



### New representatives in Taiwan, Vietnam and Hungary

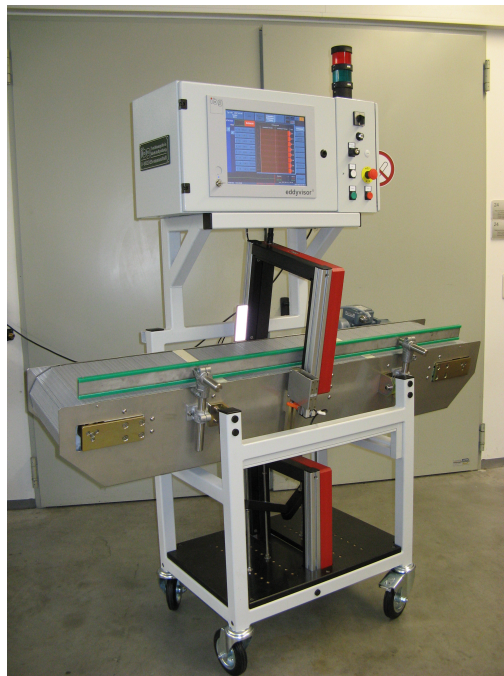
ibg expansion. We have new partners in Asia: Taiwan and Vietnam. And in Europe, we are now also active in Hungary.

With offices abroad and representatives in all of the major automobile manufacturing and supplier countries, ibg is optimally set up to support you worldwide regarding all questions of application, sale, installation and service. Please have a look at our website [www.ibgndt.de](http://www.ibgndt.de) for contact details.

## Transport belt sorting systems for huge cast or forged parts

ibg supplies simple but very flexible handling systems for testing huge cast or forged parts for hardness and / or material mix.

These systems are based for example on belts which transport the test parts through the test coil and each part is tested with the well-known Preventive Multi-Frequency Technology.



The picture shows an example of a belt system.

#### IMPRESSUM

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# info

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## ibg-Talk



Again, an eventful year for ibg runs out. After the extremely successful introduction of the **eddyvisor<sup>®</sup>S** structure test instrument in 2005, we have been able to present the new **eddyvisor<sup>®</sup>C** crack test instrument to our customers.

During the Workshop in April, our German customers had occasion to vet the new development. In the meantime, the first instruments have been sold to the Far East and to America. The rapid acceptance of our new developments in the market confirms how important it is for our customers to only deliver goods of the highest quality.

If you are interested in a presentation of our new generation of **eddyvisor<sup>®</sup>** instruments for either crack or structure test or both we are at your disposal - contact our sales staff, offices abroad and representatives.

Ihr  
Herbert Baumgartner

## eddyvisor<sup>®</sup>SC Crack detection and structure test in one instrument

The new generation **eddyvisor<sup>®</sup>** enables crack detection and structure test with only one instrument. The result is the **eddyvisor<sup>®</sup>SC** [S = structure; C = crack].

The basic version of the **eddyvisor<sup>®</sup>SC** has already two channels for crack test and two channels for structure test. **eddyvisor<sup>®</sup>SC** instruments can be equipped with up to 16 channels for structure test and up to 8 channels for crack detection.

Usage of this instrument offers many advantages: For example, when used in a test system, crack test and structure test may be combined at one or several stations. In addition to less PLC programming effort, in many cases the cycle time may be reduced and the layout of the test system simplified. The investment cost for a combined instrument is also lower than the sum of single instruments.

Furthermore, the **eddyvisor<sup>®</sup>SC** offers numerous options for documentation of data which is nowadays of more and more importance.



Photo: Basic instrument **eddyvisor<sup>®</sup>SC** in desktop version for testing material parameters and surface defects

## Crack detection probes available for all types of application

Coil and probe manufacturing is a science in itself and requires theoretical knowledge as well as many years of experience.

ibg benefits from almost three decades of practical experience. One team at ibg deals with the design, layout and testing of probes for crack and structure testing to ensure the right sensor will be found for your application.



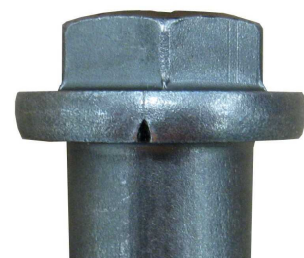
Photo 1: a variety of crack test probes

Manufacture of crack detection probes is very complex as microscopic components have to be installed and mounted with high precision. Wherever possible, use of standard probes is recommended due to lower costs and availability. ibg stocks standard versions of a wide range of probe types.

Certain types of application however, require customised probes, which are manufactured for a special task, such as testing rough surfaces, toothed areas, profiles or difficult to access locations such as the inner diameter of hubs.



The photos show natural defects.



There are "nearly" no limits for the design of probes for special cases. As well as electro-mechanical optimisation, ibg directs attention to ease of installation and high mechanical precision.

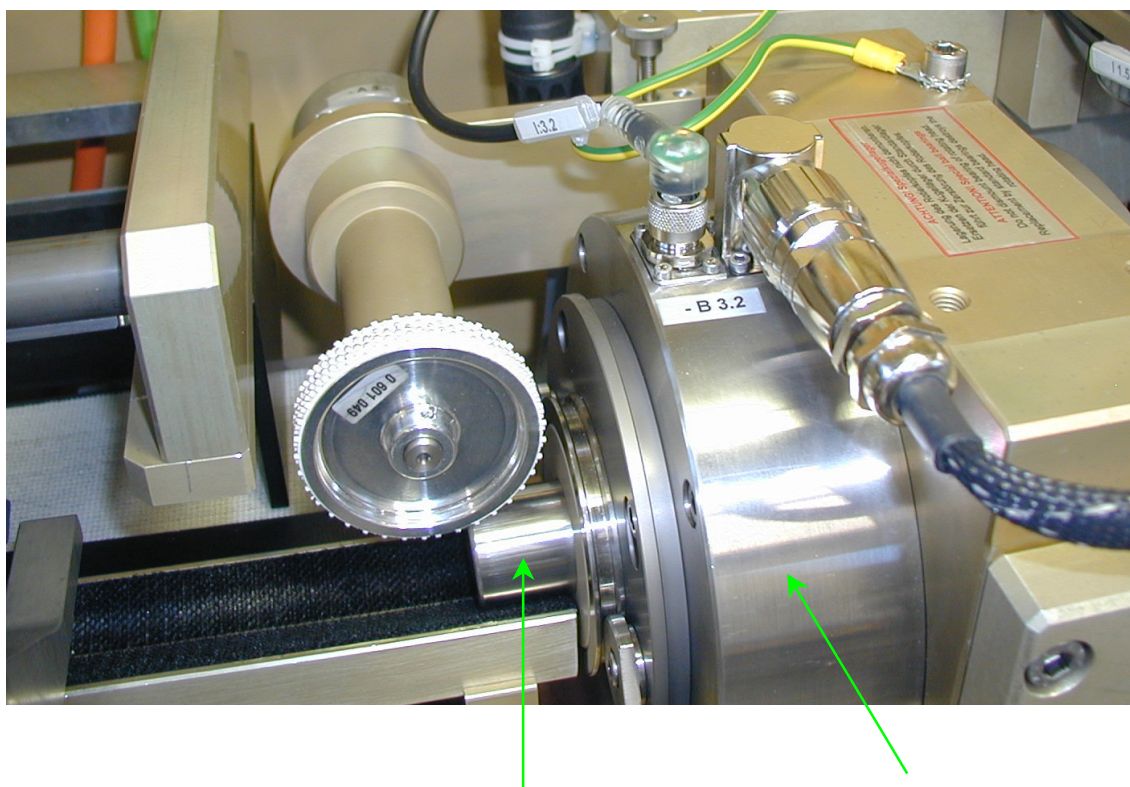


## Effective eddy current crack detection with modern automation concepts

Eddy current crack detection technology is superior to conventional crack test methods such as visual or magnetic particle inspection. The eddy current method is easy to automate and the test result is reliably indicated by the instrument. The unsafe "human factor" has no influence.

Furthermore, no consumable items are required. The investment cost for an eddy current system is higher in the beginning, compared with a magnetic particle system for example. However, the payback period is short as the eddy current method is far less wage-intensive and the current expenses are also lower. As a rule, the investment cost for an eddy current system is recovered within a few years and in some cases within a few months.

Modern automation concepts such as the use of CNC probe movement enables scanning of complex geometries for surface defects without interruption.



The photo shows an example, a cylindrical roller entering the rotating head eddyscan®H where it is scanned without contact.

Such crack test systems may also be equipped with other stations for heat treatment verification or marking.