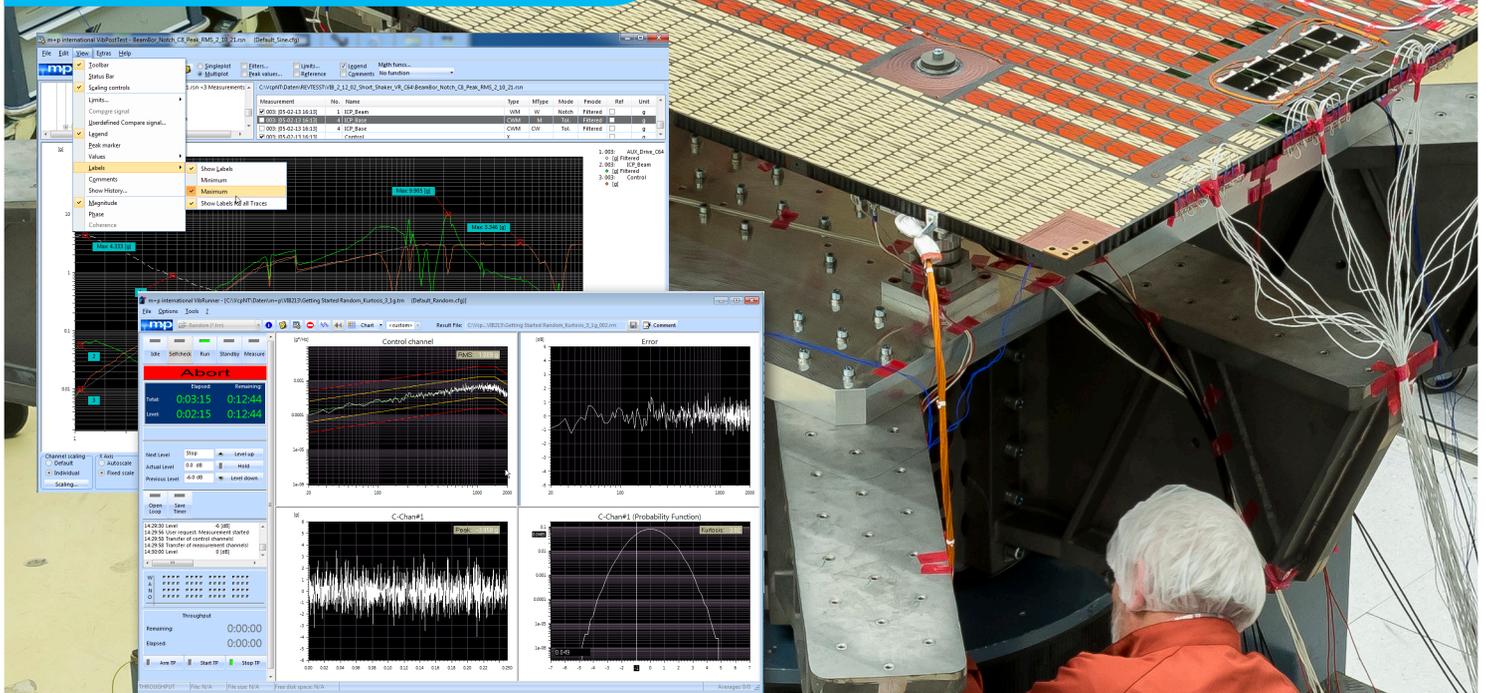


m+p VibControl Revision 2.13



- Classical Shock: Control on First Pulse, Loops in Schedule
- Throughput Automatic Start and Stop
- Random Kurtosis Control
- Line Style Selection in Charts
- Vector Notching Features in Random
- Posttest Enhancements
- Windows 10 Support

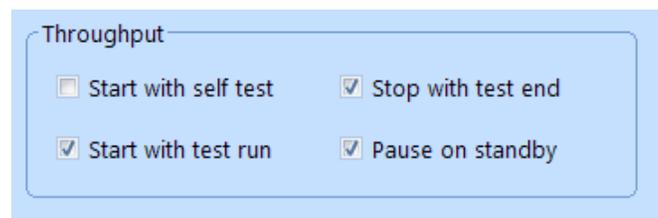
Classical Shock: Control on First Pulse, Loops in Schedule

m+p VibControl Revision 2.13 provides a significantly improved shock control procedure. As soon as the first pulse has been measured a coherence estimation takes place and is used to control the signal output for the following pulses, which considerably reduces the strain for the device under test.

A very time-saving feature is the loop definition option in shock schedules. One or several loops can be defined using markers and repeat commands when creating the schedule.

Throughput Automatic Start and Stop

For more efficient testing procedures, throughput can now be started and stopped automatically in a predefined way. The Throughput section in the VibEdit test definition window offers four start and stop options: Define a start together with the test start or self-test start, a pause during standby and a stop at test end. Thus, throughput will not remain active for hours while the test run has already been completed. And a test run abort will also stop the throughput recording.

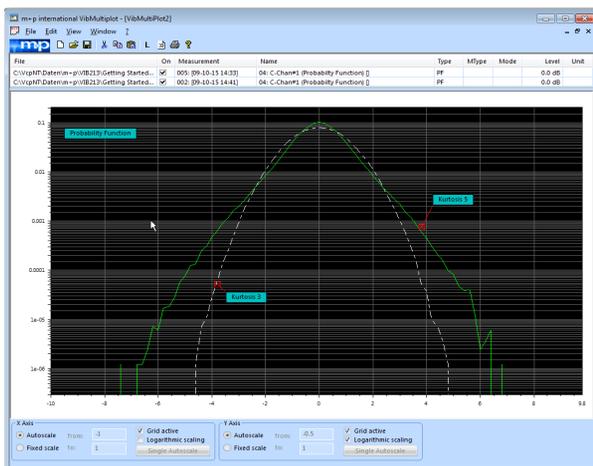


Throughput section in VibEdit

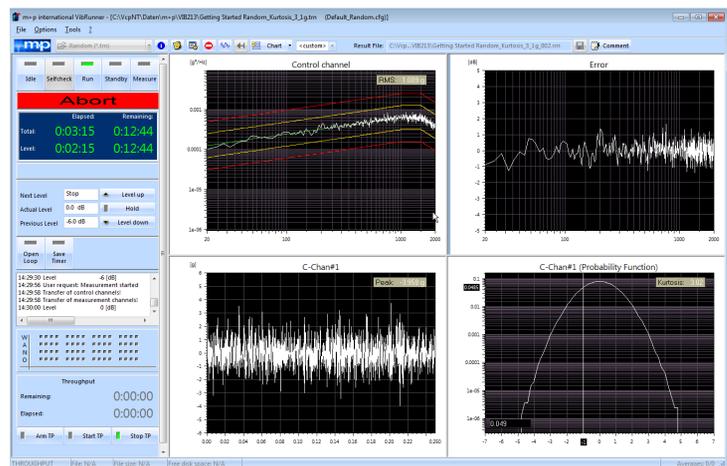
For maximum flexibility of the feature it is possible to enter start or stop commands into the schedule which enables the user to define short throughput recording phases during the test run.

Random Kurtosis Control

Accelerate your structural life testing applications using kurtosis control. Usually, this type of testing is executed with random excitation – it seeks to achieve a Gaussian distribution which is concentrated about mean and shows a low probability of extreme values. These conditions generate peak accelerations which are often too low for simulating natural strain. Kurtosis, however, offers a third “dimension” to control the excitation as it allows the adjustment of the probability density function (PDF). Increasing the kurtosis means increasing the peak levels in a defined way, and therefore the damage-producing area of the test can be adjusted independently of the PSD and the RMS settings of the test.

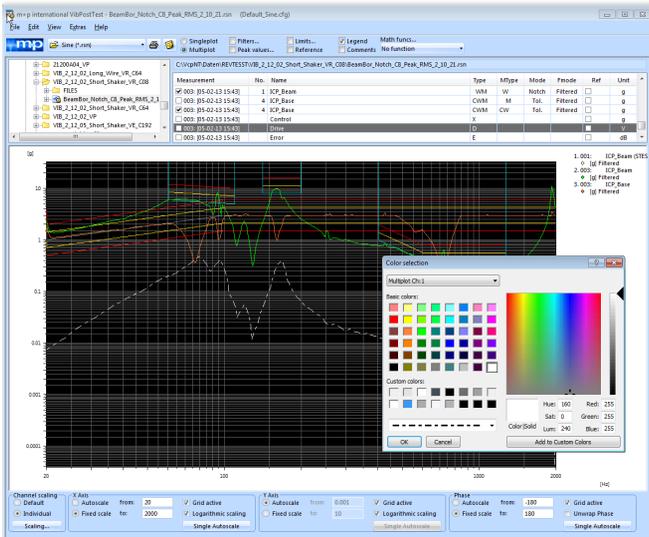


Probability functions for Kurtosis 3 and Kurtosis 5 settings



VibRunner windows with probability function displayed

Line Style Selection in Charts



Selecting a line style

In order to provide an even more flexible chart display, m+p VibControl now offers the option to change the line style for any trace on your VibPosttest chart. Traces can be shown and printed in one colour and different line styles, which enables a black and white print for any chart. Of course, you can also select the line styles in different colours to create clearer chart representations. For the line style selection, just open the colour selection dialogue, select the trace and assign the desired line style.

Vector Notching Features in Random

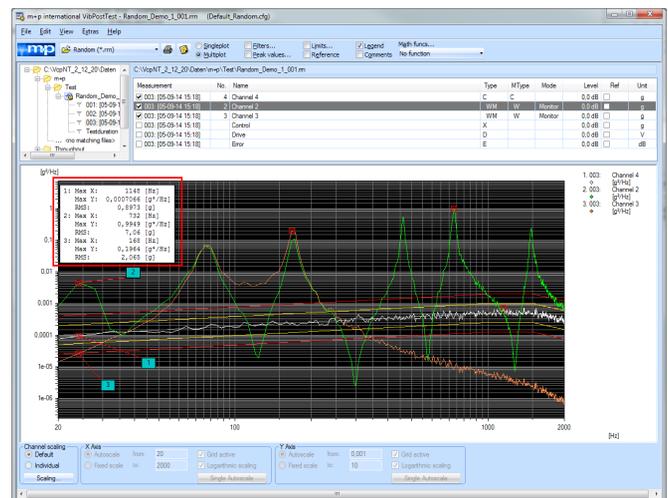
m+p international expanded its notching features for random tests with the addition of momentum notching, vector RSS notching and vector add notching. These notching modes are now available for both sine and random testing.

Another convenient notching feature is the notch table import option. Customers using systems with high channel counts will appreciate it. In both random and sine test modes it enables you to import an ASCII file containing the desired notching limits for every channel. Once created, you only need to import this file one time, instead of defining the notch limits for each channel separately.

Posttest Enhancements

1. Minimum, Maximum and Overall RMS Values Display

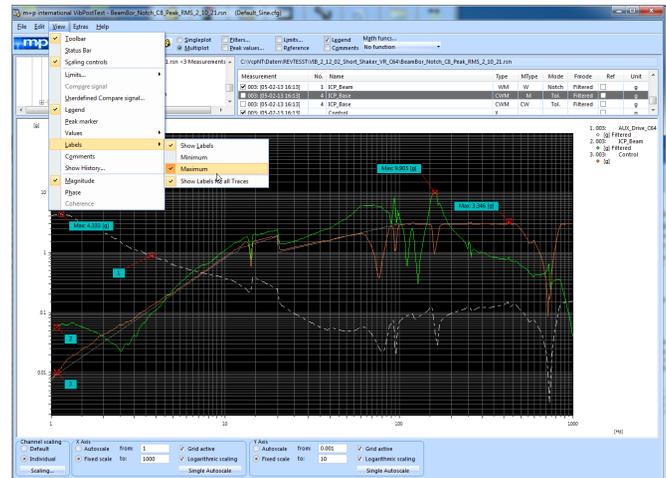
m+p VibControl Rev. 2.13 offers a display of minimum and maximum values as well as overall RMS values in singleplot and multiplot charts. The exact positions of the minimum and maximum values are also marked on the trace, which makes evaluation easier and improves your reports.



Multiplot with minimum values, maximum values and RMS (overall) enabled

2. Minimum/Maximum Labels for all Traces in Multiplot Mode

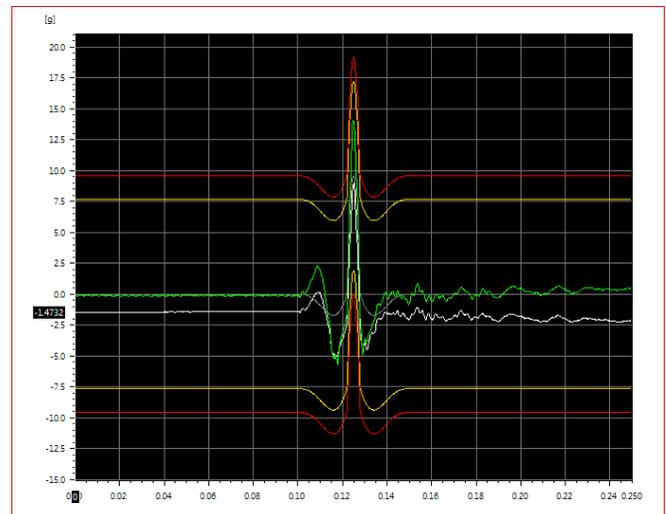
To conveniently provide more comprehensive information in every plot, you now can enable minimum and maximum labels in multiplot mode for all traces on the chart.



Multiplot mode with “Show labels for all traces” option enabled

3. DC Offset Removal

DC offset can be removed from shock or transient capture signals in your VibPosttest chart. It can be removed from time signals and with any of the math functions enabled.



Time signal with DC offset and with removed DC offset

4. Peak Search in Multiplot Mode

The new m+p VibControl revision enables you to carry out peak search in multiplot mode just as you would in singleplot mode. Open the peak search dialogue and define your search criteria which are then applied to each selected trace. The results are listed in the chart.

Other New Features

■ Windows 10 Support

m+p VibControl 2.13 is fully operational under the Windows 10 operating system.

■ Faster Online Graphics in Random Testing

The online graphics update rate has been improved for random test modes.

■ Number of Lines Selection for Sine and Sine Reduction Tests

In sine and sine reduction test definitions, the number of spectral lines used for data storage can be selected in the Measurement section of the setup window.

■ Rename Channels in VibPosttest

In VibPosttest you can now rename channels by selecting a measurement in the list view and editing the channel name. The name will automatically be updated for all measurements and will be persistent when you save the file.

■ Improved Test Definition Export

For sine and random modes, m+p VibControl offers supplementary print templates for test definitions with a new and very compact channel list view. These template files can be customized according to your needs.

■ Digital Start and Stop Function

Use this option for activating an external device/recorder during your control run. As soon as VibRunner is in run mode, digital output channel 7 is set to high. It is set to low again, when VibRunner is in standby mode after the control run.

This Update Note provides you with an overview of the most significant product enhancements in m+p VibControl Revision 2.13. These together with other smaller improvements make m+p VibControl even more powerful and user-friendly.

The new software revision has resulted primarily from close cooperation with you, our valued customers. We strive to continuously optimize our products. If you have any suggestions on how to further improve our product offering, please let us know.

m+p VibControl 2.13 is available now. Please do not hesitate to contact us for further information.

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