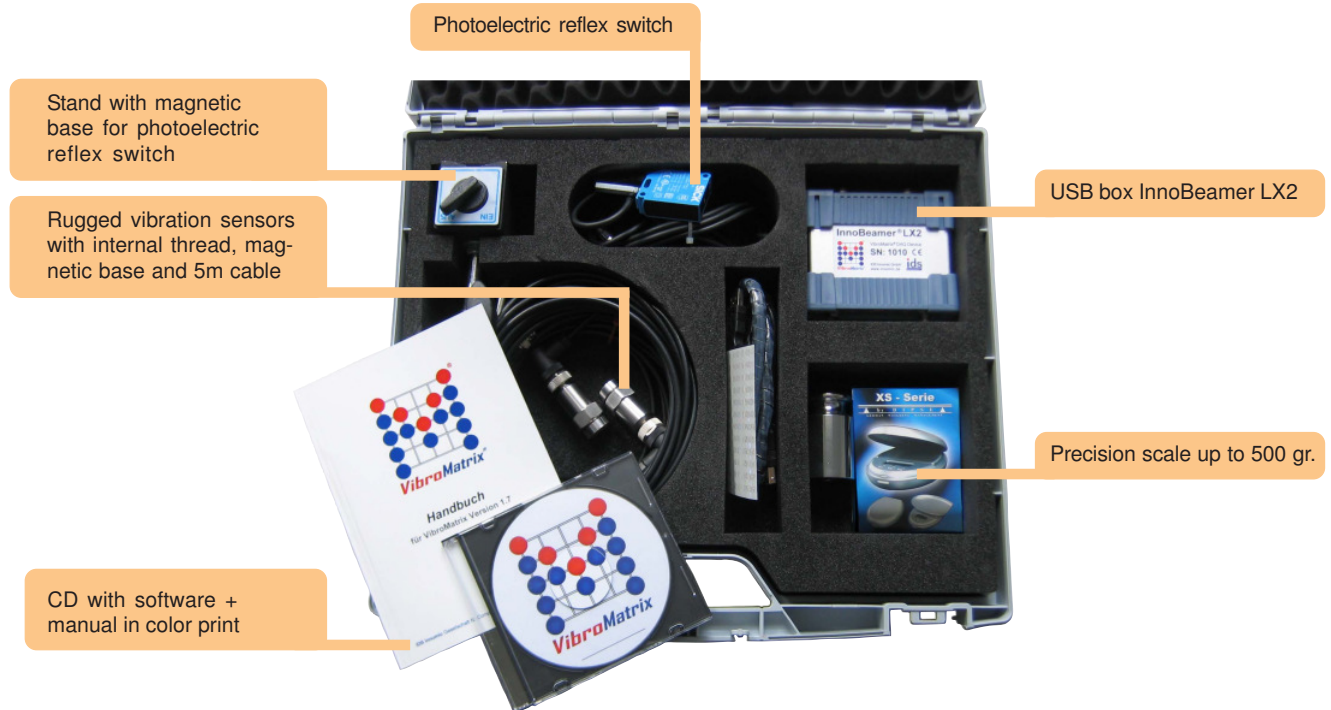




VibroMatrix® Kit

Balancing Kit

VibroMatrix®



The VMSet-01 and VMSet-02 come in a handy case and provide you with everything you need for Single- resp. Two-Plane-Balancing. It is not necessary to select all required single components on your own.

The system can be extended easily by new software instruments, e.g. for frequency or run-up analysis at any time. New hardware components are not necessary.

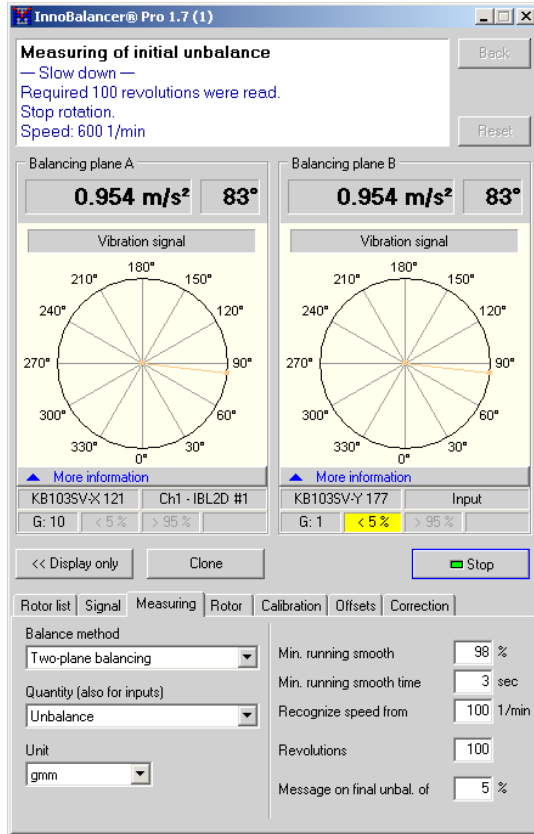
	VMSet-01P	VMSet-01S	VMSet-01L	VMSet-02P	VMSet-02S	VMSet-02L
	Single-Plane-Balancing			Single- and Two-Plane-Balancing		
Hardware						
Sensor for Vibration Measurement	<ul style="list-style-type: none"> - Type: Piezoelectric accelerometer, shear design - Sensitivity: 100 mV/g, linear frequency range: 0.13 .. 22 000 Hz - Operating temperature: -20 .. 120 °C - Protection grade: IP67 / insulated case avoiding ground loop problems - Accessories: Clamping magnet and cable (5m) 					
Amount	1	1	1	2	2	2
Sensor for Reference Position	<ul style="list-style-type: none"> - 1 piece opto-electronic sensor - Scanning range: Maximum 7m, signal sequence min: 1500/s, response time: < 330 µs - Protection grade: IP67, operating temperature: -40 .. 60 °C - Accessories: Stand with switchable magnetic base, 2m cable 					
USB Box for Digitization	<ul style="list-style-type: none"> - 1 piece InnoBeamer LX2 - Inputs: 2x analog for vibration sensor(s), 1x digital for photoelectric reflex switch - Signal frequency: 0.1 .. 3200 Hz - Supply current: < 500 mA with supply of all sensors - no mains adapter required - Operating temperature: -20 .. 50 °C, weight: 350 gr. - Accessories: 1.8m USB cable 					
Software Licenses						
InnoBalancer	1x Pro	1x	1x Light	2x Pro	2x	2x Light



InnoBalancer® 1.7

Balancing Instruments

VibroMatrix®



InnoBalancer during measurement

Application

The InnoBalancers are designed for the reduction of vibrations.

Rotating parts in drives, gears, pumps, fans and many other technical products cause perturbing vibrations. These vibrations often have to be reduced in order to increase product quality and durability by smooth run.

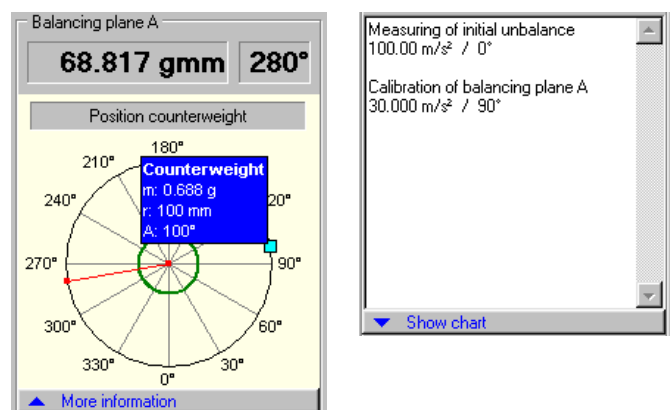
The InnoBalancers allow a purposeful vibration reduction by balancing. Both discoidal and longish rotors can be balanced systematically and fast.

The InnoBalancers support field balancing. Ideally, the rotor is balanced directly in installed state. So you save the complex dismantling and the transport of the rotor to a balancing machine. Moreover, in many cases, an acceptable performance can only be achieved by balancing the installed rotor with all attached parts.

Measuring of initial unbalance

— Slow down —
Required 100 revolutions were read.
Stop rotation.
Speed: 600 1/min

A clear user guide supports the customer.



More balancing information, graphically and in plaintext.

Properties

3 InnoBalancer versions are offered. The Light Version already allows Single-Plane-Balancing or Two-Plane-Balancing as well as balancing by adding/removing weight, drilling, milling and balancing rings. The Standard Version additionally offers balancing with fixed positions and balancing with setscrews. In the Pro Version, the fixed positions can be configured with different correction modes or parameters. Additionally, it offers a rotor list, in which the intermediate runs can be saved as well. They can be reloaded again to continue the measurement.

The user is guided through the balancing process in plaintext. Thanks to the auto recognition of rotation speed, he or she does not need to start a measurement manually.

Results are displayed numerically as well as in a polar chart, which is allocated to each balancing plane. For further information a window can be opened when required.

A powerful report-function generates balancing-reports acc. to individual requirements. After having configured it once, you generate balancing reports at the push of a button.

Technical Data

	InnoBalancer Pro	InnoBalancer	InnoBalancer Light
Methods			
Balancing	Single-Plane-Balancing Two-Plane-Balancing Unbalance adjustment	Single-Plane-Balancing Two-Plane-Balancing	Single-Plane-Balancing Two-Plane-Balancing
Correction	Add weight Remove weight Drilling Milling Balancing rings Setscrews Counterweight list	Add weight Remove weight Drilling Milling Balancing rings Setscrews	Add weight Remove weight Drilling Milling Balancing rings
Fixed Positions	3 .. 99, individually adjustable	3 .. 99, uniformly adjustable	-
Signal Processing			
Vibration Measurands	Acceleration in m/s ² , mm/s ² , µm/s ² , nm/s ² , pm/s ² , g, mg Velocity in m/s, mm/s, µm/s, nm/s, pm/s, in/s Displacement in m, mm, µm, nm, pm, in		
Unbalance Measurands	Unbalance in mgmm, gmm or gm Mass based on radius in mg, g or kg		
Rotation Speed	6 .. 600 000 min ⁻¹ *		
Speed Recognition	Automatic recognition of run-up, constant rotational speed and slow -down		
Graphical Presentation			
User Guide	Four-line textual instructions for measuring the initial unbalance, calibration and verification runs		
Vector Indications	Numeric, in polar chart and in text list		
Balancing Indications	Numeric and in polar chart		
Correction Indications	Positioned numerically in polar chart and extended in description field		
Polar Chart	Indication of vibration signal with value and angle, unbalance with value and angle, tolerance zone for pass-/fail-recognition, fixed positions, correction measures		
Recommended Screen Resolution	From 1024 x 768 pixels on		
Miscellaneous			
Rotor List	Yes	-	
Save Intermediate Measurements	Yes	-	
Available in a Kit	VMSet-01..07	VMSet-01S VMSet-02S	VMSet-01L VMSet-02L
General Functions	Measured data is held after switch off, instrument is cloneable		

* When working with InnoBeamer L2 or LX2: 6 .. 20 000 min⁻¹

Changes without prior notice

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— D e u t s c h l a n d —

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