About IABG

IABG offers integrated, ground-breaking solutions in the sectors Automotive • InfoCom • Mobility, Energy & Environment • Aeronautics • Space • Defence & Security. We provide independent and competent consulting. We implement with future viability and target orientation. We operate reliably and sustainably. Our success is based on an understanding of market trends and requirements, on our staff's technological excellence and a fair relationship with our customers and business partners.

As a development partner we provide quality control services and develop solutions in the areas of functional efficiency, quality, design, and materials. We offer a broad spectrum of products and services, ranging from numerical analysis to experimental testing to the realisation of turnkey, customised test systems that we operate for the customer.

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AUTOMOTIVE


INFOCOM


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AERONAUTICS


SPACE


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IABG. The **Future.**

Impact Testing

for rail applications

IABG

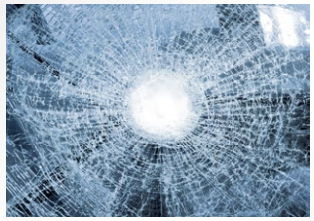
IABG provides impact testing for rail components and structures to identify potential for improvements in advance

- Trains are exposed to high mechanical stresses in everyday use such as hail, stone chipping or vandalism
- These influences can cause massive damage to materials and components of the train
- The above mentioned scenarios can be replicated by IABG's impact tests with standardised projectiles to identify structural weaknesses of components like windscreens, train fronts, side doors, etc.
- Our impact tests offer the possibility to identify structural problems of components in advance and provide valuable insights for the further development of the component

Broken windscreen of an underground due to vandalism

Our wide range of applicable international and customer-specific test standards* allows to cover different purposes for your product

- UIC 651
- DIN EN 15152 and DIN EN 5566*
- NF F 15-818
- GM/RT 2100, Appendix B
- Standardised and customized projectiles, e.g. aluminium projectiles, ice, hail, stones, etc.
- Projectile velocities up to 350 m/s*
- Masses up to 10 kg*



UIC-projectiles, broken windscreen after a test and calibration of the impact facility

We offer an entire spectrum of measurement technology to give an insight into material behaviour of the tested components

- High speed video cameras with up to 30.000 fps and Digital Image Correlation (DIC) to evaluate deformation and strain
- Data acquisition with a sampling rate up to 1 MHz, e.g. strain gauges, accelerometers, load cells, etc.
- Non-destructive testing methods, e.g. ultrasonic and eddy current, CT, etc.*

Why you should rely on us

We are a neutral company, helping our customers meet mandatory impact test regulations. **We provide an overview** of how test objects react in worst case scenarios along with analyses of their potential weaknesses. **According to the test results, we provide test certifications** that enable market entrance and facilitate sales.

IABG is certified according to ISO 9001
IABG's ballistic, blast and impact tests are accredited according to DIN EN ISO/IEC 17025

*These (testing) services are not accredited according to DIN EN ISO/IEC 17025

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