High-quality test instruments that meet customer’s demands, and supported by professional competence as well as reliable service quality are the basis of success and the steady growth of ibg. This has also been confirmed by a recent customer’s satisfaction poll carried out in Germany.

ibg’s goal is to develop and supply our customers of the automobile industry with the best possible and state-of-the-art instruments.

To keep and improve our market presence and service quality, above all in Europe and Asia we „enlarged“ our international sales team by one man. Furthermore, we have new cooperation partners in India and China in order to support the rapid growth in these countries and be able to competently serve our customers. Advice and on site support for our customers is the core of our philosophy. Our offices and representatives worldwide look forward to being contacted by you.

Yours Herbert Baumgartner

Safety-critical stampings tested for heat treatment

Imagine a safety belt buckle which fails in an emergency case. A small component can save your life, but only after correct heat treatment. In order to guarantee this, each part has to be verified for correct heat treating. Photo 1 shows a selection of safety-critical stampings.

ibg is your experienced specialist with regard to testing of such components. The test instruments eddyliner®P or eddyvisor® will verify each part using the Multi-Frequency Technology so that also unexpected failures are reliably detected. These instruments are best suited for integration in automatic production lines or can also used as stand-alone device.

Photo 2 shows, as an example, a semi-automatic test system with feed conveyor, test station, sorting station and colour marking. Depending on customer’s requirement cycle times of 1 sec./part, 0.5 sec./part with a Twinsorter or even 0.25 sec./part with a Quattrosorter may be realised.
Efficient 100 % structure test of small and medium batches

Component manufacturers and heat treatment companies who handle batches up to approx. 15,000 parts know the problems: automation for this size of batch is too expensive because of high investment costs. Manual handling is also too expensive because of the high personnel costs. A compromise has to be found.

If 100 % structure testing is concerned, ibg standard sorting devices are the solution. In connection with the test instruments eddyliner®P or eddyvisor® they realise cycle times of approx. 1 part per second in semi-automatic mode. The test parts (diameter range 1 - 60 mm) are placed by hand in the test coil, and testing as well as sorting into a good or bad chute is achieved automatically. The system is ready for operation within minutes and changing to different part types is also possible within a few minutes. It is best suited for testing of small and medium batches and is often used for „fire brigade applications“ as it is very mobile. It can also be fully automatic system, when combined with feeding and separation mechanics.

Here you can see the ibg standard sorting devices (parts up to 10 mm, 25 mm, 40 mm and 63 mm diameter) which are available usually within short notice. Customised sorting devices can also be offered for special geometries or larger test parts.
Crack detection on rollers (e.g. needles or cylinder rollers) has to be fast as crack testing must not be the bottleneck in the production process. In this case, the rotating heads eddyscan®H developed by ibg are used especially for such applications. They are equipped with up to four probes (four channels) and rotate with up to 12,000rpm. Depending on crack specification, feed speeds up to 20 m/min is possible. The rollers are pushed through the rotating head end to end. Photo 2 shows, as an example, a test system for cylinder rollers with a diameter range of 15 - 45 mm and a length range of 14 - 80 mm. Conversion to a different part type is possible within 15 minutes.

Photo 3 shows a test system for needles; here the needles are fed vertically to the rotating head.

Both test systems are designed according to customers' requirements.
The smallest parts are often responsible for the failure of a complex component

It is unbelievable! But often it concerns geometrically inconspicuous, not even very precisely manufactured parts of only a few millimetres in length and height. If their heat treatment is incorrect, or not treated at all and are installed in components like injectors or steering mechanisms they can cause failure of the complete component. Only 100% eddy current testing for correct heat treatment as well as a safe internal material flow with locked containers avoids such faults.

ibg specialise in the manufacture of coils and probes for testing small and very small components and can also offer customised solutions. We produce encircling, round or rectangular coils to suit the part geometry.

We can provide the optimum test solution for your application and products, in combination with eddyvisor® and eddyliner®P instruments and our Preventive Multi-Frequency Technology.

... again this year: The International Sales Meeting takes place in September 2006 where all ibg subsidiaries, cooperation partners and representatives are invited. The main topic will be - besides general topics - presentation of the new crack test module eddyvisor®C.

More than 40 participants from all over the world are awaited at ibg headquarter in Ebermannstadt.