



m+p
international



Experts in Vibration

m+p international

As highly qualified experts in the field of vibration control for environmental testing, dynamic signal analysis, data acquisition and monitoring, and test rig automation, we take pride in sustainably meeting your expectations of productivity, quality, and reliability with our products and services. You can rely on m+p international to keep your investments secure. The m+p solutions can be easily expanded and adapted to current tasks due to their modular design and we complement this with customized development services. Our solutions inspire customers and have been known to create lasting added value for global players from aerospace, automotive, test houses, research institutions, and many other key industries.

www.mpihome.com

m+p international

Your Partner for Test and Measurement Systems Worldwide

m+p Analyzer

Acquire and Analyze Dynamic Signals

m+p Analyzer acquires and analyzes dynamic signals both in real-time and in post-processing applications. With its user-friendly interface, it offers analysis tools and plug-ins for analysis of time series, frequency, experimental modal, Operating Deflection Shape (ODS), and much more.

Whether determining and analyzing the natural frequencies of a satellite, testing the dynamic behavior of a vehicle body, or tuning the acoustics of an electric motor, m+p Analyzer makes the task effortless.

Complement your vibration measurements with a multitude of additional sensors and display all data together in configurable diagrams. Besides directly interfacing with the reliable and flexible measurement hardware from m+p international, m+p Analyzer also supports hardware from other manufacturers such as National Instruments.



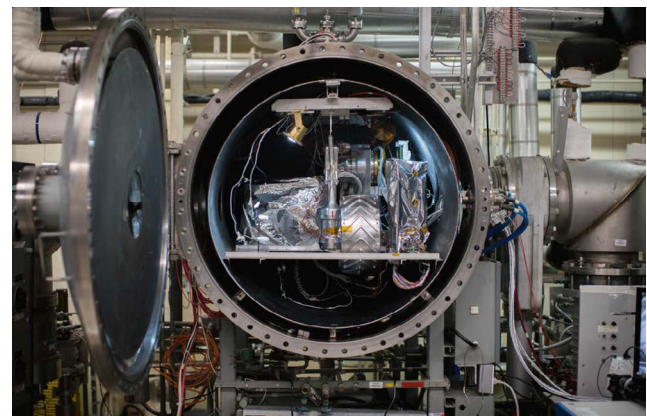
m+p Coda

Measure and Monitor Data Reliably

With **m+p Coda** we provide a reliable system for data acquisition and monitoring, from two to several thousands of channels. Thanks to m+p Coda's support of various hardware types and sensors with individual sampling frequencies, m+p Coda adapts flexibly to your measurement requirements. Our experts will support you to configure m+p Coda to suit your application.

The user-friendly interface allows an efficient display of measurement data in real time, without any programming knowledge. With functions such as grouping, naming and simultaneous display of measurement channels you always keep the overview even with a high number of channels.

m+p Coda monitors test operations, shaker systems, climate chambers and complex laboratory facilities. Channel-specific alarm and abort limits ensure protection of the test articles. You can quickly assess the current status of the test or the facility at any time to ensure a reliable operation.



m+p Coda communicates via digital outputs and an OPC interface with shakers or other test equipment and can automatically send command and alarm signals directly to facility personnel.

m+p VibControl

Test Your Specimen Safely and Efficiently

Leading environmental testing laboratories worldwide rely on the quality of **m+p VibControl** software solutions for all types of vibration control and shock testing. The intuitive operation, extensive tools for analysis and reporting, numerous extension possibilities, and outstanding stability of our m+p VibControl solution enable vibration testing that exactly meets your specifications.

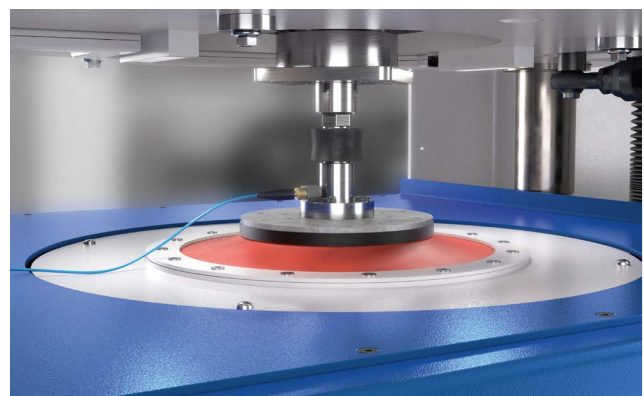
All excitation signals such as sine, random, shock, SRS as well as mixed modes comply with all major standards (IEC 60068, MIL-STD 810, etc.). Reproduce complex test requirements, like road load or shock, by correlating any previously recorded time signal with your shaker. Additionally, multi-axis control, using multiple shakers simultaneously, shortens test time and enables you to test large objects extremely efficiently. m+p VibControl expertly prevents test article damage by employing numerous safety



functions such as alarm and abort limits as well as notching. With force limiting, you prevent over-testing in critical frequency ranges.



m+p VibControl is not only used for the classical vibration testing on shakers. With **m+p VibControl Acoustic Control** we are the world market leader in recreating acoustic environments in reverberation chambers, which are used for the validation of satellites and devices in space applications. This solution also plays a key role in Direct Field Acoustic Noise Testing (DFAN) and can achieve sound pressures in excess of 150 dB with maximum diffusivity of the controlled sound pressure field.



m+p VibControl is also used in the **HFe 3** high-frequency test rig to determine the dynamic stiffness of elastomer mounts. The electrification of vehicles has brought into focus new types of annoying cabin noises, which have so far been masked by combustion engines. Especially for elastomer mounts used in electric and fuel cell vehicles, the HFe 3 offers a way to future-proof your design through vibration tests at high frequencies up to 3 kHz and preloads up to 8 kN.

m+p Customer Service

Individual Consulting and Reliable Solutions

Our experienced support team and global partner network will install and commission your solution and assist you on-site, by phone, or online with application questions and technical problems. We answer your questions comprehensively and provide quick solutions to keep your m+p system running reliably.

Regular software updates and upgrades with new functions ensure that our systems are always state-of-the-art. Maintenance contracts guarantee you, in addition to prioritized support and automatically available software updates, free loan of replacement equipment and thus maximum availability of your system.

With our comprehensive calibration service, we verify the performance of your measurement hardware to ensure accurate, reliable, and documented results while complying with local regulations and standards.

Through seminars in cooperation with experts from industry and science as well as customized onsite training courses, we ensure safe handling of your test and measurement system and provide you with practical background information from basics to advanced or special applications.



ISO 9001
CERTIFIED

m+p Analyzer, m+p Coda, m+p VibControl and HFe 3 are products of m+p international.



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