, and lanes. • Corrected GPS with RTK post processing (base optional). • Interface with external GPS devices to use existing hardware.	• Separate or combined data formats: profile only, slope only, GPS only, or integrated 2D/3D survey data. • Multiple export formats: PNEZD, PLLHD, Excel, CSV, ERD/PPF & PDF.
• Works with grade control systems (e.g. PaveSmart) for milling, paving or grinding machines. • Use third party controls for variable depth milling or paving. • Portable configuration for use of hardware on different machines	• Easy software for calibration, collection and analysis of data on a Touchscreen Toughbook with Windows 7/8/10 Pro. • On-the-Fly adjustments to design data and ongoing machine control.
• DOT compliant inertial profiler for QA/QC smoothness testing. • Profiling system complies with AASHTO/ASTM standards. • Detachable hardware. • Reusable shipping/storage container.	• Ride quality data reported under DOT ride quality specifications (IRI, MRI, HRI PRI, RN). • Fully compatible with ProVal. • User-selectable data collection and analysis parameters (project details, filtering methods, blanking band, bump/dip templates, etc.).
• Panasonic Toughbook rugged operator interface computer. • Reusable shipping/storage container. • Patented technology.	• Precisely calculate areas of localized roughness for corrections or bonus/penalty results. • On-screen GPS navigation along profile data. • Surface profile data complies with DOT/FHWA specifications.





•Generate Rich 2D/3D Survey Data • Compatible with CAD Software & Machine Control Systems

•Profiling System Data for QA\QC Ride Quality Testing • Guaranteed to Meet DOT Agency Specifications and Test Methods.

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