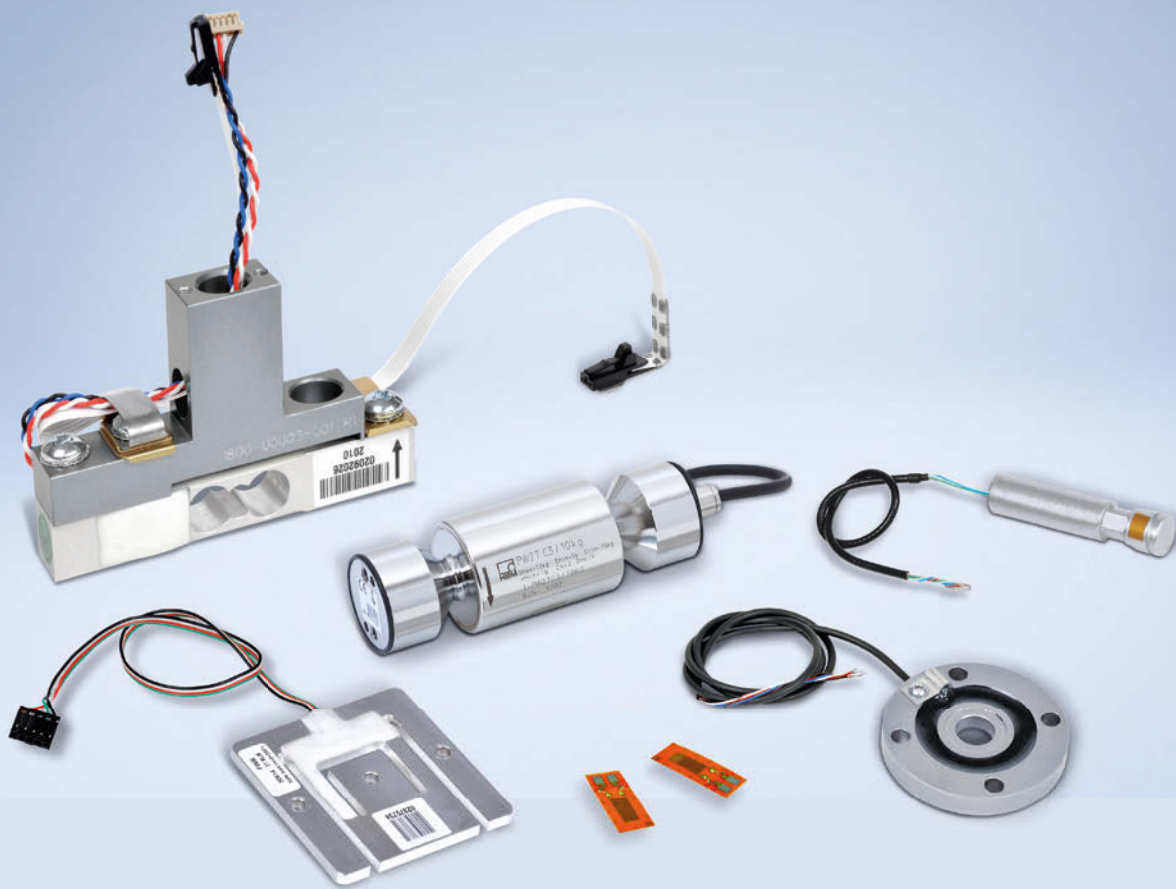


OEM Sensors

Custom Load, Force, Torque and
Pressure Sensors for OEM Applications





HBM offers a wide range of load, force, torque and pressure measurements to OEMs that need to incorporate strain gage-based sensors into their end products.

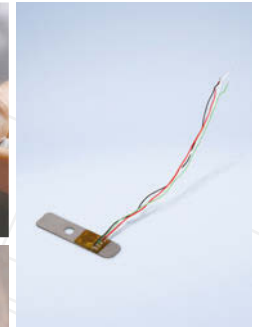
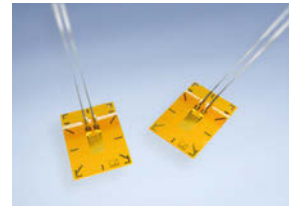
For many specialized or demanding applications when off-the-shelf sensors are not an option, HBM designs and manufactures sensors and sub-assemblies that are compatible with today's smart products, while requiring minimal design changes to the OEM's existing system. HBM's experienced team of design engineers will work closely with the customer, from the design stage all the way to the finished product, including verification and validation.

Local sales professionals all over the world are on hand to assist you throughout the process, with offices in North America, Europe and Asia. In addition, the China facility is equipped to handle high volume requests for mass production, making HBM a truly reliable and capable global OEM sensor supplier.



HBM's four main offerings include:

- Both standard and custom strain gages for transducer manufacturing
- Fast and exceptional gaging services for customer supplied parts
- Complete sensor designs – from sub-miniature/blade-type sensors to large load pins
- Sensor and load introduction subassemblies for packaging design, handling, mounting, testing and shipping



Top 5 Reasons for Selecting Custom OEM Sensors from HBM:

- The capability to design a sensor from a blank sheet of paper, from the design all the way to the finished product.
- Being one of the largest strain gage manufacturers in the world, capable of designing and manufacturing any type of gage to match an exact technical requirement.
- The expertise to design a sensor without any modifications to the end user's system, avoiding high dollar costs, wasted time and resources.
- The 65+ years of experience supplying highly reliable and accurate strain gage based force, torque, strain and pressure transducer solutions.
- Global support, with over 1,800 employees worldwide and offices in the US, Europe and Asia.

Markets served...just to name a few

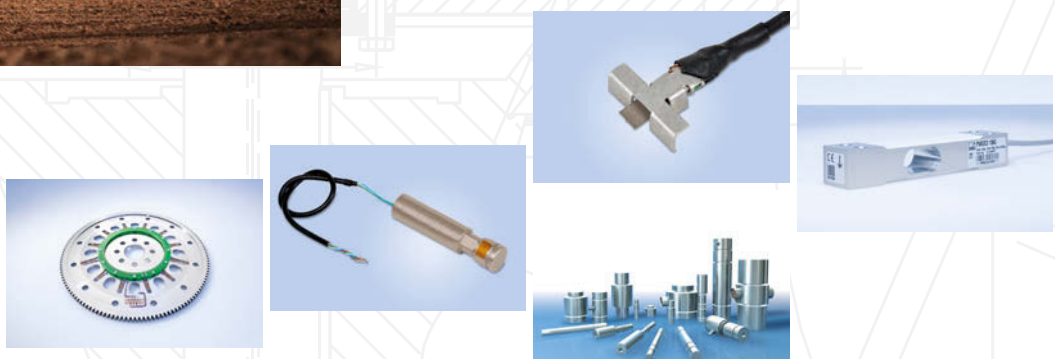
MEDICAL

Measurement of mechanical stress for monitoring force in medical infusion devices, or sensor and display units used in patient weighing systems.



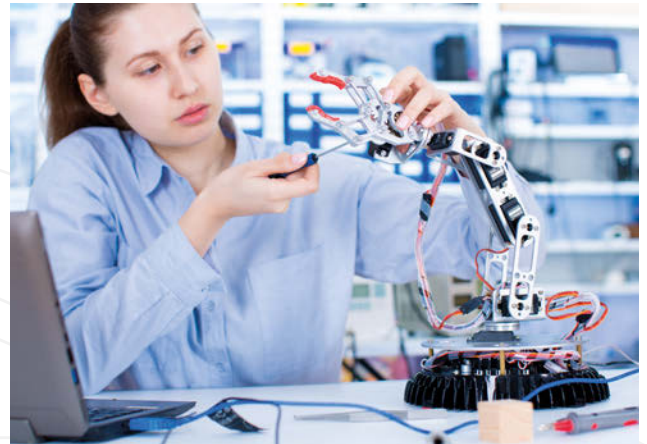
AGRICULTURE

Agriculture machinery manufacturers are implementing an increasing amount of advanced sensor technology to their precision farming equipment. HBM's custom products are leading the innovation forefront for hydraulic/pneumatic downforce sensors, harvesting yield monitors, baler sensors, and tractor draft load pins.



ROBOTICS / TORQUE

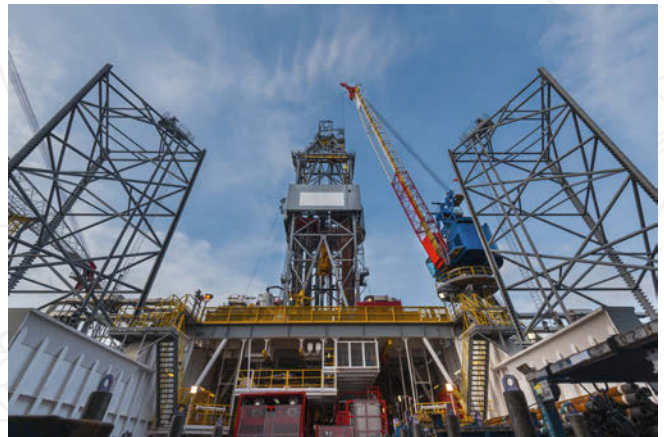
Single and multi-axis sensors for the use in robotic surgical and industrial equipment measuring system forces.



INDUSTRIAL VEHICLES

HBM's extensive range of products provides the highest level of environmental protection and durability possible. From on-board vehicle pay load, to overload conditions, and commercial vehicle scales, rugged HBM load cells are manufactured with robust and corrosion resistant materials like stainless steel and aluminium.





ENERGY/OIL & GAS

Turnkey solutions in the industry including offshore surface and subsea oil and gas applications for monitoring drilling and production operations as well as safety related activities.



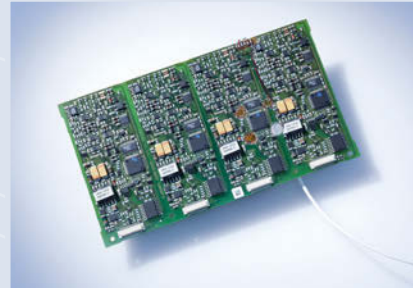
From idea to product, the professionals at HBM will work closely with you to get a transducer that matches your application, whatever industry you are in!

Superior Electronics and Strain Gages

DIGITAL AED TRANSDUCER ELECTRONICS

The AED converts the signals supplied by analog load cells into digital data and helps make the implementation of your process control systems easy and convenient.

A Transducer Electronic Data Sheet (TEDS) microchip allows for quick plug and play. The TEDS module speeds the system configuration process by having the characteristics of the sensor saved to memory.



STRAIN GAGES

HBM can design a customized strain gage to meet your specific needs.

When it comes to converting mechanical quantities like force, torque and pressure into electrical values, strain gage technology offers both strong performance and competitive pricing. HBM offers strain gages available with various creep compensation values specifically designed for transducer manufacturing.

Thousands of strain gage designs are available, but if none seem to fit, a dedicated project team will design a customized strain gage to meet your needs.



Please note: The product images shown in this brochure are samples to be used as a reference point as there are many variations available. Please contact oemsensors@hbm.com for more information.



www.hbm.com

HBM Test and Measurement

Tel. +49 6151 803-0

Fax +49 6151 803-9100

info@hbm.com

measure and predict with confidence

