DEWESoft®

DYNAMIC SIGNAL ANALYSIS & NVH SOLUTIONS

WELCOME TO THE DEWESOFT EXPERIENCE. ONE SOFTWARE, ONE HARDWARE, ONE SOLUTION.

ULTIMATE ALL-IN-ONE TOOL FOR ANY NVH CHALLENGE

EASY TO USE AND VERSATILE

Get your measurements in 30 seconds.

DEEP IN FUNCTIONALITY

With an amazing set of features, Dewesoft instruments are used in most advanced research labs around the world; all functions are available at the same time in one software.

DUAL CORE HIGH DYNAMIC

Dewesoft Sirius increases signal dynamic to 160 dB by using two ADC converter per channel with different gains. Both - time domain and frequency domain data have an amazing dynamic signal performance.

SuperCounter®

Patented Supercounter technology provides perfect angle and angular speed information which is a base to align data from time to angle domain.

FULLY SYNCHRONISED

Data from various sources are perfectly aligned: Analog, Digital, Counter, Vehicle buses, Video, ...

ALL-IN-ONE

Dewesoft hardware can perform a wide variety of measurement tasks. Every function is available in a single Dewesoft X software package.

MODULAR AND EXPANDABLE

Can you imagine FFT analyzer with thousands of channels? We can... Systems can be gradually expanded from one to unlimited number of channels.

TOTAL SOLUTION

Combine your NVH measurements with data recording, electrical power, combustion, vehicle dynamic and other powerful Dewesoft tools.

NO HIDDEN COSTS

Software license is included in every system. Free lifetime software upgrades included. No yearly maintenance or upgrade fees, free online training courses.

PLUG AND PLAY

Any device, sensor or signal. Smart sensors with TEDS are recognized automatically.

FFT ANALYZER

R O T A T I N G   M A C H I N E R Y

THE FFT ANALYZER IN DEWESOFT HAS IT ALL: TOP PERFORMANCE, ADVANCED CURSOR FUNCTIONS, HIGH FREELY SELECTABLE LINE RESOLUTION, FLEXIBLE AVERAGING AS WELL AS ADVANCED FUNCTIONS FOR IN-DEPTH ANALYSIS.
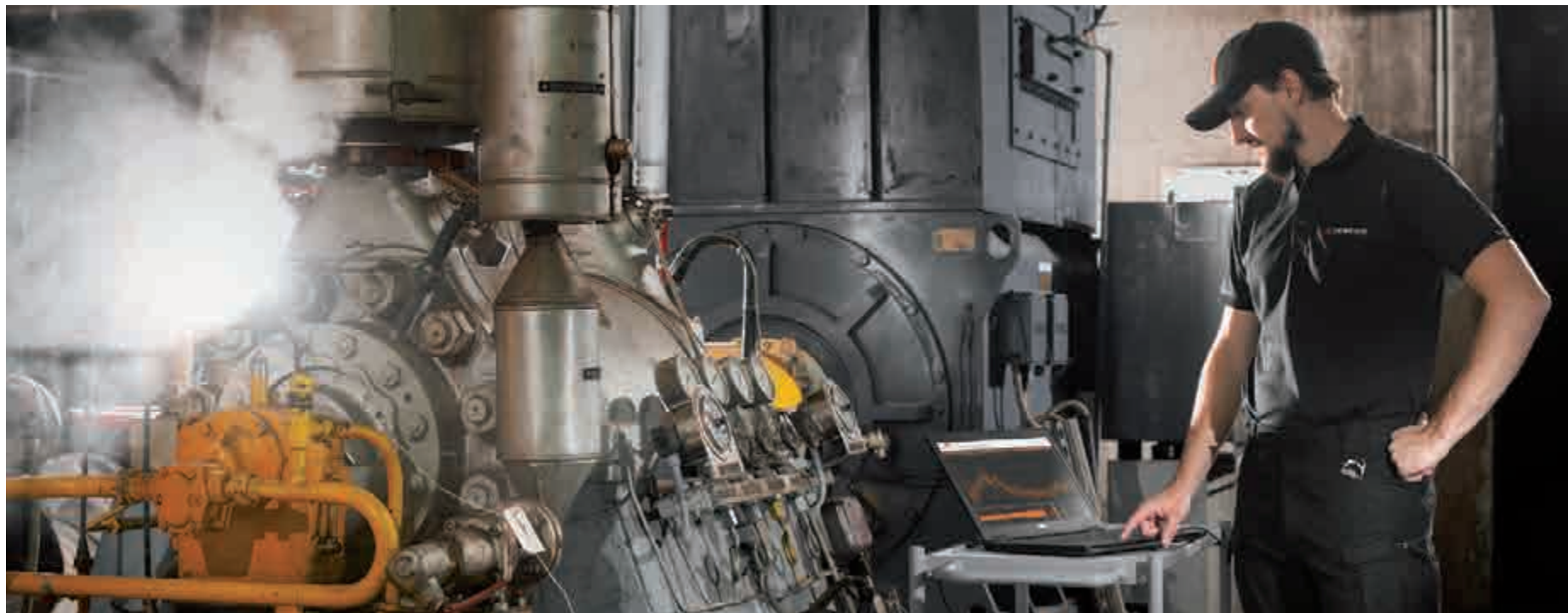
AVERAGING
Overall (averaged) FFT with linear, peak and exponential averaging or block-based calculation is available.

ANY LINE RESOLUTION
Selectable line resolution up to 64k lines for most demanding tasks.

CURSORS AND MARKERS
Maximum marker, free marker, zoom marker, sideband marker, harmonic marker, RMS marker.

ADVANCED MATH
Auto spectrum, cross spectrum, complex spectrum, waterfall spectrum, cepstrum (for bearing faults, speech processing), full FFT (for rotor whirl analysis), STFT (for non stationary signals), envelope detection (for bearing fault analysis).

CURSOR VALUE ESTIMATE
Innovative window interpolation technique allows precise amplitude and frequency estimation.
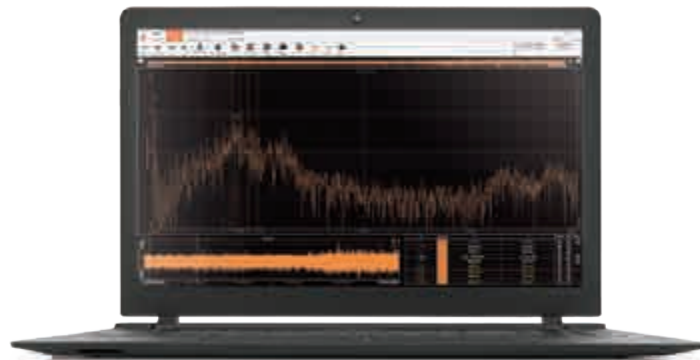
OCTAVE ANALYZER

R O T A T I N G   M A C H I N E R Y

OCTAVE ANALYSIS IS AN INDISPENSABLE TOOL FOR SOUND MEASUREMENT AS WELL AS PREDICTIVE MONITORING.
DEWESOFT OCTAVE ANALYSIS SOLUTION MEETS ALL OF THE IEC AND ANSI CLASS I SPECIFICATIONS FOR OCTAVE FILTERS.

FREQUENCY SOUND WEIGHTING
Standard frequency weighting curves (A, B, C, D and Z) can be applied directly in frequency domain for analysis of sound.

SYNTHESIZED ANALYSIS
Extremely fast calculation from the frequency domain in large channel count systems.

AVERAGING
Linear, peak and exponential averaging or block-based calculation.

RESOLUTION UP TO 1/24 OCTAVE
For deep analysis of data very narrow band analysis up to 1/24th octave.

TRUE OCTAVE ANALYSIS
True octave filters exactly represent the filter sets defined by the IEC 61260 standards and offer the user a real time response for vivid live visualization of data, crucial for advanced acoustic analysis.

SEAMLESS ACOUSTIC SUITE INTEGRATION
The Octave analyzer is perfectly integrated with sound level, sound power, sound intensity and other modules for advanced sound analysis.

ORDER TRACKING

R O T A T I N G   M A C H I N E R Y

DETERMINE THE OPERATION CONDITION OF ROTATING MACHINES (RESONANCES, STABLE OPERATION POINTS, DETERMINING CAUSES OF VIBRATIONS). EVEN MORE POWERFUL IN COMBINATION WITH OTHER MATH MODULES LIKE TORSIONAL ANALYSIS, COMBUSTION OR POWER ANALYSIS - THE TRUE EKG FOR MACHINES.

PROXIMITY PROBES

RPM SENSOR
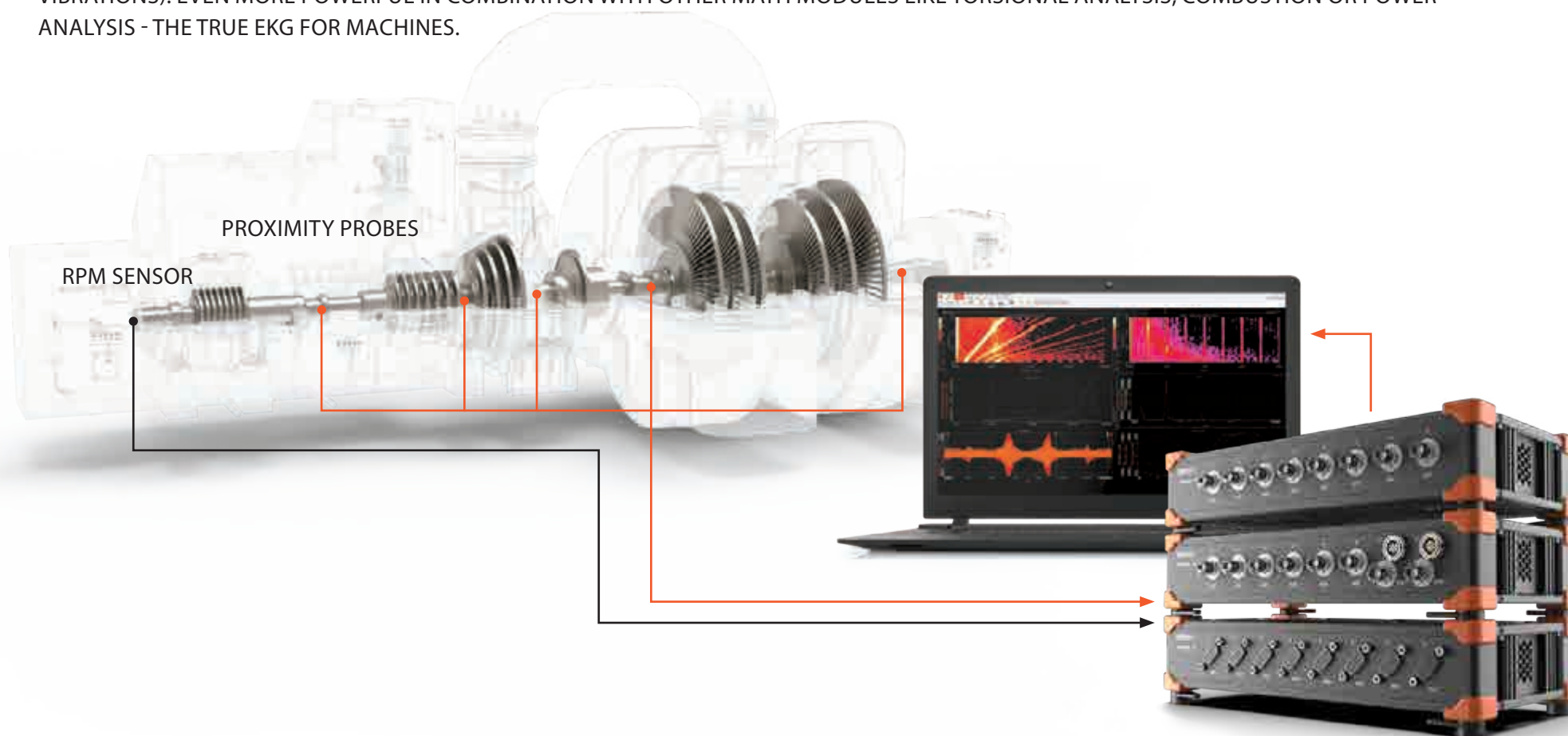
TIME, FREQUENCY AND ORDER DOMAIN - AT THE SAME TIME
Due to a high sampling and advanced alias free resampling mechanism, data are available in all three domains (time, frequency and order), everything at the same time in one screen and data file, perfectly synchronized.

ANGLE SENSOR SUPPORT
All angle sensors from tacho, encoder, geartooth, geartooth with missing or double teeth, tape sensors and others are supported to perfectly determine angle and rotational speed with 10nsec resolution using SuperCounter technology.

ADVANCED MATH
Any order and time domain harmonics can be easily extracted with amplitude and phase, available versus rotational speed or time in run up or coast down modes.

RICH VISUALIZATION
Frequency and order 3D waterfall plots provide a great tool to determine machine condition. Nyquist, Bode and Campbell plots are available for presentation of the data. Orbit analysis with raw or order view is an efficient tool for turbo-machinery analysis.

ROTATIONAL AND TORSIONAL VIBRATIONS

ROTATIONAL AND TORSIONAL VIBRATION MODULE ALONG WITH ORDER TRACKING ARE A STRONG TOOL TO TROUBLESHOOT SHAFTS IN AUTOMOTIVE, INDUSTRIAL OR POWER-GENERATION APPLICATIONS.

ANGLE SENSORS

EASY SENSOR SETUP
The Math module supports any type of sensor output, and the sensor type can be totally different at each end of the rotor. SuperCounter technology provides 10ns resolution in determining rotational angle and speed.

ACCESS TO ALL DATA
All data, such as reference angle, individual sensor rotational angle, speed and acceleration, torsional angle and velocity are readily available for advanced analysis.

ADVANCED MATH
Different input filters and rotational DC filters are available as well as the option to enter rotational speed ratio for gearbox analysis.

ORDER TRACKING INTEGRATION
Closely combined with order tracking, advanced data analysis is available based on the same angle sensors as the source of frequency.

BALANCING

R O T A T I N G   M A C H I N E R Y

BALANCED ROTORS ARE ESSENTIAL FOR SMOOTH OPERATION OF ROTATING MACHINERY. IMBALANCE WILL CREATE HIGH VIBRATIONS, REDUCING MACHINE LIFE, CAUSING MATERIAL DEFECTS AND DOWN TIMES. THE BALANCING MODULE IS THE TOOL TO ELIMINATE IMBALANCE ON SITE.

ACCELEROMETERS

RPM
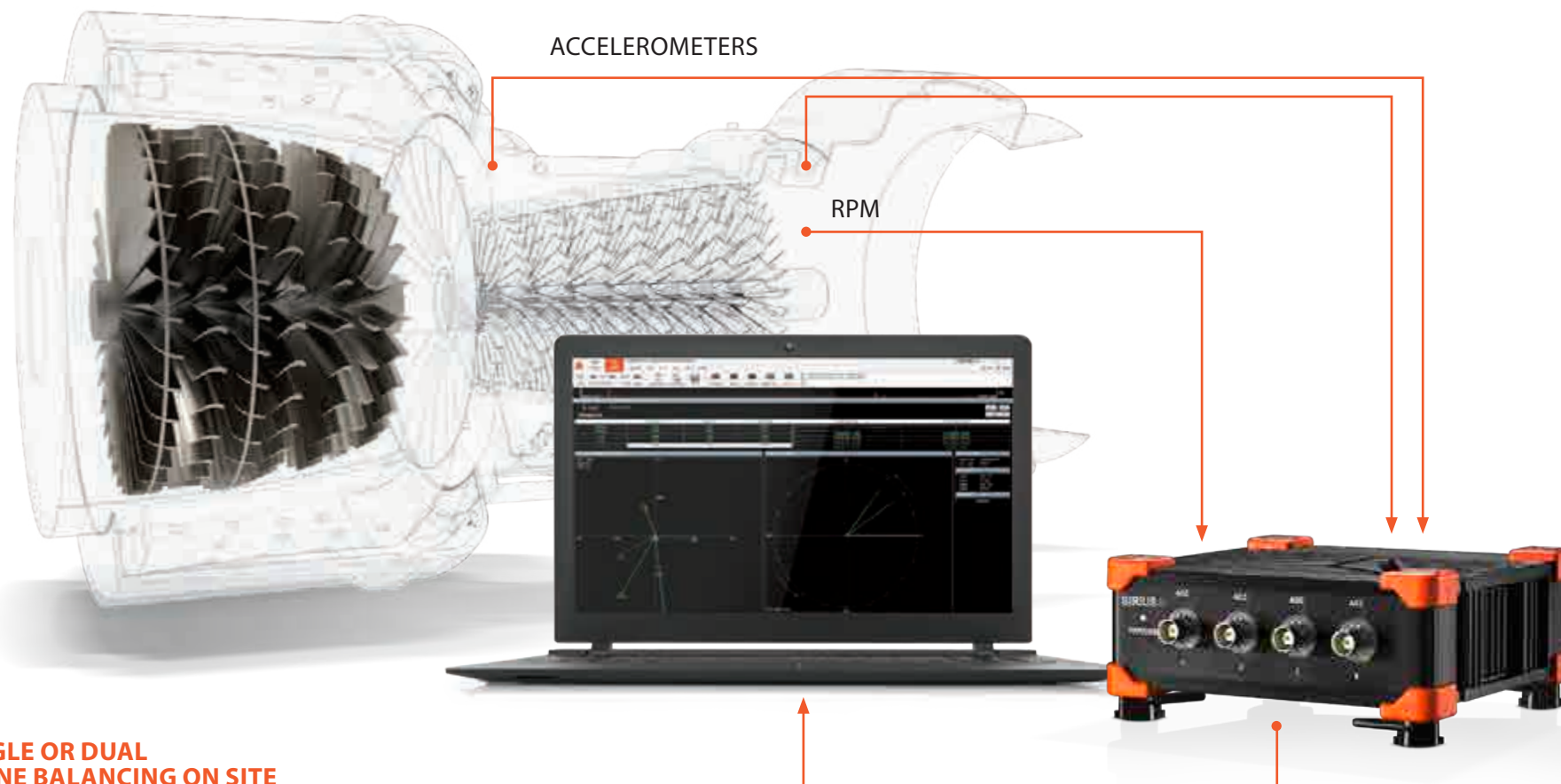
SINGLE OR DUAL PLANE BALANCING ON SITE
Perform single plane (narrow disc) or dual plane (long shaft) balancing.

RICH VISUALIZATION
Results from all runs are displayed in order to ease a decision for the next steps and to evaluate the stability of the measurement. RPM display has color indicator to determine in-out range.

SIMPLE STEP-BY-STEP PROCEDURE
Users are guided through the balancing steps for flawless operation including setup of angle sensor with live preview. Multiple modules can be combined for multi-axis balancing to save time and improve the quality of balancing.

WEIGHT SPLITTING
Adds the possibility to split needed balancing weight into equidistantly spaced points, for example holes on the rotor.

STORAGE OF INFLUENCE VECTOR
Influence vectors can be stored so that additional test runs are not needed for repetitive balancing of the same machine.

SHOCK RESPONSE SPECTRUM (SRS)

MECHANICAL SHOCK PULSES ARE OFTEN ANALYZED IN TERMS OF THE SHOCK RESPONSE SPECTRUM. THE SRS ASSUMES THAT THE SHOCK PULSE IS APPLIED AS A BASE INPUT TO AN ARRAY OF INDEPENDENT SINGLE-DEGREE-OF-FREEDOM SYSTEMS.

SUPPORTED STANDARD
Shock response spectrum calculation according to ISO 18431-4.

ADVANCED MATH
All relevant mathematics (positive max., negative max., maximax in either primary, residual or composite) are calculated. Results in frequency domain spectrum can be shown as acceleration, velocity or displacement. Support for pseudo-velocity and static acceleration determination.

DAMPING/QUALITY FACTOR
The selection of the damping ratio or quality factor is easily updated.

EASY SETUP & USE
The setup of sensors and the system is fast and simple; automatic shock detection based on the threshold method.

DATA EXPORT
Data can be exported in virtually any data format used for NVH analysis.

SELECTABLE FREQUENCY SPAN
Freely definable calculation range for the frequency spectrum.

MODAL ANALYSIS

S T R U C T U R A L   D Y N A M I C S

MODAL TEST IS AN INDISPENSABLE TOOL TO DETERMINE THE NATURAL FREQUENCIES AND MODE SHAPES OF ANY STRUCTURE - OFFERS EASY TO USE OPERATION WITH FAST SETUP WHILE PROVIDING RICH VISUALIZATION AND ANIMATION OF RESULTS.

ACCELEROMETERS

FORCE SENSORS

MODAL SHAKER
MS-250

ANALOG OUT
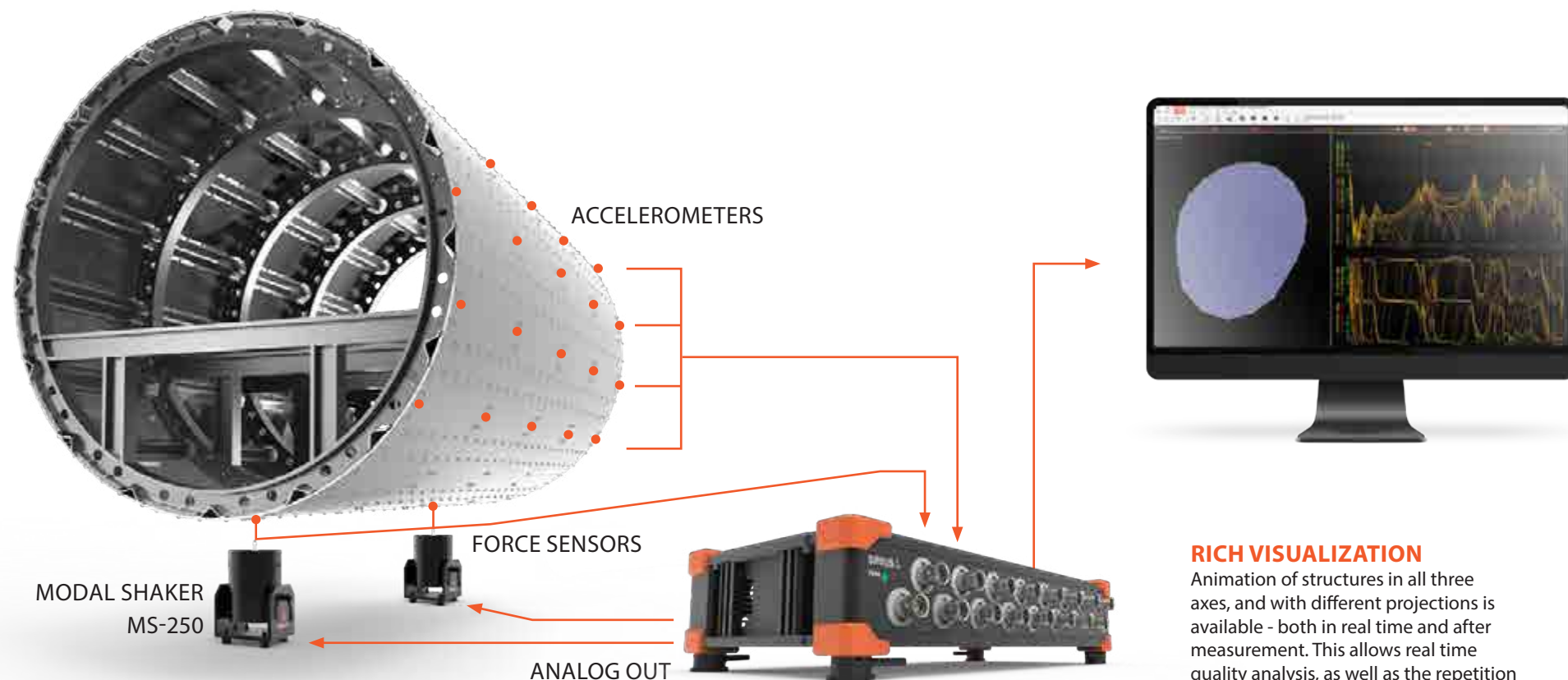
IMPACT HAMMER MODE
Allows grouping, rejecting and repeating measurement points; multiple reference and excitation points are supported. Ability to move excitation and response points ensures full flexibility when performing measurements.

SHAKER MODE
In combination with built-in function generator module, the system allows any type of excitation - Sine, Noise, Burst and Chirp.

ADVANCED MATH
Operating deflection shapes (ODS), mode indicator functions (MIF) and COLA analysis are fully implemented while operational modal analysis (OMA) and time domain ODS are available with close integration in connection to external software package.

RICH VISUALIZATION
Animation of structures in all three axes, and with different projections is available - both in real time and after measurement. This allows real time quality analysis, as well as the repetition of any measurement at any point. The Modal Circle tool determines the exact resonance, and calculates the viscous or structural damping factor.

UNV IMPORT/EXPORT
Geometry can be created using either the built-in editor, or imported from a UNV file. All data, from raw time domain to auto spectrum and FRFs can be exported using standard UNV file format.

SINE PROCESSING

STRUCTURAL DYNAMICS CHARACTERIZATION,
DURABILITY AND FATIGUE TESTING, DESIGN VALIDATION AND QUALIFICATION.

ACCELEROMETERS

SHAKER

COLA

DEVICE
UNDER TEST

VIBRATION CONTROLLER
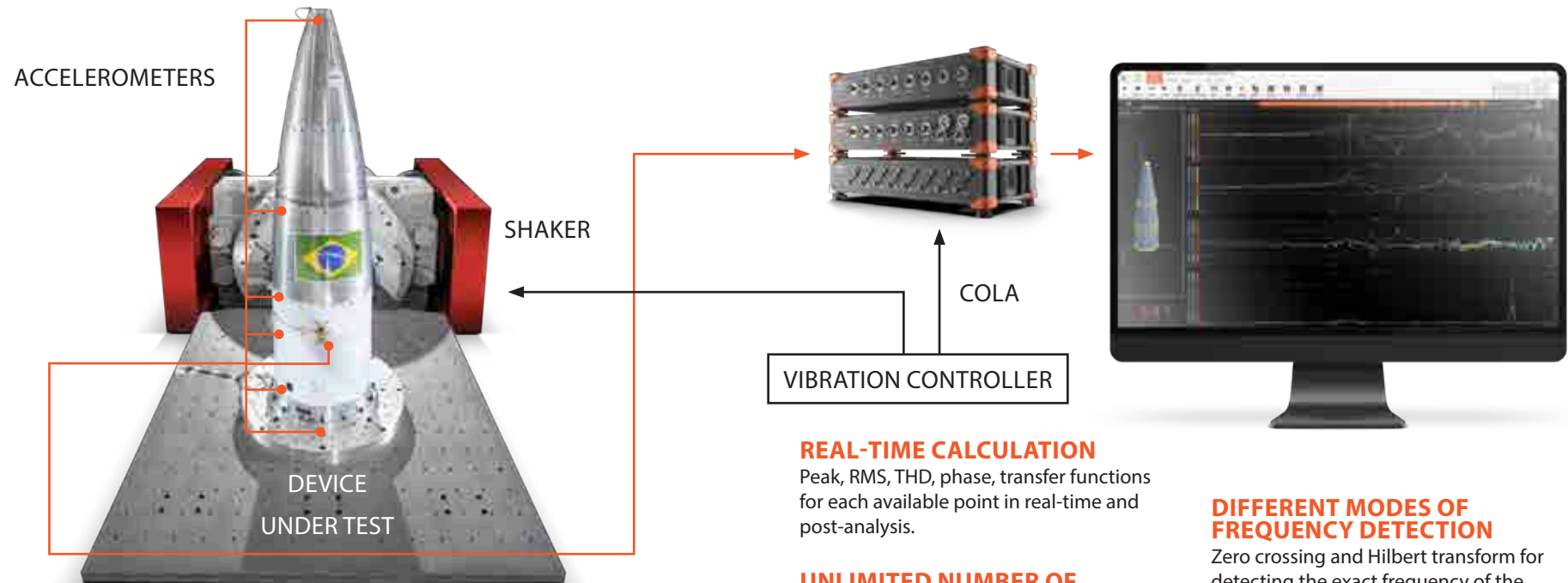
DATA EXPORT
Data can be exported in virtually any data format used for NVH analysis.

ONLINE AND OFFLINE ANIMATION
Determine the quality of results - animation of structure in all three directions with different projections during (and after) measurement.

FUTURE-PROOF APPLICATION
Lifetime free upgrades and support.

STORE AUTOMATICALLY
Automatic storing on desired trigger conditions.

TEDS SUPPORT
Save time by using teds accelerometers which are supported by Dewesoft X and on all Dewesoft hardware.

REAL-TIME CALCULATION
Peak, RMS, THD, phase, transfer functions for each available point in real-time and post-analysis.

UNLIMITED NUMBER OF CHANNELS
Supports real-time calculation on an unlimited number of channels.

COMPLETE SINE PROCESSING TESTS
Directly integrates with your existing shaker and controller, needing only the COLA signal to sync perfectly.

EASY TO SET UP AND USE
Simply connect the accelerometers and COLA signal, assign the correct channels and start measuring.

DIFFERENT MODES OF FREQUENCY DETECTION
Zero crossing and Hilbert transform for detecting the exact frequency of the sweep produced by the shaker controller and driving the shaker through an amplifier.

UNMATCHED POWER OF CALCULATION
Runs octave and FFTs simultaneously on all channels and all in real-time.

DEWESOFT QUALITY AND FLEXIBILITY
Simply add additional parameters to the same measurement system and expand your measurement chain in seconds.

SOUND LEVEL METER

A C O U S T I C S

COMPLIANCE WITH INTERNATIONAL STANDARDS. MAXIMUM ACCURACY AND HIGH DYNAMIC RANGE HAVE BEEN RE-IMAGINED WITH THE DEWESOFT APPROACH. REGARDLESS OF THE ACOUSTICS MEASUREMENT, SLM PLUGIN IS ALWAYS AT THE HEART OF IT.

ADVANCED MATHEMATICS - ALL AT THE SAME TIME
Predefined standard frequency weighting A, B, C, D, and Z), time weighting (Fast, Slow or Impulse), sound pressure level, equivalent, peak, minimum & maximum sound pressure levels, sound energy, impulsivity of sound, statistical noise level (LAF1, 5, 10, 50, 90, 95 and 99 % classes of values) are all available at the same time.

UNMATCHED FLEXIBILITY
SLM supports measurements in either air or water and can be combined with all other physical measurement parameters, vehicle bus systems, video, GPS and other math to build a thorough image of your entire measurement.

SUPPORTED STANDARD
IEC 61672 Class 1 sound level meter

RICH VISUALIZATION
Flexible displays offering digital meters, analog bars, time domain recorders, narrow band FFT and octave analyzers can be freely combined to show your SLM data in real time as well as in post processing.

HIGH DYNAMIC RANGE
Our top-of-the-class data acquisition hardware with 160 dB dynamic range in the time and frequency domain allows direct input of IEPE compatible microphones. Supported automatic recognition of microphones with TEDS. Dewesoft data acquisition system can be scaled for any number of microphones which can be effortlessly calibrated with a calibrator.

SOUND POWER

WIDELY ESTABLISHED SOUND POWER MEASUREMENTS WITH FAMILIAR, DISTINCTIVE USER INTERFACE AND INDUSTRY UNMATCHED FLEXIBILITY. RATING AND COMPARISON OF DIFFERENT NOISE SOURCES WITH EASE AND EXACTNESS WHILE SIMULTANEOUSLY MONITORING ANY NUMBER OF ADDITIONAL PROCESS PARAMETERS.
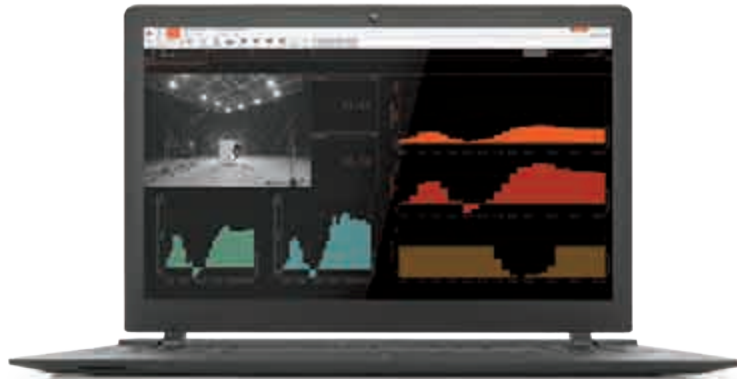
HEAVY MACHINERY
Includes measurement procedures for testing heavy machinery.

SUPPORTED STANDARDS
Fully compliant with relevant sound power standards **ISO 3741,ISO 3743-1, 3743-2, ISO 3744, ISO 3745, ISO 6393, ISO 6394, ISO 6395 and ISO 6396.**

RAPID REAL-TIME AND OFFLINE CALCULATION
All calculated parameters are available during measurement as well as offline; rapid calculation of correction factors K1 (background noise measurement), K2 (room correction with integrated RT60 module), C1, C2 and C3 (deviations due to meteorological reasons - temperature and barometric pressure); support for raw time domain data storing and offline sound power calculation.

PREDEFINED REPORT
After testing, present your results using our pre-defined and yet flexible report templates.
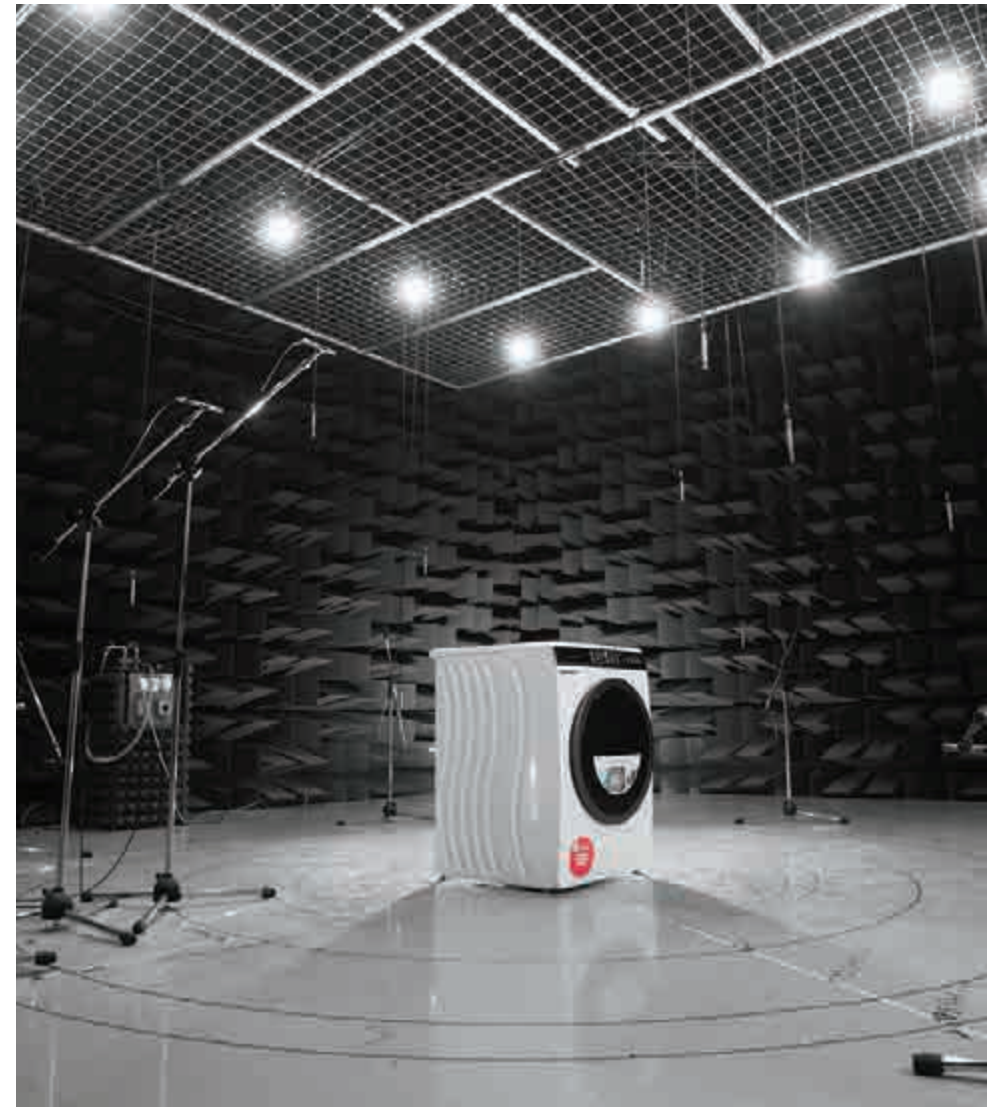
GUIDED STEP-BY-STEP PROCEDURE
You will be guided step by step through the entire measurement procedure, with our clear and comprehensive user interface.

REVERBERATION TIME RT60
Expand your measurement with RT60 and perform room ratings yourself, using the same software interface. Template for absorption coefficient included!

RT60 plugin sold separately.

SOUND INTENSITY

A C O U S T I C S

NOISE SOURCE DETERMINATION BROUGHT TO AN ENTIRELY NEW LEVEL. SOUND INTENSITY MEASUREMENTS IN A SIMPLE AND INTUITIVE WAY WITH PRECISION AND FLEXIBILITY UNMATCHED IN THE INDUSTRY. FOR EXAMPLE: MEASURING PROCESS PARAMETERS AND RECORDING VIDEO IN PARALLEL.

PHASE CALIBRATION
Straightforward, automated phase calibration and correction with a single button click.

IEC 61672 CALIBRATED
Complete measurement chain of sound intensity solution can be calibrated according to **IEC 61672.**

QUICK SOUND SOURCE IDENTIFICATION
Effortlessly identify noise sources with an easy-to-use interface.

ADAPTED FOR INDUSTRY
No need for a special environment - perfect for measuring on big chillers, transformers and other large-scale industrial applications.

SUPPORTED STANDARDS
Complies to Sound Intensity-based Sound Power calculation - **Discrete points method (ISO 9614-1)** and **Scanning method (ISO 9614-2).**

UNMATCHED FLEXIBILITY
Measurement of additional process parameters like vibration, video and others, everything perfectly synchronized.

SUPPORTED HARDWARE
Plug and play support for different intensity probes from all major manufacturers, integrating full remote control functionality.

SOUND QUALITY

PRODUCT SOUND ENGINEERING ANALYSIS AND CHARACTERIZATION OF PRODUCT SOUND .
THE INDISPENSABLE TOOL FOR SOUND ENGINEERING - MAKE YOUR PRODUCT SOUND RIGHT.

POWERFUL METRICS
Articulation index, speech intelligibility, noise rating and criterion.

MONAURAL AND BINAURAL ANALYSIS
Select desired measurement method before measuring or measure both at the same time.

FUTURE-PROOF APPLICATION
Lifetime free upgrades and support - our solutions are constantly being improved.

REAL TIME AND POST ANALYSIS
Calculation of metrics is supported in real time as well as in post analysis.

LOUDNESS & SHARPNESS
Calculation according to **ISO 532-1** and **ISO 532-2.**

MEASUREMENT EXPANDABILITY
Bundled with award-winning Dewesoft X Professional - advanced and easy-to-use data acquisition and analysis software.

TIME-VARYING AND STATIONARY SIGNALS SUPPORT
No limits when it comes to different use cases.

POWERFUL DAQ SYSTEM
Bundled with renowned SIRIUS DAQ system supporting sampling rates of 200kHz.

REVERBERATION TIME RT60

A C O U S T I C S

WHEN ROOM ACOUSTICS PROPERTIES ARE THE ISSUE, RT60 SOLUTION REPRESENTS AN ESSENTIAL TOOL. EASY SETUP ENABLES RELIABLE MEASUREMENT FOR EFFECTIVE MODIFICATION OF ROOM PARAMETERS AND EASY TO ACHIEVE DESIRED REVERBERATION TIME.

DIRECT MICROPHONE INPUT
Our data acquisition hardware with 160 dB dynamic range allows direct input of IEPE compatible microphones with support for TEDS automatic recognition. Data acquisition system can be scaled for any number of microphones.

EVALUATION RANGES
Different evaluation ranges for reverberation of time estimation are supported (T20, T30 and T60).

SUPPORTED STANDARDS
Fully complies with the **ISO 354** standard using integrated response method.

PARAMETER ESTIMATION
Estimation of modal decay parameters from noise measurements of reverberant and resonating systems using **Lundeby method.**

ABSORPTION COEFFICIENT CALCULATION
Calculate absorption coefficient and make a report with provided report template.

HUMAN BODY VIBRATION

MEASURE THE EFFECT OF VIBRATION ON THE BODY OF A HUMAN BEING. THE EXTRACTED PARAMETERS ALLOW THE JUDGMENT OF RISKS FOR WORKERS EXPOSED TO VIBRATION. WHOLE-BODY AND HAND-ARM MEASUREMENT IS SUPPORTED ACCORDING TO INTERNATIONAL STANDARDS.

HAND VIBRATION

SEAT VIBRATION

SUPPORTED STANDARDS
ISO 5349, ISO 8041, ISO 2631-1 and ISO 2631-5.

ADVANCED MATH
All data like RMS, Peak, Crest, VDV, MSDV, MTVV, Weighted raw, al (ISO 2631-5), al and D (ISO 2631-5) are available.

DATA ANALYSIS
Dewesoft X is the basis for R&D work related to reduction of the vibration due to its deep data analysis functionality.

WHOLE BODY VIBRATION
Applicable to motions transmitted from workplace machines and vehicles to a person's body through a supporting surface.

HAND ARM VIBRATION
Sensors are installed on special adapters for fixing on a handle or between fingers.

ACCELEROMETERS

INTERFACES & SENSORS

	I1T-50G-1	I3TI-50G-1	I1TI-50G-2	C1T-100G-1	I1TI-500G-1	I1AI-500G-1	I3T-50G-1
Number of axis	1	3	1	1	1	1	3
Sensitivity	100 mV/g	100 mV/g	100 mV/g	50 pC/g	10 mV/g	10 mV/g	100 mV/g
Range	50 g	50 g	50 g	100 g	500 g	500 g	50 g
Type	IEPE	IEPE	IEPE	Charge	IEPE	IEPE	IEPE
Frequency range	+/- 5 %: 0.3 to 5000 Hz	+/- 10 %: 2 to 5000 Hz	+/- 10 %: 0.3 to 10 000 Hz	+/- 8 %: up to 5000 Hz	+/- 10 %: 1 to 10 000 Hz	+/- 10 %: 1.1 to 10 000 Hz	+/- 10 %: 0.3 bis 10 000 Hz
TEDS	yes	yes	no	no	yes	yes	yes
Features	Miniature size	Case isolated, triaxial	Case isolated, industrial	High temperature	Case isolated, modal	Ultra-miniature	Low noise, triaxial
Dimensions	10.2 x 10.2 x 10.2 mm	1 5.5 x 15 x 15 mm	17.5 x 42.2 mm	12.7 x 24.4 mm	19.4 x 12.7 x 16.1 mm	9 x 6 mm	12 x 12 x 11 mm
Weight	4.3 g	10 g	44 g	25 g	10 g	2 g	5.6 g
Temperature range	-51 °C … +85 °C	-51 °C … +85 °C	-51 °C … +121 °C	-51 °C … +191 °C	-40 °C … +85 °C	-51 °C … +121 °C	-51 °C … +82 °C

TACHO SENSORS

	DS-TACHO2	DS-TACHO3	DS-TACHO4
Light source	LED	Laser (red class 2)	LED
Housing	Stainless steel	Stainless steel	Stainless steel
Cable length	2.5m cable	2.5m cable	5m optical fiber and trigger box
Frequency range	Up to 4kHz	Up to 4kHz	up to 1MHz
Distance to object	Up to 1m	Up to 7.5m	from 1-10 mm
Power supply	3-15VDC, 45mA	3-15VDC, 45mA	10-30VDC
Operating temperature	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Dimensions	73mm length, 16mm diameter	73mm length, 16mm diameter	M6 x 20mm with 2.5m cable
Connector	L1B7m connector for SIRIUS and DEWE-43 counter input	L1B7m connector for SIRIUS and DEWE-43 counter input	L1B7m connector for SIRIUS and DEWE-43 counter input
Accessories	30cm reflector band	30 cm reflector band	1m reflector band with 2mm black/white grid

TACHO LEVEL CONVERTER

DS-TACHO1- tacho level adapter	
Description	Converts analog tacho signal to digital signal with adjustable trigger level
Trigger/retrigger level	±10 mV … ±2 V (adjustable with screwdriver)
Max input voltage	±50 Vdc, ±100 Vac
Power supply output	5VDC (max current depending on used Dewesoft device: e.g.. DEWE-43:max 800 mA)

MICROPHONES

MICROPHONES

	46AE - 1/2" CCP Free-field Standard Microphone Set	146AE - 1/2" CCP Free-field Rugged Microphone Set IP67	46BE 1/4" CCP Free-field Standard Microphone Set w/o cable	46DE 1/8" CCP Pressure Standard Microphone Set
Frequency range (±1 dB)	5-10 kHz	5-10 kHz	10-40 kHz	10 - 25 kHz
Frequency range (±2 dB)	3.15-20 kHz	3.15-20 kHz	4-80 kHz	6.5 - 70 kHz
Dynamic range lower limit with GRAS preamplifier	17 dB(A)	18 dB(A)	35 dB(A)	52 dB(A)
Dynamic range upper limit with GRAS CCP preamplifier	138 dB	138 dB	160 dB(A)	174 dB
Set sensitivity @ 250 Hz (±2 dB)	50 mv/Pa	50 mV/Pa	3.6 mV/Pa	/
Set sensitivity @ 250 Hz (±3 dB)	/	/	/	0.8 mV/Pa
IEC 61094-4 Compliance	WS2F	WS2F	WS3F	manufactured within same tolerances
Temperature range, operation	-30 to 85 °C	-40 to 125 °C	-30 to 85°C	-30 to 70°C
Temperature range, storage	-40 to 85 °C	-40 to 85 °C	-40 to 85°C	-40 to 85°C
TEDS	yes	yes	yes	yes
Weight	33 g	35 g	8 g	7 g

SOUND INTENSITY PROBE

50GI-R CCP Intensity Probe with Remote Control	
Sound-intensity microphone pair 40GK, phase-matched	½" Free-field
Preamplifiers 26CB	Phase-matched
Frequency response and phase-matching	IEC 61043 class 1
Frequency range (±2 dB)	IEC 61043 Class 1
Frequency range with 100 mm spacer	30 Hz – 1 kHz
Frequency range with 50 mm spacer	80 Hz – 1.5 kHz
Frequency range: with 25 mm spacer	120 Hz – 5 kHz
Frequency range: with 12 mm spacer	200 Hz – 10 kHz
TEDS	yes
Weight	400g

MODAL HAMMER

IH-440N-1	
Number of axis	1
Sensitivity	50 mV/lbf (=11,24 mV/N)
Range	100 lbf (=444,82 N)
Type	IEPE
Frequency range	75 kHz resonance frequency
TEDS	yes
Features	modal hammer with TEDS
Dimensions	221 x 71 mm
Weight	100 g (head)
Temperature range	-40 °C … +65 °C

SHAKERS

Permanent Magnet Shaker			
	PM-20	PM-100	PM-250	PM-440
Output Force (Sinus)	20 N	100 N	250 N	440 N
Frequency range	0 - 12 kHz	0 – 8 kHz	0 – 5 kHz	0 – 5 kHz
Displacement (Pk-Pk)	5 mm	10 mm	25 mm	25 mm
Max Acceleration	30 g	45 g	80 g	80 g
Amplifier (Integrated, External)	I	I	E	E

- Embedded power amplifier and signal generator for PM-20, PM-100
- Lightweight, durable, portable and easy to use
- Adjustable trunnion base provides high degree of flexibility
- Broad frequency range

Modal Shaker			
	MS-20	MS-100	MS-250	MS-440
Output Force (Sinus)	20 N	100 N	250 N	440 N
Frequency range	0 – 12 kHz	0 – 8 kHz	0 – 5 kHz	0 – 5 kHz
Displacement (Pk-Pk)	5 mm	10 mm	25 mm	25 mm
Max Acceleration	40 g	60 g	100 g	100 g
Amplifier (Integrated, External)	I	I	E	E

- Embedded power amplifier and signal generator for MS-20, MS-100
- Modal stinger can be easily adjusted by the through-hole armature
- Lightweight, durable, portable and easy to use
- Adjustable trunnion base provides high flexibility
- Up to 25mm stroke and broad frequency range

Inertial Shaker			
	IS-5	IS-10	IS-20	IS-40
Output Force (Sinus)	5 N	10 N	20 N	40 N
Frequency range	10-1000Hz	10-3000 Hz	10-3000 Hz	10-3000 Hz
Displacement (Pk-Pk)	1 mm	5 mm	8 mm	12 mm
Total mass	0,06 kg	0,24 kg	0,3 kg	1,2 kg
Amplifier (Integrated, External)	E	E	E	E

- Compact and lightweight design
- Superior low frequency performance
- Any angle mounting
- Low friction bearing guided

OUR COMPANY

BUILT WITH YOU
AND FOR YOU

The best solutions can be made only by a motivated team of people who love their work – those who design and build instruments with a spark in their eyes, and those who light up when they have an idea for improvement. Working with you, we are creating Dewesoft together.

BUILD TO
LAST

Dewesoft is built to last, strongly investing in people, our technology and our own sales network. Dewesoft is owned by the employees – self-financed, and with a AAA credit rating.
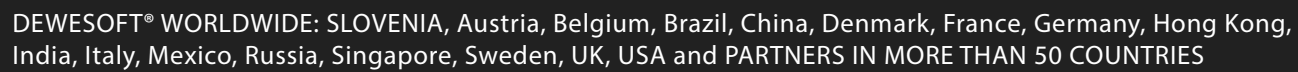
EVERYTHING
IN HOUSE

Everything is made in our headquarters in the EU. We own our key technologies, like our software and hardware development labs, chassis manufacturing, pick & place, assembly and testing. It's all done in-house with our own committed employees.

HIGHEST
QUALITY

Quality certificates are only the tip of the iceberg of our commitment to quality in all our processes. We are extremely proud that our work had been recognized for excellence with a variety of international and local awards, including NASA TECH award "PRODUCT OF THE YEAR" and Automotive Testing International magazine "SOFTWARE INNOVATION OF THE YEAR".

DEWESOFT® WORLDWIDE: SLOVENIA, Austria, Belgium, Brazil, China, Denmark, France, Germany, Hong Kong, India, Italy, Mexico, Russia, Singapore, Sweden, UK, USA and PARTNERS IN MORE THAN 50 COUNTRIES

DEWESoft LLC
10730 Logan Street
Whitehouse, Ohio 43571

+1-855-339-3669
www.dewesoft.com
support.us@dewesoft.com
sales.us@dewesoft.com