

Products and Solutions
for Transducer Manufacturers



Solutions for Making Transducers

Are you a sensor manufacturer, looking for products and services like:

- Strain gages, adhesives, balancing elements
- Transducer electronics
- Calibration amplifiers
- Reference transducers
- Calibration services
- Software for automation of measurement tasks?

With more than 50 years experience of manufacturing transducers ranging from high precision reference transducers, to mass-produced low cost types, HBM is uniquely qualified to help you define and design the right product quickly and confidently.

Strain Gages

When it comes to converting mechanical quantities like force, torque and pressure into electrical values, strain gage technology offers an excellent blend of performance and cost advantages.

HBM offers strain gages available with various creep compensation values specifically designed for transducer manufacturing.

Linear, diaphragm rosette and shear type grid patterns are all available from stock. You can order open-faced or encapsulated gages and the possible combinations for carrier and grid materials are numerous.

In addition to our wide range of standard gages, our dedicated project team will design customized gages to meet your needs; whether you need a gage that is optimized for precision or for cost efficiency.





Stick-on Option

Many of our strain gages are available with adhesive pre-coated on the gage backing. These stick-on gages are easy to handle and help you to produce transducers with excellent measuring features and consistent quality.



Strain Gages

From single grid to sophisticated full-bridge patterns: HBM produces standard types to stock and customized types to order. Our factories in Darmstadt (Germany), Marlborough, MA (USA) and Suzhou (China) are ready provide a solution within your technical and price targets.



Compensation element for temperature dependence of the zero point and sensitivity of the transducer.

Strain Gage Accessories

HBM offers all accessories needed to make a strain gage transducer. The product range includes balancing and compensation elements, adhesives, protective coatings, solder, terminals and cleaning aids.



HBM adhesive product line.



Load cell with AD105 transducer electronics mounted on the side.

Transducer Electronics

Are you interested in making your transducer digital? HBM offers fast response electronic circuits that make your load cells intelligent. They provide digital measurement values, which can be filtered and scaled.

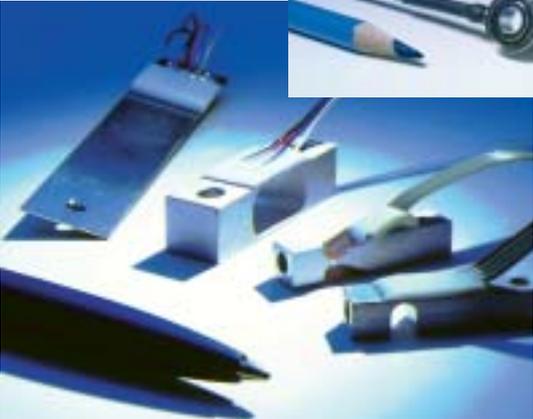


The AD105 is a very compact printed circuit board which can be integrated into your load cells. Alternatively, it can be mounted on one side of the load cell and covered with a shield cap (available from HBM).

Application Examples



Force and weight measurement elements with strain gages applied.



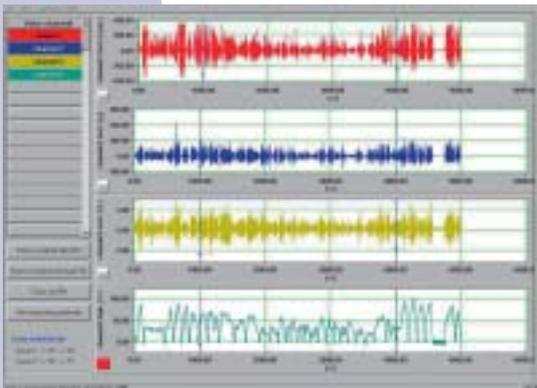
Z6 load cell with strain gage visible.

Calibration Amplifiers

HBM's high precision amplifier DK38 and DMP39 are widely used in calibration applications all over the world. Today, they have powerful successors - ML38 and DMP40 - with accuracy classes in the range of 0.0025 up to 0.0005. These amplifiers are completely computer controllable so they are ready for automated measurements in a production environment.



With today's amplifiers, ML38 and DMP40 HBM is leading the way, yet again.



Software

To assist you in the collection, analysis and visualization of data, HBM provides the leading measurement software package catman® Professional. catman® Professional is particularly user friendly: it features various ready-to-use measurement programs and does not require any programming knowledge. Additionally, it enables you to customize your measurement tasks such as performing calibration during a production process.

Reference Transducers

To test the accuracy of your transducers, HBM offers several reference transducers for calibrating force and torque as standard products.

Reference transducers are available for force and torque.





Calibration Services

Do you need to calibrate your reference transducers? HBM has a German Calibration Service (DKD)-approved or UCAS-accredited calibration laboratory for force, pressure, torque and voltage ratio mV/V.



Traceability of measurement results is highly important for the quality control of your transducer production. HBM offers calibration services according to international standards and procedures for your reference transducers and calibration systems.



Knowledge Transfer - HBM Literature and Seminars

HBM can offer you and end users immediate access to important information to give you decisive advantages over your competitors. Insights gained from our many years of practical experience are made available to our customers in different ways: HBM seminars, training, road shows, technical publications, magazines and our web site.



From Sensor to Software

Whatever your measurement need, HBM can provide you with an exact measurement solution. You can freely configure your system by choosing from our vast assortment of strain gages, transducers, signal conditioning and data acquisition instrumentation, as well as software.

HBM - measurement with confidence

Quality management: HBM was the first company in Germany to be certified according to ISO 9001 in 1986.

Calibration capabilities: In 1977, HBM was accredited as an official calibration laboratory, the first outside the German PTB (German Metrology Institute).

Environmental management: HBM is certified according to ISO 14001.

HBM has an in-house EMC laboratory where our products and systems are tested rigorously before they are released for sale.

Please visit our web site at:

www.hbm.com

Find Out More?

Would you like a competitive offer for the gages in your transducers?

Do you need to acquire know-how and systems for the calibration of your transducers?

Would you like to discuss your application?

Please contact your nearest representative or e-mail us at: makingtransducers@hbm.com



measurement with confidence

Hottinger Baldwin Messtechnik GmbH

Im Tiefen See 45
D-64293 Darmstadt · Germany

Tel. +49 6151 8030
Fax +49 6151 803 9100

E-mail: info@hbm.com
Internet: www.hbm.com