

# Datastick® InSpect™

Route Creation & Execution Software  
for Datastick VSA Vibration Analyzers

## PC and Handheld Route Software for Fast, Easy Vibration Data Collection

Datastick® InSpect™ software makes it easy to set up an inspection route on a PC, download it to the handheld computer used in the Datastick VSA™ Vibration Spectrum Analyzer, and — after the route has been run — upload the collected data back to the PC. With InSpect, a lower level technician can collect vibration data and bring it back for analysis. Running a route is as easy as tapping the NEXT button on the VSA handheld.

Start by using the included InSpect RouteMaker™ application to build a hierarchical route on the PC. You can set up inspection points for a machine in minutes and then copy and paste entire machine setups to make route-building even faster.

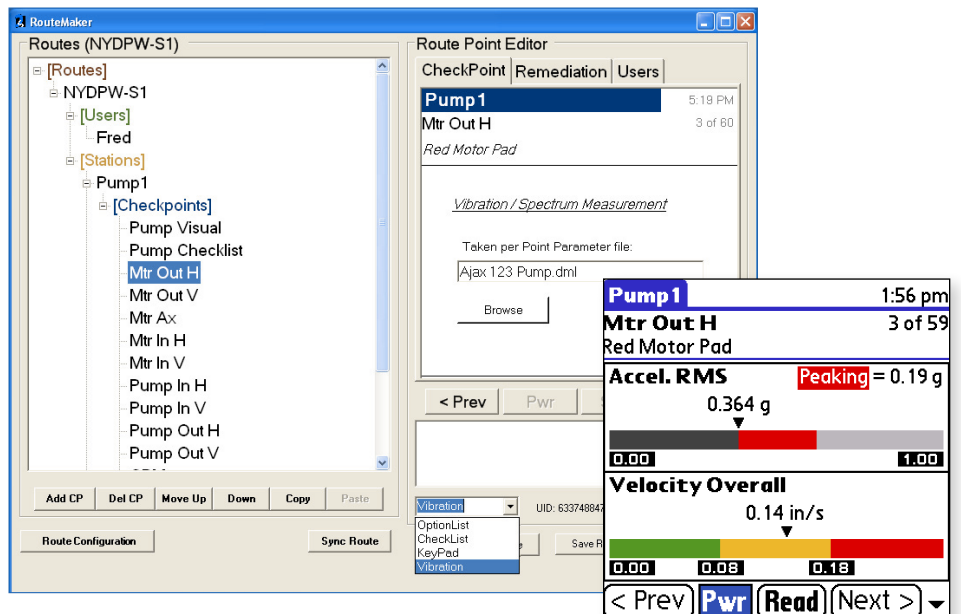
InSpect RouteMaker software gives you the option of creating checklists to ensure that less experienced personnel don't miss important points, such as: "Is the machine running? Yes/No." You can also include instructions to the technician, such as where to place the sensor and what to do if he spots trouble. When you've finished creating the route, simply click the mouse and the route uploads from the PC onto the VSA's handheld computer.



### Simply Tap NEXT

As the technician runs the route, he simply taps NEXT on the handheld computer's touchscreen and takes the read. (A built-in safeguard prevents attempts to get a read from a sensor that hasn't settled.) If he needs to deviate from the route sequence, he can jump directly to the any available inspection point from a list.

When the technician takes a vibration measurement, he gets immediate visual feedback through bar graphs that show RMS Acceleration, Peaking Value™ metric, and Overall Velocity with alerts, which you can set to ISO standards or any value appropriate for your specific facility and machine.



At any time, he can switch to Datastick Spectrum™ software for more in-depth data – to view an FFT or waveform, and then save that data, for example.

### Back at the PC: Datastick Reporting System

When the technician is finished running the route, he hands you the device and you upload the data to your PC and import it into a special version of Excel-compatible Datastick Reporting System™ (DRS) software for InSpec, where you can trend the data and create reports. Shown is just one of several different reports you can make. Note that Acceleration, Velocity, Peaking, and Displacement are shown together in terms of percent change over time.

### Datastick Peaking Value™ Metric: More useful than Crest Factor for spotting bearing faults

Peaking Value is Datastick's proprietary advanced signal-processing metric for detecting and tracking the development of high-frequency impulse energy buried in a machine vibration signal. Peaking reflects the amount of excessive impact energy (both random and periodic) within the high-frequency vibration that is often a sign of bearing damage.

Lab tests show Peaking Value is more reliable for tracking (trending) a situation such as roller-bearing defects than using a straight high-frequency acceleration level or an enhanced Crest Factor. It is a convenient and reliable method of detecting, quantifying, and tracking of developing situations where an acceleration signal contains shock waves or other impulse events.

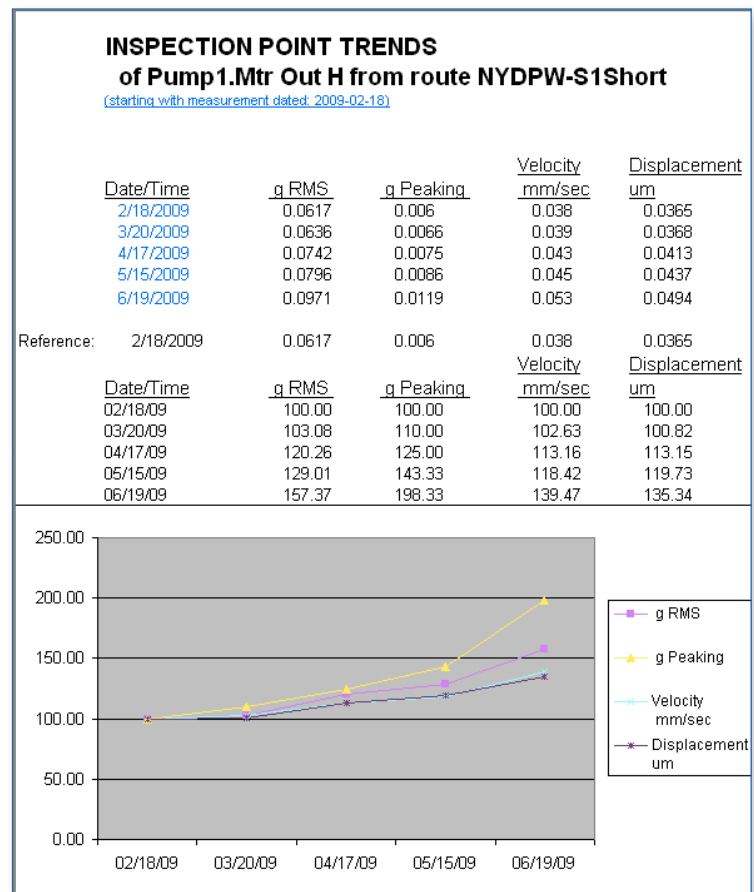
To learn more about Peaking Value and how it can help you spot bearing faults, see [www.datastick.com/technotes/technote01.html](http://www.datastick.com/technotes/technote01.html)

### Key Features

- Hierarchical route creation on the PC
- Routes download to the handheld computer used in your Datastick VSA-Series Vibration Spectrum Analyzer
- Up to 100 points per route, with an unlimited number of routes
- Routes can be changed on the handheld in seconds
- Vibration inspection points configurable for acceleration, velocity, or displacement; maximum frequency, low-frequency cutoff, amplitude range, sensor sensitivity, alarm limits
- Optional checklist inspection points
- Optional numerical-input inspection points for recording gauge readings
- Optional yes/no inspection points
- Optional supervisor-specified remedy steps for failed tests
- Handheld software leads the data-gathering technician through the route step by step
- Handheld software prevents the user from getting reads until the sensor has settled

\*64-bit Windows 7 syncs wirelessly exclusively.

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- Data uploads to PC and imports into a special version of Datastick Reporting System for InSpec software for trending and reporting

### Requirements

Datastick VSA Vibration Spectrum Analyzer with associated handheld computer; PC with Microsoft® Windows XP, Windows Vista, or Windows 7\* and Microsoft Office® 2003 or 2007 or Microsoft Excel® 2003 or 2007



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

Datastick Systems, Inc.  
P. O. Box 6147  
San Jose, CA 95150-6147

Toll-free in USA: 888 277 5153  
Tel: 408 987 3400  
Fax: 408 987 3402

[findout@datastick.com](mailto:findout@datastick.com)  
[www.datastick.com](http://www.datastick.com)