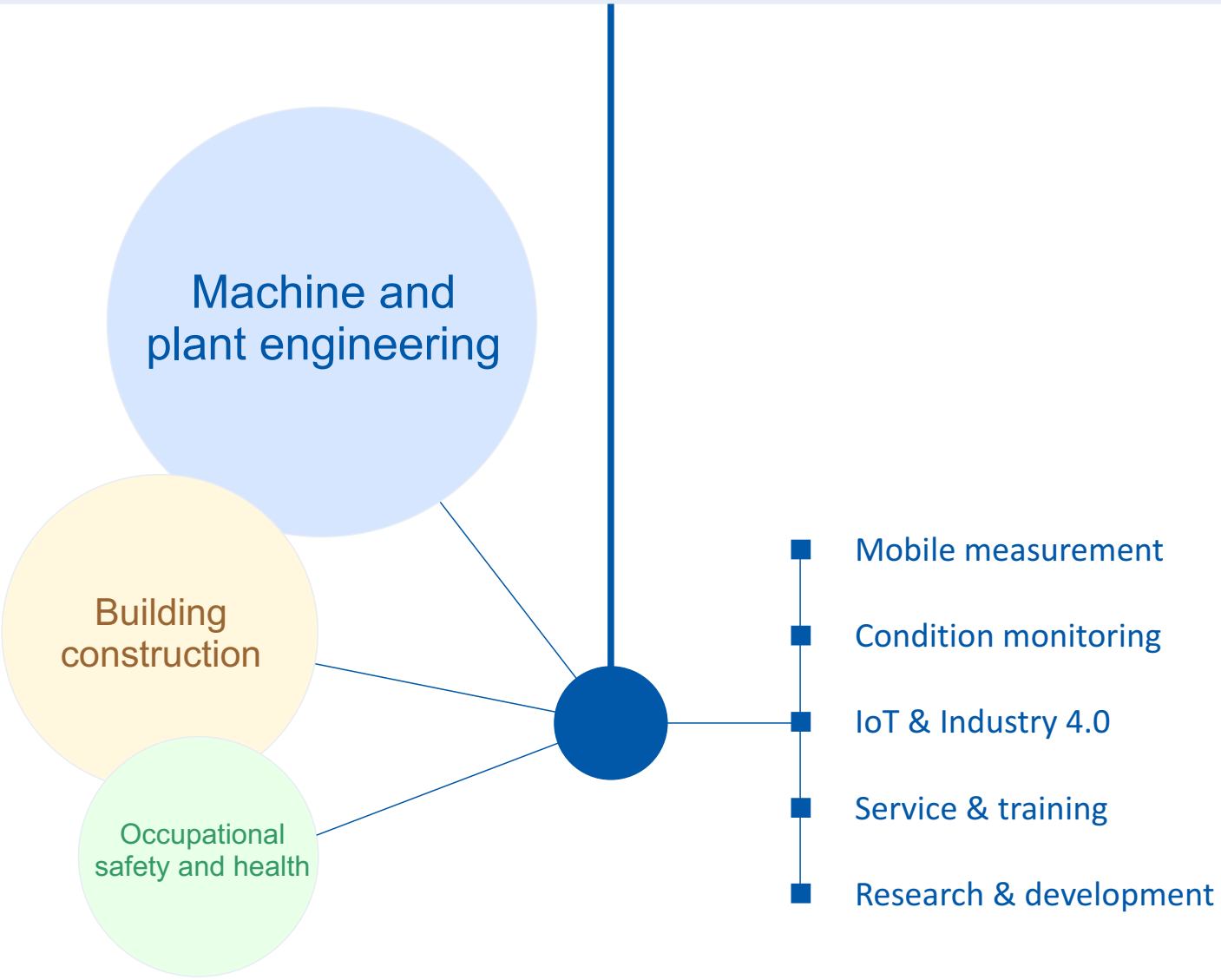
since 1996

Vibration Measurement Equipment Manufacturer



IDS CP 02/2023

IDS Innomic Schwingungsmesstechnik GmbH, D-29410 Salzwedel, Zum Buchhorst 35, Tel. +49 3901 3059950, www.innomic.com

The company

History

Foundation
as ids engineering
office for digital Vibration
Measurement

Foundation
of IDS Innomic
company for computer & vibration
measurement equipment GmbH

New company building
in plus-energy building
technology

Co-founder of
Conimon GmbH

Foundation of
IDS Innomic
Vibration Measurement
Equipment GmbH

1996 | 1998 | 1999 | 2004 | 2008 | 2012 | 2014 | 2017 | 2018 | 2019 | 2020 | 2022 | 2023

- **Balancing software**
- **VibroMatrix measuring system**
- **Control units for balancing machines**
- **Radio network measurement technology for building vibrations**
- **Condition monitoring system VibroLine VLE**
- **VibroLine VLX with fieldbus and streaming technology**
- **VibroLine VLX 5. Generation SD-Card Recording**

Systematically to the goal

With over 25 years of experience in vibration measurement technology, we deliver reliableproducts and ideas reliably and in the highest quality from the heart of the Altmark region. In doing so, we place the highest value on a high level of development and production depth across all phases of the creation of our products, so that we can react as independently and efficiently as possible to customer requirements at all times. Our team, consisting of engineers and physicists, from science and economy, guarantees a competent interaction in the implementation of your projects, supply of measurement technology, and of course in the support, application and commissioning.

Challenge us!

We would also be happy to discuss your requirements and wishes in a personal meeting at your site. We will not only present our products in general. If you wish, we can also show you the options available to you in a practical measurement on your machines.

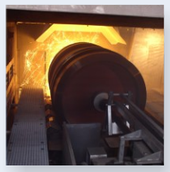
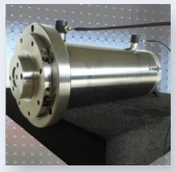
Location

Vibration Measurement

Fields of application

Motors Pumps Fans Processes Machine tools



Machine and plant engineering

Construction & Development

Vibration in construction
Effects on people & buildings
Micro vibrations
Serviceability of buildings

Occupational health and safety
Human - Vibration measurement
Hand-Arm & Whole Body

System solutions

VibroMatrix ®
Measuring Kit

VibroLine ®
Condition Monitoring

Vibration analysis and monitoring • complete from a single source

From the sensor to the evaluation, we supply high-quality coordinated components from our own development and selected production for the entire measurement chain. For mobile vibration measurement on site, the measurement kits of the **VibroMatrix®**-system contain all necessary components for measurement, recording and online/offline analysis.

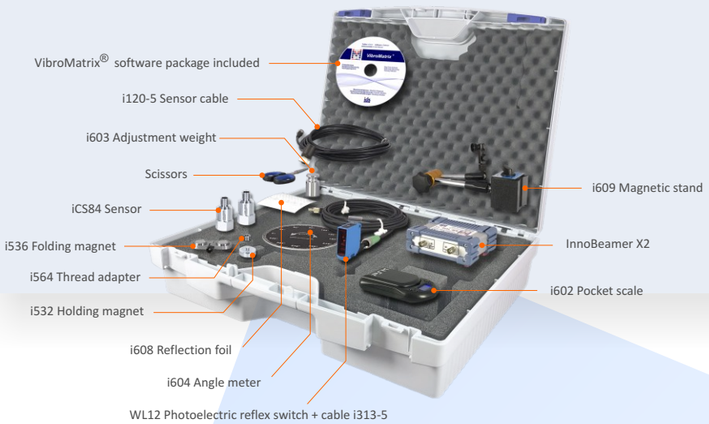
Condition monitoring with **VibroLine®** offers seamless monitoring of the vibration status of machinery and equipment and can be seamlessly integrated into existing control systems and control cabinets via analog and digital interfaces.

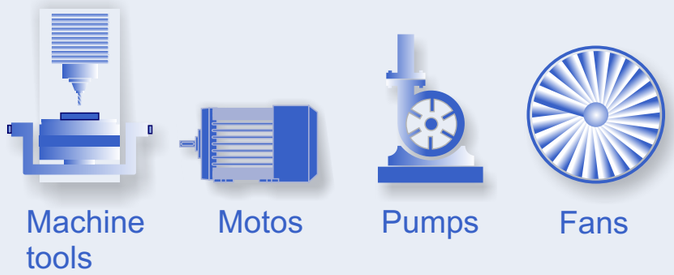
In addition, we offer extensive support in the implementation of your project by our certified vibration measurement technicians as a **service and in the training program.**

Mobile vibration measurement & analysis

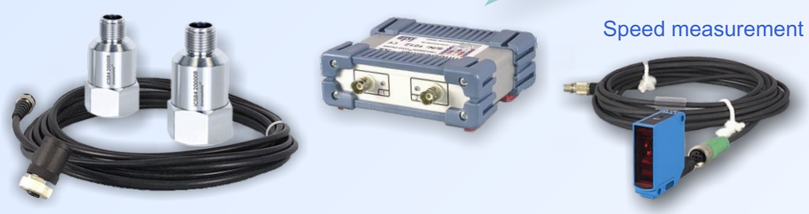
VibroMatrix ®
Measuring Kits

Measuring Kit	Application	Windows computer





USB 2.0



calibratable measuring chain

Measurement technology and accessories as VM case set suitable for the application

Measurement cases for the most common applications in **Machine engineering**, **structural vibration** and **human vibration measurement**, fully configured with all necessary sensors, cables and coupling accessories. If required, also individually assembled according to your requirements.

VibroMatrix ®
Software Modules

Time signals, Orbit	**InnoScope®**
Characteristic values numerical	**InnoMeter®**
Characteristic values graphically	**InnoPlotter®**
Frequency analysis, rolling bearing	**InnoAnalyzer®**
Frequency analysis, waterfall diagram	**InnoAnalyzer 3D®**
Run-up/Coast-down Tracking Analyzers	**InnoAnalyzer Speed®**
Third octave and octave band analysis	**InnoAnalyzer Octave®**
Balancing in 1 and 2 planes	**InnoBalancer®**
Recording and monitoring	**InnoLogger®**
Measurements on wind turbines	**InnoMeter 3834®**
Vibration protection - building	**InnoMeter 4150-3®**
Vibration protection - humans	**InnoMeter 4150-2®**
Whole body vibrations	**InnoMeter HVM 2631®**
Whole body vibration on ships	**InnoMeter HVM 20238®**
Hand-arm measurements	**InnoMeter HVM 5349®**

Condition Monitoring

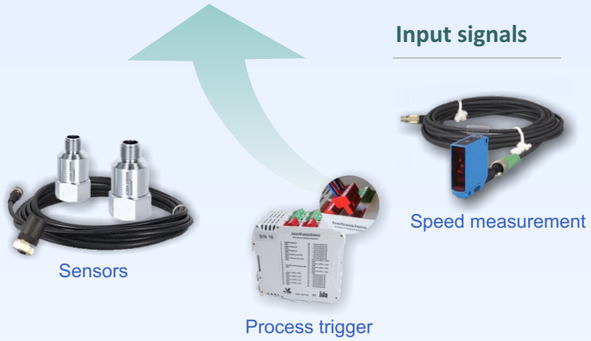
VibroLine®
VLE & VLX Series

VLE	VLX	Outputs	Interfaces	Optional	Analysis & parameterization

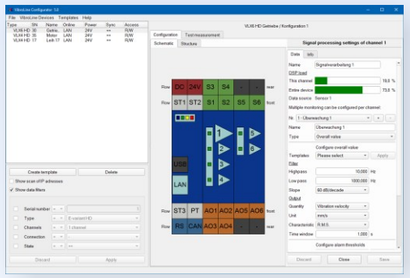
Digital Output | 4-20mA — VLE & VLX

CAN open | Modbus RTU | Modbus TCP | HTTP API — VLX

DataStream | MultiMode | DataInspect — VLX



VibroLine configurator



VibroLine® Vibration Monitoring Plus - VLE & VLX

Reliable machine protection - In the environment of Industry 4.0

VibroLine is characterized by seamless monitoring of all measuring channels. With a cycle time of 8 ms, the device is particularly suitable for monitoring dynamic processes, e.g. in CNC machines. In time-critical applications (e.g. collision warning), the system even alarms within 0.7 ms.

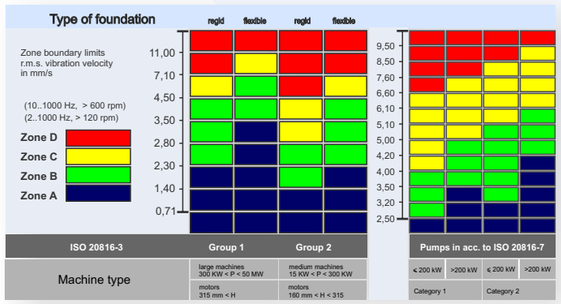
Model Serie HD	VLE	VLX
• Measured values via 4-20 mA • Alarms via digital switching signals	✓	✓
• Measured values and alarms via fieldbuses • Modbus RTU/TCP, CANopen, HTTP API	-	✓
• Speed inputs • Process trigger	1 1	3 1
• Additional options available • DataStream, MultiMode, DataInspect	-	✓

The vibration monitoring offers up to 8 measuring channels in a compact DIN rail housing. Besides IEPE accelerometers all sensors with output signal max. ±10 V AC are supported.

Integration into an existing automation environment is flexible via classic interfaces and fieldbuses. As an optional plus, VibroLine outputs the high-resolution sensor signals via streaming, e.g. for own signal analyses and AI algorithms. Data sheet VibroLine 5.0

Typical applications

Machine protection DIN 20816
Total vibration characteristics



Rolling bearing monitoring
BCC, k(t) Bearing characteristics

Unbalance and misalignment
Order characteristics

Collision detection
Fast high pass filter

Quality assurance
Automated testing

Accessories - Vibration measurement

For a standard-compliant measuring chain, tested and calibrated.

Sensors

Whether highly sensitive special sensors or robust sensors suitable for industrial use, we supply suitable sensors for different frequency ranges, sensitivities and coupling possibilities.

Sensor cable

With our own production of sensor cables, we can supply you with all lengths and connections - whether 1, 10 or 100 meters of cable with suitable connectors.

Speed measurement

We offer retro-reflective sensors, contrast scanners and inductive systems in a wide variety of designs. This means that very high speeds can be reliably detected even under harsh conditions.

Sensor mounting accessories

There are numerous options for coupling the sensors to your machines: Holding magnets, adhesive pads, threaded pins or mounting cubes. We will be happy to support you in the selection process, taking into account the various coupling properties.

Impulse hammers

An impulse hammer is necessary to measure the applied forces of a structural excitation for the calculation of a transfer function. We supply impulse hammers in all common sizes.

Vibration calibrators

Vibration calibrators are available with different fixed frequencies and excitation amplitudes. You can use them to test your measurement chain or calibrate sensors in-house. Alternatively, you can have an accredited calibration (DAkkS) performed by us.

Practical and tested!

High-quality measurement technology can only show its full potential if the entire measurement chain meets the requirements for measurement accuracy. Improper coupling of the sensors, unfavorable cable lengths, incorrect positioning or environmental influences that have not been taken into account can falsify the measurement result and thus make it unusable. We will be happy to advise you and show you what is important with successfully tested solutions.

Services

For a long term cooperation.

Measurements

- Vibration measurement on machinery and equipment
- Performed by ISO18436-2 certified vibration analysts
- Measurement report and proposed solutions

Solution-oriented

Trainings

- Seminars on vibration measurement and vibration analysis
- Trainings at your site or in-house in our training rooms
- Training courses on basic and application-specific topics

Future-oriented

Balancing

- Balancing in 1 und 2 planes
- Performed by ISO18436-2 certified vibration analysts
- Balancing of fans, spindles, milling shafts, decanters, classifiers, etc.

On site

Rental service

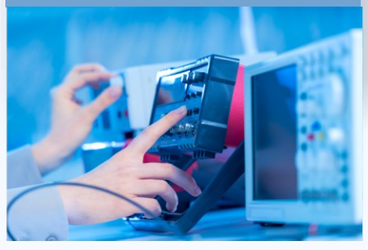
- All complete systems are also available as rental cases
- Crediting of the rental price to the purchase price
- For one-time or short-term use

Flexible

Calibration service

- Calibrations of vibration measurement chains and individual sensors
- Factory calibrations DAkkS calibrations
- Reminder service for your next calibration

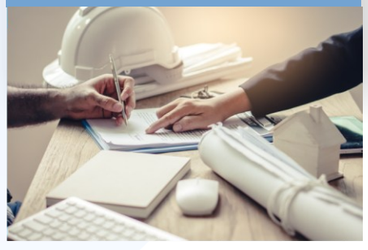
Safe



Development Service

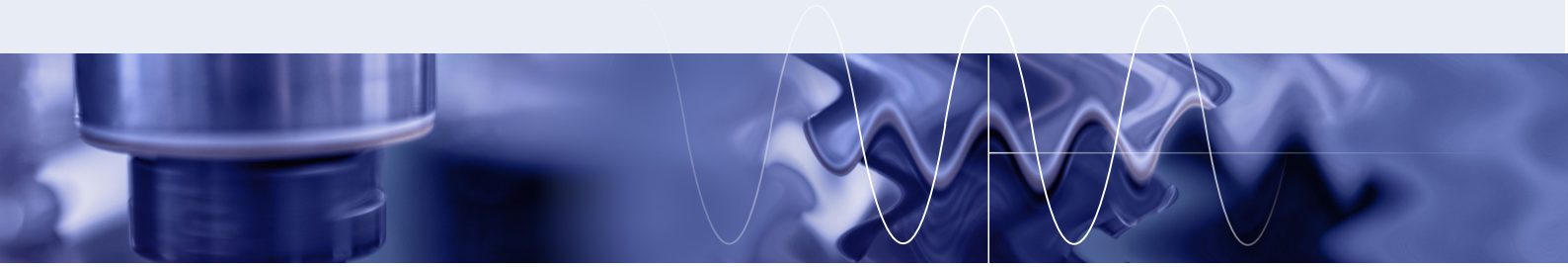
- Customized automation solutions for vibration measurement
- New functions of our measurement technology according to your requirements
- Development of hardware and software precisely for your purposes

Individual



We support you!

From planning to the introduction and application of new vibration measurement technology, we always offer you customer-oriented and competent support with our service offerings. Here you benefit from our experience from projects that have already been successfully implemented many times. Our technical office and field service is a reliable contact for you at any time.



IDS Innomic Schwingungsmesstechnik GmbH
Zum Buchhorst 35

D-29410 Salzwedel

Telefon: +49 3901 3059950
Fax: +49 3901 3059951

E-Mail: info@innomic.de
Web: www.innomic.com

IDS CP 02/2023