

VIBRAIUN EASURE OLOGY **Early failure detection**



"A solution exists for every problem. We only have to ask in a sophisticated manner, to identify the exact problem.

We think the feasible and do the thinkable. We believe in quality. And deliver top class technology to our customers."

Michael Ruthrof - CEO red-ant

To develop a new generation of **innovative measurement systems**, that was the **vision** of graduate engineers **Michael Ruthrof** (mechanical engineering) and **Oliver Thost** (electrical engineering) when they founded red-ant in 2004.

They wanted to be among the best with their measuring systems for quality assurance in series production and for early failure detection in prototypes. Defining individual system solutions of highest quality that are precisely tailored to the respective customer needs — that was and is their goal.

The founders also demonstrated their pronounced passion for perfection in terms of customer orientation when the red-ant competence centre started its service in 2011. Since then, highly qualified experts have been on hand to provide customers with competent help, 24/7.

In the meantime, the start-up has become a **globally active company** with more than 170 customers and 500 sold systems.

The success proves that red-ant is on the right track with its **unconditional customer and service orientation**. And with the highest resolution of all NVH-systems on the market, red-ant continues to be at the forefront of technology.

Let us convince you too!

EARLY FAILURE DETECTION

INTELLIGENT, PRECISE, EFFICIENT

The high demands in vehicle and machine construction require precise diagnostics in early failure detection. Especially in research and development, it is important to test prototypes efficiently and to detect and analyse damage at an early stage.

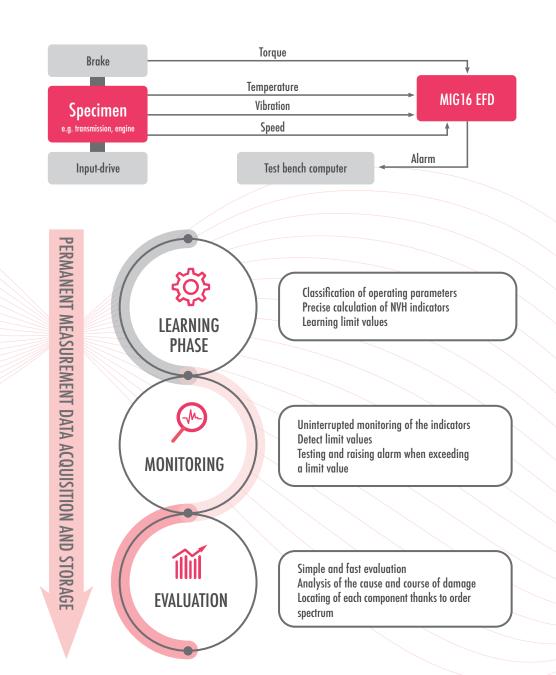
As an innovation leader, we have revolutionised early failure detection in recent years and, thanks to our unique concept, have established ourselves in the motorsport market in particular. With permanent data acquisition and continuous calculation and classification, our MIG16 EFD measurement systems offer an intelligent and innovative measurement technology for early failure detection.

AREAS OF APPLICATION

- Endurance testing and durability testing of (electric) motors, gearboxes, axles, turbochargers, wind turbine gearboxes etc.
- Condition monitoring and safeguarding
- · Material testing
- Ideal for applications where high measurement accuracy at low cost is required

ADVANTAGES AT A GLANCE

- Multi-channel: Simultaneous acquisition of up to 16 channels
- Multi-indicator: Monitoring of vibration, torsional vibration and torque changes
- Modular: Individual configuration for maximum flexibility
- State-of-the-art technology: 24bit measurement data acquisition, 200 kHz, speed detection with 80 MHz, highest order spectrum resolution (128,000 lines)
- Uninterrupted monitoring 24/7
- Simple operation and fast evaluation
- Documentation and storage of the entire test process and all raw data

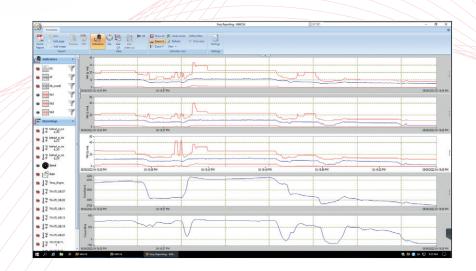


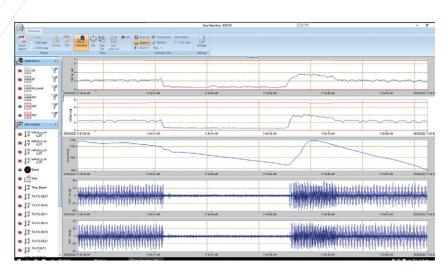
YOUR REQUIREMENTS - OUR SOLUTION

With us, experience meets passion. With our know-how in all aspects of vibration measurement technology and a strong passion for perfection, we will find the right solution for each of your requirements. In this way, we succeed in defining the optimum system solution that is precisely tailored to your specific needs.

Individual configuration according to your requirements







Simple and fast evaluation through our modern reporting module

FROM 19" TO 250 g — HOUSING OF YOUR CHOICE

You alone decide in which housing we install our MIG16 EFD product. From small to portable to large, black or silver - your requirements and taste determine the size and look.

19" SYSTEM



Steel standard housing

MINI MIG



Lightweight and fanless system

DURAPAC 17"



17" system with display and keyboard

NANO MIG



250 g compact technology – ideal for automotive applications

SERVICEINCREASE YOUR PRODUCTION QUALITY!



red-ant Training

- Focused on customer-specific topics
- Individually tailored to your needs
- Competent training personnel
- · User training on-site or online workshops to deepen your knowledge





red-ant Competence Centre

- Worldwide support 24/7 for all running red-ant systems
- Targeted damage diagnosis by qualified experts
- Comprehensive documentation and reporting
- Commissioning of new systems
- On-site support and analysis
- Maintenance of the systems





red-ant Order measurements

- · Joint definition of measurement tasks and objectives
- Provision of measurement technology including high-quality hardware and software
- Test setup (positioning of sensors) and validation of all measured values
- Execution of the measurement series incl. plausibility check
- Clear and comprehensive evaluation
- Translation of the measurement statements into comprehensible results





red-ant Financing

- Favourable conditions incl. insurance cover
- Variable financing framework, upgrades possible at all time
- Flexible rental period with take-over option at the end of the rental period
- · Use of investment or project budgets
- Detailed, individual advice
- Fast delivery and installation



REFERENCES THAT SPEAK FOR US:

































We are always there for you. Initial consultation at any time and free of charge.



red-ant measurement technologies and services GmbH

Taunusstraße 51 Tel. +49 89 306 58 99-0 80807 München Fax +49 89 306 58 99-99 Deutschland E-Mail info@red-ant.de



France

AllianTech
Mr. Daniel Leroy
86, Rue Paul Vaillant Couturier
92230 Gennevilliers, Paris
Tel. +33 562 200029
E-Mail information@alliantech.com

Spain

Grupo Álava 16, Calle de Albasanz 28037 Madrid Tel. +34 976 200 969 E-Mail alavay@grupoalava.com Turkey

Ulutek Teknoloji Geliştirme Bölgesi No. 134 Uludağ Üniversitesi Görükle Kampüsü 16059 Nilüfer/Bursa Tel. +90 224 2808444 E-Mail info@dta com tr

Korea

CieL-S Co.

85514 LINC, Sungkyunkwan University
2066 Seobu-ro, Jangan-gu, Suwon
Gyeonggi-do 16419
Tel. +82 31 2996782

F-Mail info@ciels.co.kr

South America

Lynx lecnologia Electronica Ltd Mr. Ricardo T. Ianaka R. Dr. José Elias, 358 Alto da Lapa, São Paulo SP, 05083-030 Tel. +55 11 3839-5910 F-Mail yendas@Junytec com bi North America

ToyoTech LLC 47523 Lakeview Blvd Fremont, CA 94538 Tel. +1 510-438-9548 E-Mail info@toyotechus.com

India

Vibrant Spectra 14/1, Malleswaram 17th Cross Bangalore 560 055 Tel. +91 80 2356 2892 E-Mail ram@vibrantspectra.com China

Sonus Technologies Co. Ltd.
Unit 202-204A Two Harbourfront
22 Tak Fung Street Hung Hom,
Kowloon Hong Kong
Tel. +86 139 1132 3553
F-Mail Izf@sonustc.com

Japai

Toyo Corporation 1-6, Yeasu 1-chome Chuo-ku, Tokio 103-8284 Tel. +81 03 3279 0771 E-Mail kohnor@toyo.co.jp