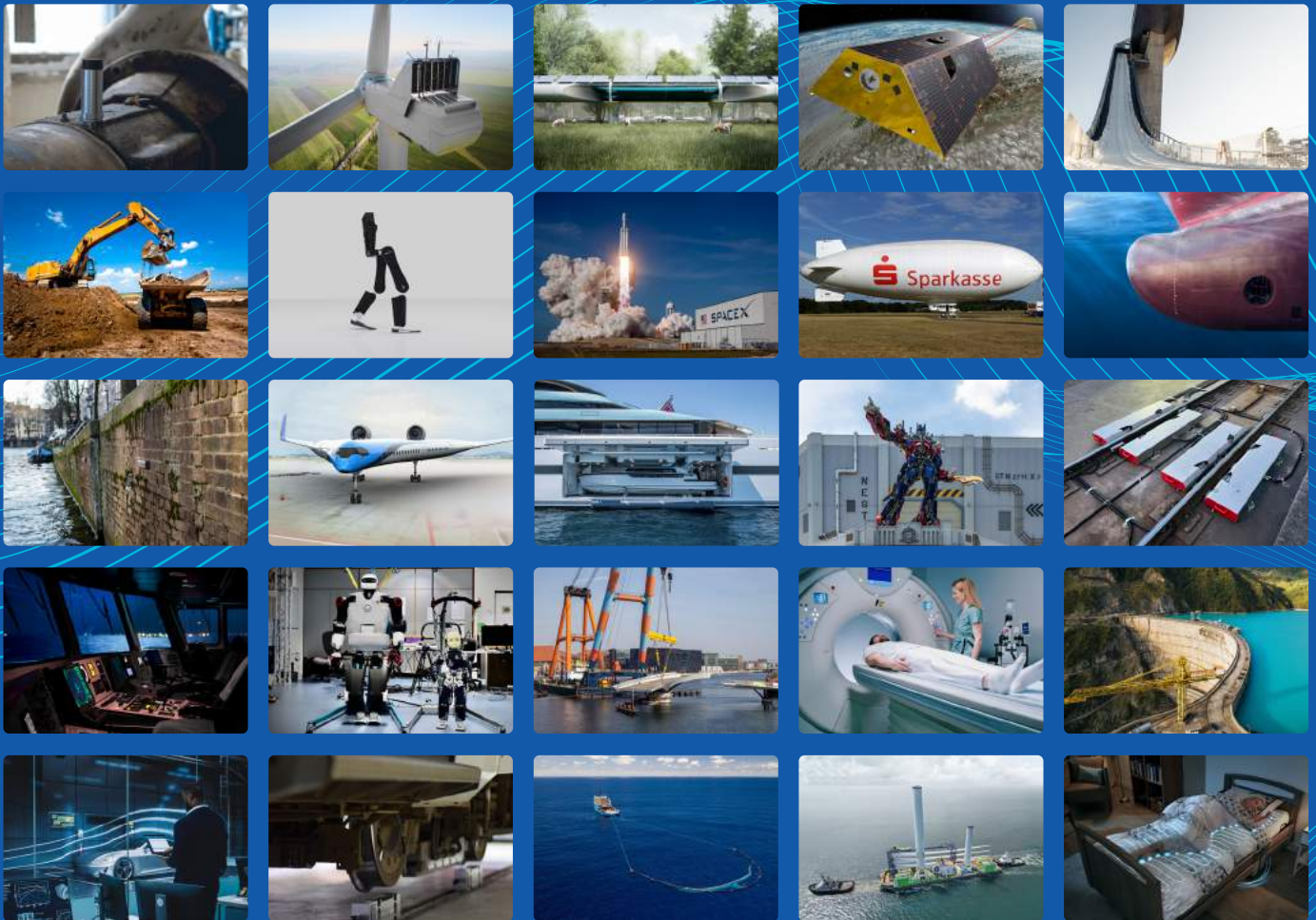


WELCOME TO THE WORLD OF ALTHEN



Integrated sensor
solutions for your
unique applications


ALTHEN

SENSORS & CONTROLS



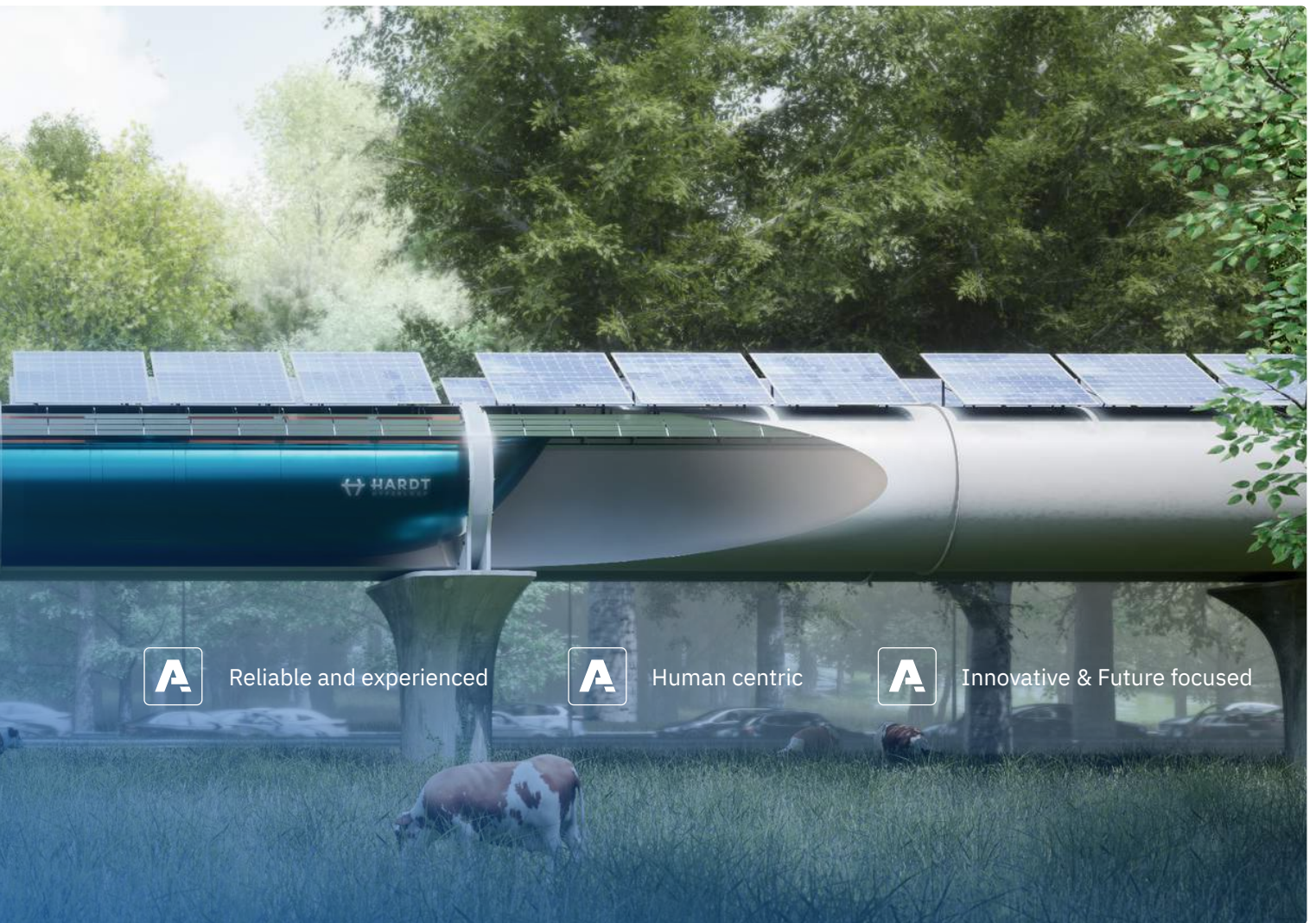
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Always the right sensor solutions

The innovative sensor expert
that creates integrated sensor
and measurement solutions



Why

We create integrated sensor en measurement solutions. Either off-the-shelf or custom made but always driven by our experience and knowledge. By understanding the bigger vision of our customers we work in co-creation towards a shared goal: everything can be measured.

What

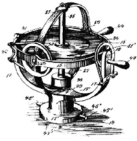
Integrated sensor solutions for OEM, Test & Measurement, Industrial IoT, and Joystick control solutions. Althen provides you with a team of expert engineers. We help to solve your challenges in co-creation with sensor and controls solutions off the shelf or 'made to measure'. We are recognized for our ability to deliver customized turn-key solutions in combination with a distinctive service level.

How

With a track record of over 75 years we aim for long term partnerships. Our state-of-the-art sensors and quality control process have set us apart. Our approach is flexible and transparent, ensuring open communication every step of the way. Althen is a company that you can count on to deliver the very best. We are not afraid of that extra mile.

75 year history of Althen Sensors & Controls

In 1947 Admiral P.J. Feteris started the trading company PJ Feteris BV in The Hague with a focus on representation and advice on naval equipment in the Netherlands (Sperry).



To focus on aerospace and simulation the subsidiary company ILTO BV was registered in 1963.



Dirk Schouten joins mr. Victor Feteris as partner in the Curton Europe holding, which owns Feteris components BV, Relli BV, and Ilto BV

CURTON EUROPE N.V.

Feteris Components renamed to Altheris Sensors & Controls BV



1947

1953

1963

2000

2001

2006

2011



Company's name was changed to: Handelsmaatschappij PJ Feteris BV what later became Feteris Components BV



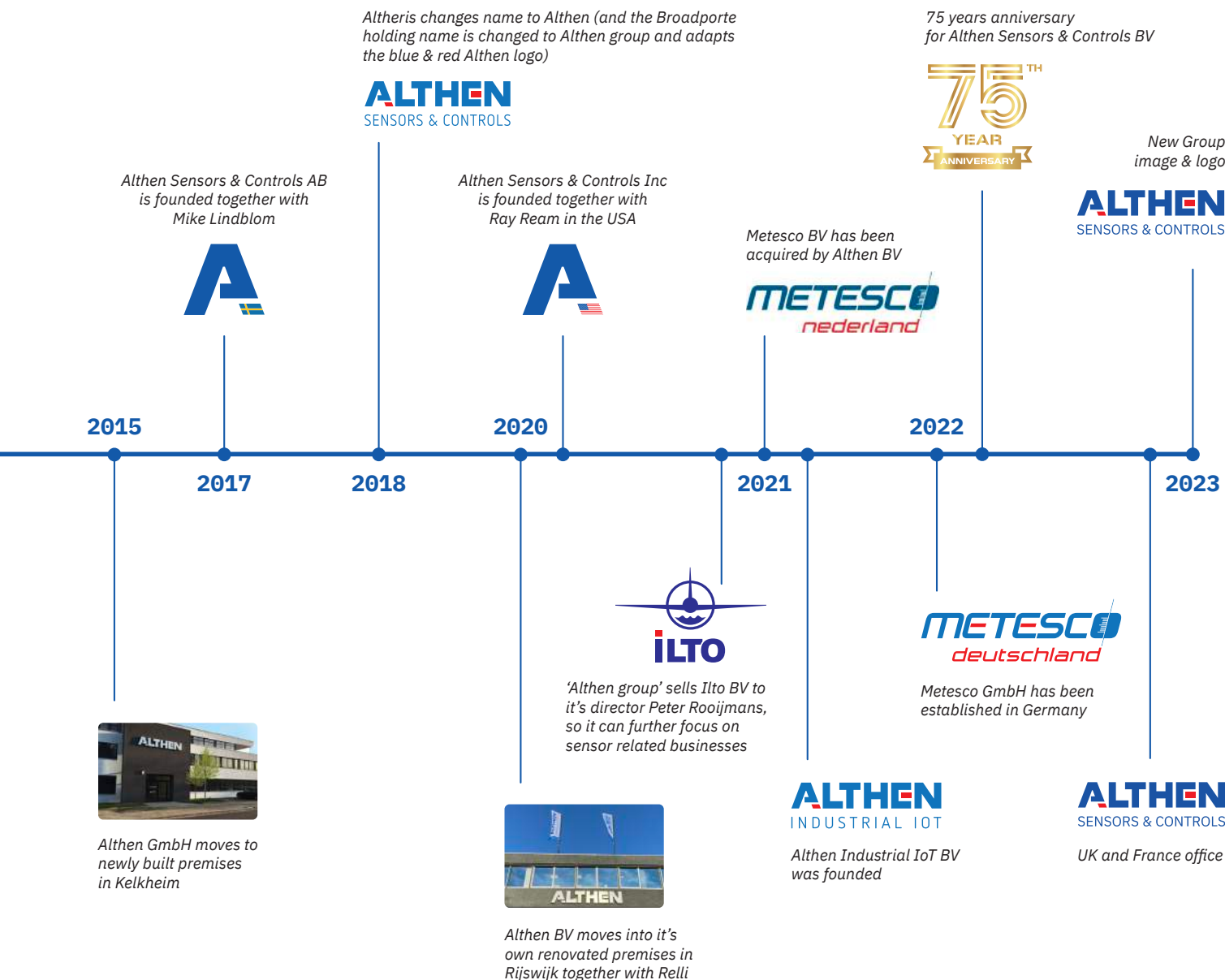
Althen GmbH was acquired by the holding



Dirk Schouten becomes 100% of Curton Europe holding and changes the group name to Broadporte Holding NV



Relli Technology was acquired by Curton Europe holding



Mission statement

Sensors enable the world of tomorrow

MUCH MORE THAN JUST SENSORS & CONTROLS

It is about ambition. It is about evolution. It is about shaping the future. The development of our sensors and our expert technical knowledge is not only part of our profession, they actively shape the future. Because sensors can do more.

Tools are what lifted people above the animals. Our sensors and controls are the ultimate tools. They give us the power to measure things that are incredibly heavy, immense, or tiny. They give us the power to see in the dark. Into space. To venture into the deep sea. They open worlds normally not accessible for us, human beings.

Sensors give us the ability to realize even the biggest dreams. To capture things that go beyond our senses. They give us the knowledge and confidence we need to create, develop, and explore new places.

AT ALTHEN WE BELIEVE IN THE REALIZATION OF BIG DREAMS

If you can dream it, you can build it. If you can build it, you can live it. That is why our small sensors are often part of a much bigger plan, like The Ocean Cleanup. Or The Hyperloop. But it is not size that matters to us. It's the challenge. We love solving problems. Nothing is too small to deserve the highest accuracy. No dream is too big. No decimal too small.

Whatever the measuring job, there is always an engineer behind it. With an idea, a plan, a vision. Someone who sees the bigger picture.

Every day we team up with these engineers. We share expertise, and we ensure that they have the right tools for the job. We give them the confidence to dream bigger, so that even the biggest dreams become reality.



Sensors break barriers



Sensors enable communication



Sensors explore new worlds

We are Althen. We integrate sensor solutions. We enable the future.

Philosophy

Why we do, what we do

coming together is
a beginning, keeping
together is progress,
working together
is success

Henry Ford

About Althen Sensors & Controls

Integrated sensor and measurement solutions for your applications



PIONEERING MEASUREMENT AND SENSOR SOLUTIONS

In our product portfolio all physical parameters are represented. As we are always looking for the newest innovations, we will not be satisfied until we have found the perfect solution for your measurement task.

Our in-house production and design department continuously creates numerous customer-specific sensor and measurement solutions for almost all applications in many different industries. We supply standard and custom sensor solutions for Original Equipment Manufacturers (OEM), Test and Measurement (T&M), and Industrial Internet of Things (IIoT).

We believe that the future is ours to shape. With our innovative use of the latest sensor technology we're capable of delivering whatever our customers need, no matter the industry. We understand that success in the future is about staying ahead of the curve, which is why we're always exploring new ways to push the boundaries of what's possible. We're committed to excellence, reflected in our partnerships and sponsorships from cutting-edge knowledge institutions to upcoming talents

in schools and universities. We're a company that invests in the future, not just for our customers, but also for a more intelligent world.

YOUR BENEFITS

- Many decades of experience in sensors and measurement systems
- Industry specific knowledge about requirements and certifications for OEM, T&M, and IIoT
- In-house electronics design and production
- Development of customized sensors (also for low volumes)
- Development of customized measurement systems (no MOQ)
- Technical consulting for selecting the right product
- High service level with in-house calibration and repair department
- One-stop-shop experience for your sensors and measurement challenges

Quality & environmental management certification



Our other group companies

About Althen Smart Solutions

End-to-end IoT solutions

Althen Smart Solutions delivers standard or customized end-to-end Industrial IoT solutions for your unique application. With our strong background in sensor hardware we have a strong foundation, where we are able to add the connectivity and data platform needs on top. Complemented with IoT Consulting services to help you make sense out of your data, we offer an end-to-end service when it comes to your IoT challenge.



YOUR BENEFITS

- End-to-end solutions
- Scalable
- Data-as-a-service
- Custom development

About Metesco

Sharing measuring solutions and services

Metesco is your partner for rental and sale of measuring equipment and measuring instruments. Expertise, sound technical advice, and outstanding service are crucial to us. We make sure that you will have the most accurate and most recently certified measuring instruments. Quickly and reasonably priced.

Metesco also offers a wide range of services such as: on-site measurements, flow measurements, calibrations and much more.



YOUR BENEFITS

- +250 rental measurement devices in stock
- Range of +200 measuring instruments for sale
- In-house and on site calibration services
- Advanced measurement services on site

Quality management certification



About Relli Technology

Your best source for certified military and civil parts

Relli Technology is a lean AS9120-certified organization staffed by fully-trained experts. For more than 35 years our focus has been primarily on the supply of fully traceable (factory new) spare parts, components and equipment to the Ministries of Defence (Air Force, Army and Navy) and the aerospace and defence industry of various European nations, Relli Technology is structured around providing best-in-class service, at every step and all operational levels.



YOUR BENEFITS

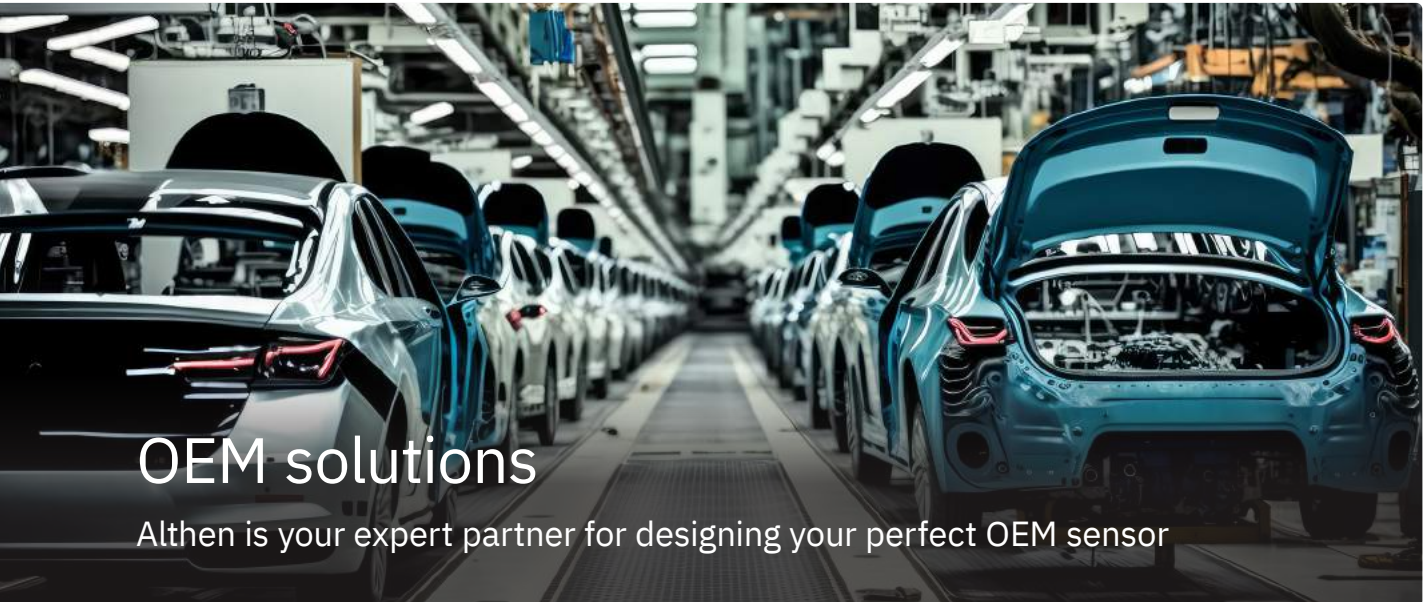
- Records of 100.000+ parts
- Service-driven mentality
- On demand sourcing
- Fast response times

ISO 9001 & AS9120B certification



Our solution areas

A unique approach to your specific challenge solutions for OEM, Test & Measurement & Industrial IoT



EXPERT DESIGN FOR YOUR PERFECT OEM SENSOR

Althen supplies standard and custom sensor solutions specifically for the Original Equipment Manufacturer (OEM). Manufacturers and engineers come to us, because they simply can't find the sensor solution that fits their system. Every application is different and often there is a need for a custom design to fit the specific requirements. That is where our engineers will co-design a new sensor which meets the unique specifications.

We are not limited to our standard catalog products. Althen is known for the flexibility to design and manufacture customized sensors. We are able to co-develop your best OEM-sensor which will enable you to build your best possible product.

DESIGN PROCES

By applying an agile project management approach we will make sure that your time and resources are involved with the highest efficiency to reach the desired results. In co-creation we develop a solution that is a great fit from every perspective.

- Exploration and scope definition
- Conceptual design
- Prototyping and testing
- Series production and implementation

✓ **Standard OEM Sensors**

Standard sensors for all the different physical quantities to be measured. Explore our standard products catalog.

✓ **OEM Sensors**

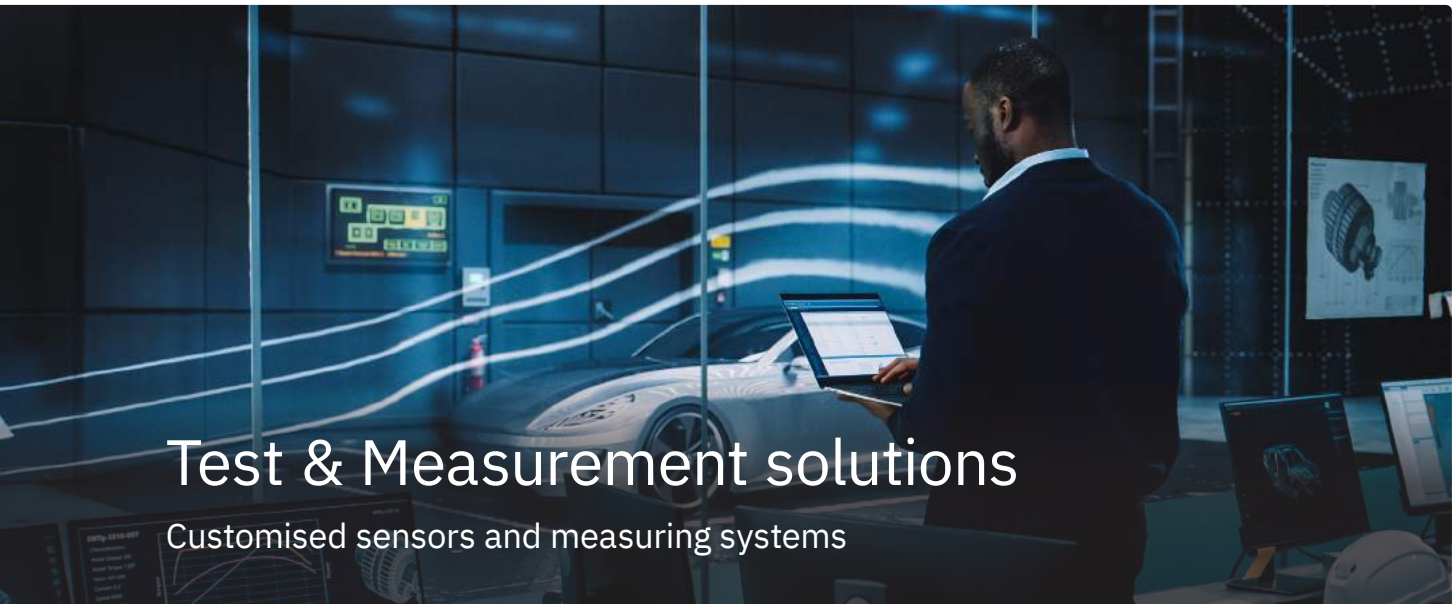
Adaptations to our standard sensors with special custom dimensions, cable assemblies, or electrical modifications.

✓ **Full custom OEM Sensors**

Designing a new sensor based from based on existing sensor technologies.

From off the shelf to fully customized:

- Short iteration cycles
- Fast proto-typing service
- Quality in product and proces
- Stock and logistic redelivery services
- High-quality consult for product updates or other product lines



Test & Measurement solutions

Customised sensors and measuring systems

CUSTOM SENSOR SOLUTIONS FOR TEST & MEASUREMENT APPLICATIONS

From custom force sensors and load cells, high performance pressure sensors, dynamic torque sensors, custom strain gauges, to custom laser scanning systems, position measurement, inclination/levelling systems, and fiber optic measurement systems.

Our strength is the flexibility to design, build and deliver a fully customized quality measurement system, that customers can literally plug and play. There is hardly a measurement challenge that can't be solved with a custom Test & Measurement solution. With our in house design and manufacturing we have the flexibility to produce fast prototypes for the customer to test and iterate on in a short time-span.

We are your application specialist applying our strong knowledge in different sensor technologies to create the best possible sensor or to develop the best fit measurement chain of existing sensors, amplifiers, electronics, and data-acquisition modules. As your Test & Measurement sensor partner our goal is always to bring the best quality solution for your specific application.

- ✓ **High precision**
Althen provides Test & Measurement solutions known for high precision, ensuring accurate data acquisition and analysis across various industries and applications.
- ✓ **Wide range of products**
We offer a diverse range of sensors and measurement instruments catering to different needs, providing comprehensive solutions.
- ✓ **Customization**
Althen offers customization options to tailor solutions according to specific customer needs, ensuring that the measurement devices meet exact requirements.
- ✓ **Reliability**
Our products are known for their reliability and durability, built to withstand challenging environments and deliver consistent performance even in harsh conditions.
- ✓ **Expertise and support**
Althen typically provides expert technical support and assistance to help customers select the right products for their applications.

Our solution areas

A unique approach to your specific challenge solutions for OEM, Test & Measurement & Industrial IoT



YOUR PARTNER FOR INTEGRATED IIOT SENSOR SOLUTIONS

Whether you are looking for a IIoT solution in which ground water monitoring has to be accessed from a web-browser or that you are looking to sense lots of high-density data from high frequency measurements, we are your partner to develop an Industrial Internet of Things (IIoT) Solutions. We are happy to help you with most suitable IIoT solution for your application.

IIoT is the complete complex measurement solution combining precision sensor hardware and electronics with:

- Wireless data transmitting
- Data storage
- Data analysis
- Smart dashboards with relevant info (webbased)
- Potentially integrated with customers processes

We deliver turn-key measurement solutions which not only contain the hardware but more important also the gathered data and information by the measurement system. With insightfull dashboards we offer all the necessary information to make operational decisions and take appropriate actions.

☑ Off-the-shelf IoT Solutions

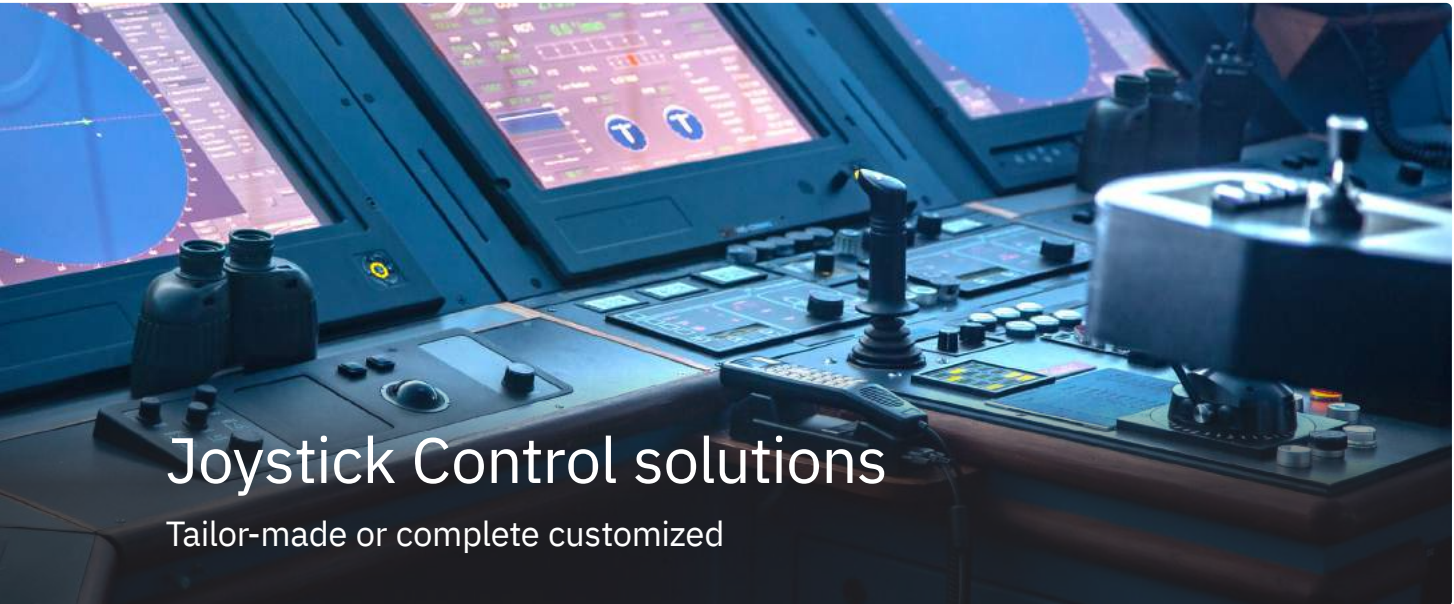
Althen has many off the shelf iot sensors, gateways, and routers available for a fast implementation. Also with the standard dashboarding solution, a project can be realized within a matter of weeks.

☑ Tailor made IoT Solutions

When an off the shelf solutions doesn't fit your needs, Althen can easily adjust and tailor a IoT solution to your needs often making use of the existing building blocks, but just implemented in a way that suits your project.

☑ Full custom IoT solutions

We don't like to reinvent the wheel twice, however when we really need to start from scratch, when there is no suitable IoT Hardware or the demand for a unique platform is so specific, Althen can develop fully custom solutions in house.



Joystick Control solutions

Tailor-made or complete customized

INDUSTRIAL JOYSTICKS AND POSITION FEEDBACK SENSORS

Human machine interface is our craftsmanship. Our philosophy goes further than producing joystick controllers and position feedback sensors. We believe in quality and attention for each individual application over quantity and mass production. Each customer is unique. Therefore we have developed more than thousand unique joystick controllers and position feedback sensors. Each tailored to the application.

By co-designing the best possible product for our customer, we believe to offer the ultimate OEM experience modern machine builders are looking for. Our team of experienced engineers are not only involved in the design and production phase of the joystick. We will help you from the very first concept, until the installation, and during the many years of operation.

- ✓ **Mechanical perfectionism**
Our joystick controllers are crafted with the highest tolerances on mechanics. By holding the controller you will feel the smoothness, or stiffness of the handle which is controlled by different type of springs. With options such as high torque, spring return or light spring you will get the sensitivity suitable for your application.
- ✓ **Custom designed handles**
Every machine and every application has it's unique set of functions to be fitted into an industrial joystick controller. Therefore one joystick handle is often not the same as another joystick handle. See below more exotic examples of some of the customized handles we have crafted.

ADDITIONAL INFORMATION
• althencontrols.com



Sensors enable the world of tomorrow



Our story is about more than sensors and controls. It is about ambition.

It is about evolution. Tools are what lifted people above the animals. Our sensor and control solutions are the ultimate tools.

They give us the power to measure things that are incredible heavy. Or immense ...

... or tiny.

They open worlds normally not accessible for human beings. They give us the power to see in the dark. Venture into the deep sea. Explore the universe.

We know what is important for your industry

We integrate sensor and measurement solution for the creators of tomorrow

OUR CORE INDUSTRIES

Every industry has its own challenges and niche characteristics. Our engineers understand that new developments come together with new challenges, and that is where we can team-up. By understanding the bigger picture, the vision, it becomes possible to really understand the requirements in your measurement challenge.

With our specialists who have grown specific knowledge about specific industries. We speak the same language. Whether it's about special medical certifications, or safety integrity levels which need to be realized. Althen makes sure to bring the right expert engineer to the job.



Product overview

Our building blocks to create integrated sensor solutions for your unique applications

bar

PRESSURE

Pressure transducers and pressure sensors with measuring ranges from 35 mbar to 12.000 bar. A wide offering of standard, Miniature, High accuracy, Differential, Wireless sensors for gas and liquid media.



kg

WEIGHT

Loadcells and weighing sensors for measuring weights from 10 gram up to 1500 tonnes. Low-cost items for applications in the automation industry.



N

FORCE

Force transducers and loadcells with measuring ranges from 0.5 N to 1500 kN. Also 2-, 3-, and 6 component sensors for measuring forces in multiple dimensions.



Nm

TORQUE

Torque sensors and measuring systems for measuring static reaction torque and dynamic rotating applications with ranges from 10 mNm to 13 kNm.



ϵ

STRAIN

Electrical straingauges and Fiber-optical (WLPI) strainsensors, measuring ranges from $\pm 500 \mu\epsilon$ to $\pm 5,000 \mu\epsilon$. Special variants for extreme environments.



α

ROTATION

Rotary sensors based on hall effect, potentiometric, inductive, encoder technology to measure from 10° to 360° .



mm

DISPLACEMENT

Linear position sensors based on hall effect, potentiometric, inductive, laser, eddy-current, and capacitive technology for ranges from 0.125 mm to 30 meter.



\angle

INCLINATION

Tilt sensors and inclination measurement systems with measurement ranges from 1° to 360° for industrial and high accurate applications, with analog and digital interfaces.



g

ACCELERATION

Servo and MEMS based accelerometers with ranges from 0.5g to 5000g. For acceleration measurement in 1-, 2-, or 3- directions.



m/s²

VIBRATION

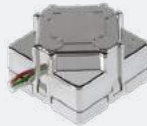
Piezoceramic vibration sensors and vibration sensors with IEPE interface and frequency range from 0.05 Hz for vibration measurement and analysis.



%s

ANGULAR RATE

High precision gyroscopes and inertial systems for measurement of angular rate with measurement ranges from 50° / s to 10,000° / s.



°C

TEMPERATURE

Electrical and fiber optical (WLPI, GaAs) temperature sensors, with measuring ranges from -40°C to + 250°C. Also temperature scanners for multichannel temperature measurement.



➤

SIGNAL CONDITIONING

Analog and digital measuring amplifiers for amplifying a broad range of sensors. Single and multichannel amplifier systems, with precise, and low noise output signals.



📊

DATALOGGING

Systems for PC-based data-acquisition, data-loggers and wireless handheld modules with USB and/or Ethernet interface.



⚙️

AUTOMATION

Digital amplifiers and indicators with interfaces such as Ethernet IP, Profinet IO, RS485, CAN-Open, CC-link, Profibus, Modbus TCP, Ethercat.



A

TURN-KEY SYSTEMS

Individual turn-key measurement systems for customer specific applications e.g. transport monitoring, trainweighing, helicopter weighing, and several hundreds more.



Our complementary services

Turn-key hardware solutions are always complemented by good services to deliver an end-to-end solution.

ALTHEN YOUR FULL SERVICE PARTNER

At Althen it is all about turn-key solutions, we believe in delivering the full package. Next to the physical hardware solution, we offer several services such as: training/consulting, calibration & repair, engineering & development, and production & prototyping. Complementary services that will provide you with full confidence, so you don't need to worry.



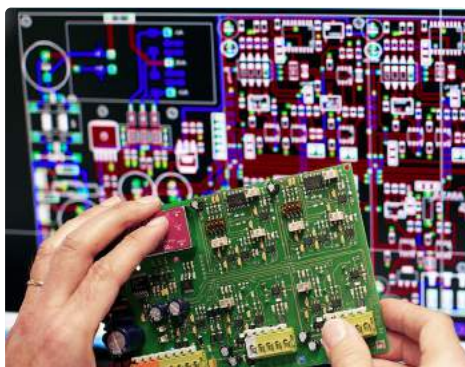
Training & Consulting



Calibration & Repair



Engineering & Development



Production & Prototyping



Measurement & Rental



Repairs

Calibration is an art

Reliable calibration service: maximum accuracy and performance for your sensors & measurement systems.

Benefit from our calibration services for new purchases as well as existing measuring instruments. The regular calibration by Althen ensures that your sensors and measuring systems work exactly according to their specifications. This is the only way to achieve correct and meaningful measurement results over the long run. Our experienced experts adjust deviations and document the results with a calibration certificate. We support you not only with the calibration of standard sensors and testers, but also with individual special solutions.

Compared to other sales companies in the field of measurement technology and sensor technology, you can benefit from our in-house calibration laboratory at our headquarters in Kelkheim. Here we are able to calibrate pressure, force, position, and inclination sensors, as well as dataloggers and complete measurement systems.

ISO 9001 CALIBRATION (FACTORY CALIBRATION)

For the physical parameters of pressure, force and inclination, we also offer certified factory calibrations. The measured data is generated exclusively with traceable measuring equipment.

CUSTOM CALIBRATION

Custom Solutions Require Custom Testing: in addition to new acquisitions and existing equipment, we also offer special custom calibrations that meet your individual needs. Our experienced experts correct deviations and document the results in a calibration certificate.

CALIBRATE SENSORS AND MEASURING SYSTEMS ONCE A YEAR

On request, we regularly check your measuring instruments and repair or adjust them if necessary - even if they are not from our house! Your instruments will stay functional for a long time and work reliably. Send us your calibration request: we will gladly advise you and send you a tailor-made offer. Also we offer service level agreements (SLA's) for annual recurring calibration needs.

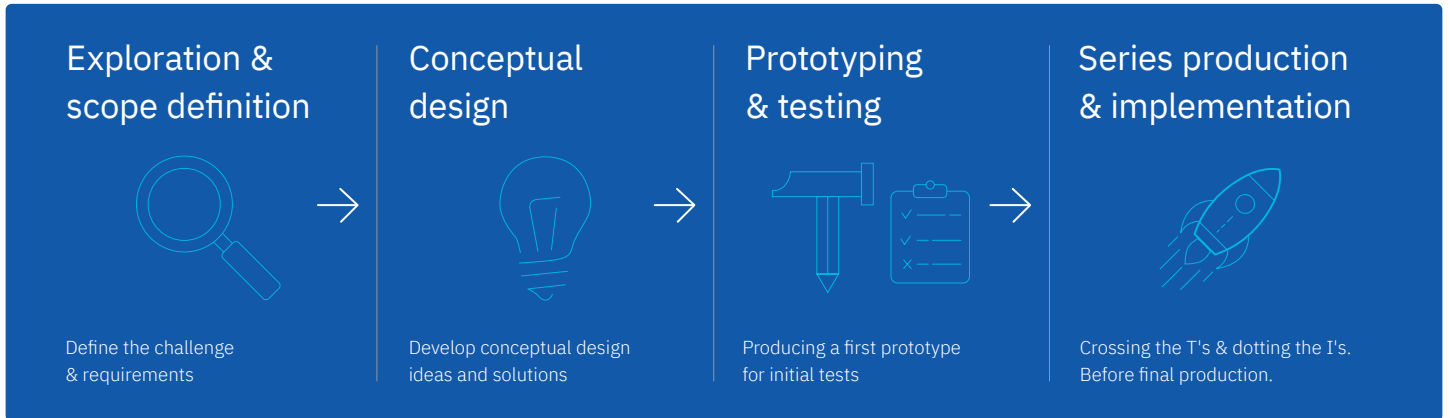


YOUR BENEFITS

- More than 40 years of experience in calibration
- Pressure, force, inclination, position and systems
- Customized calibrations for special system
- Fast track calibration service

Production & prototyping

Customized design from prototype to the final serial product



Through proven manufacturing processes, Althen offers single components or complete systems from a single source. We provide accessories for dataloggers and comprehensive solutions for measuring pressure, force, inclination, acceleration, or displacement. We select the right components from a vast range of standard products, producing single pieces or series as needed. Prototypes allow you to test integration with existing systems, ensuring functionality and cost-efficiency.

PRECISE PRODUCTION TECHNOLOGY FOR YOUR PRODUCTS

Althen, a family business, combines the latest production standards with an informal office atmosphere and direct communication with management. We value good ideas and feedback, empowering self-managing teams with autonomy and responsibility.

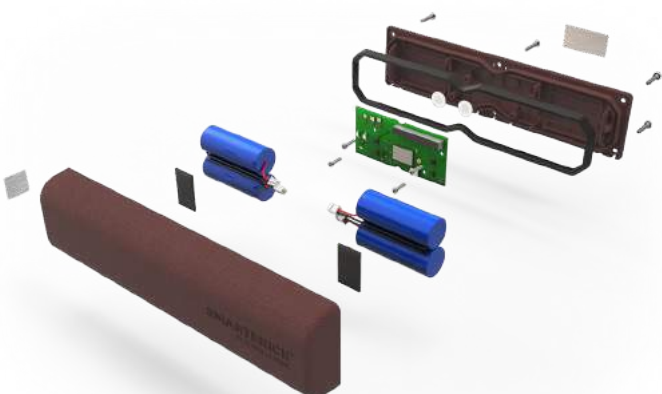
Our versatile sensor solutions serve diverse markets, leveraging individual strengths to drive future technology. Our high-quality technology is rigorously tested in our in-house calibration lab to ensure reliability and efficiency. After production, we provide support during commissioning for seamless operation.

COMPLETE MEASURING SYSTEMS

A measuring system consists of one or more sensors and the appropriate measuring amplifier and measuring data acquisition system. You will receive everything from one source at Althen. Regardless of whether you are looking for a measuring amplifier for a strain gauge or multi-channel measuring system for force / distance measurement with measurement data recording on a PC - we have the right solution for you.

YOUR BENEFITS

- Design and manufacture customized products for your complex measurement task
- In-house electronics design & production
- Development of customized sensors and complete measurement systems
- Support from brainstorming for applications to technology planning to product selection
- High service level with in-house calibration and repair department



Working at Althen

We operate in 5 countries worldwide and employ people with diverse backgrounds, skills and ambitions.



" Althen offers sensor solutions to the customer's sensor engineering challenges and stands for exceptional after sales service. Between colleagues, we call ourselves The A-Team, because we go a bit further than others in order to get the job done. "

Reliable & experienced

Our experienced team fosters a dependable and supportive working atmosphere. We prioritize reliability and expertise, ensuring every project meets the highest standards of quality and innovation.

Autonomy & fun

We promote a working atmosphere where autonomy empowers our team members to take initiative and drive innovation. Our informal and fun environment fosters creativity and enjoyment, making every project engaging and fulfilling.

Customer-focused & collaborative

Our customer-focused approach ensures we meet client needs with precision and dedication. Our collaborative working atmosphere encourages teamwork and innovation, driving us to deliver top-quality solutions.

Innovative & venturous

The innovative environment encourages creative thinking and cutting-edge solutions. We embrace a venturous spirit, empowering our team to take bold steps and explore new frontiers in technology.

OEM sensor projects

Integrated measurement technology that meets the highest quality standards

ROTATION AND TILT SENSOR FOR POSITION FEEDBACK IN NEW MULTIFUNCTIONAL MACHINE



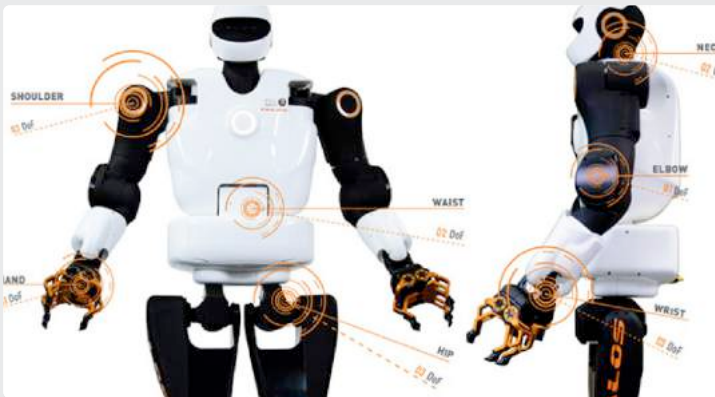
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Nm



FCP22A Potentiometer & DOG2 MEMS inclinometer

Servo mounted potentiometer with 22 mm outside diameter & J1939 Canbus interface inclinometer for automotive.

CUSTOM STATIC REACTION TORQUE SENSORS FOR FORCE FEEDBACK IN ROBOTICS APPLICATION



τ



ATF311 Torque sensor

Static torque sensor with a fully custom aluminum design with special dimensions to fit the application.

OVERLOAD PROTECTION IN MEDICAL MRI MACHINE



N



FC23 Miniature force sensor

Custom force sensor with integrated amplifier which is certified for usage in the medical industry.

LINEAR AND ROTARY POSITION FEEDBACK OF LARGE STEERABLE BOW THUSTERS IN SHIPS



mm

α



18LP Linear & FCP50A Single-turn potentiometer

Accurate position feedback for positioning of the angle of the blades and the operational angle of the total thruster.

ROTARY POSITION FEEDBACK FOR MARITIME CONTROL HANDLES IN BRIDGE APPLICATIONS



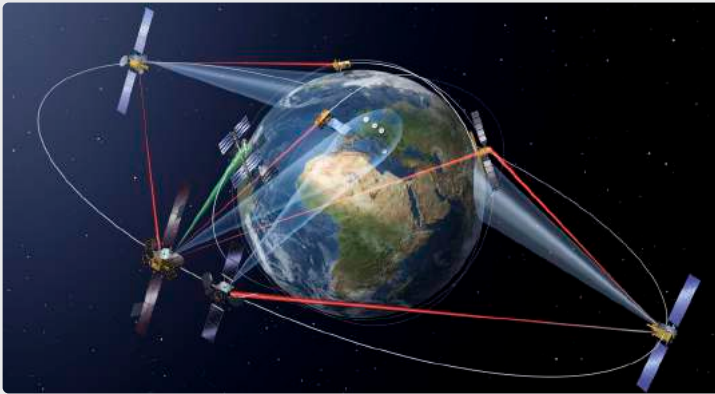
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FCP40A Single-turn potentiometer

Rotary position feedback in control handles for ships.

EDDY CURRENT POSITION MEASUREMENT FOR ACCURATE POSITIONING OF MIRROR ON LCT SATELLITE



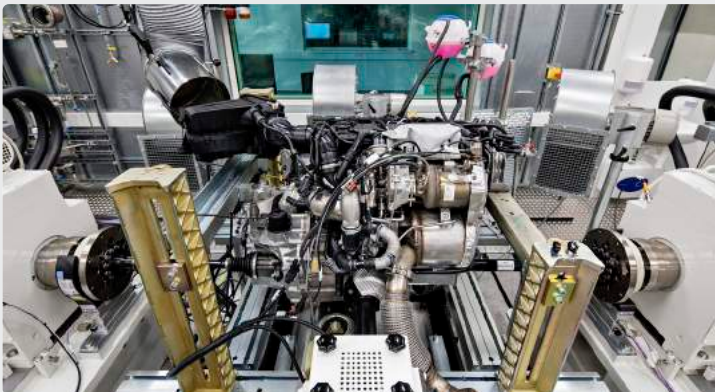
mm



KD-5100 Eddy current sensor

Difference measuring system with a differential resolution up to a nanometer.

PRESSURE MEASUREMENT IN AUTOMOTIVE ENGINE TEST BENCH



bar



P900 High precision pressure transducer

For accurate (0.1% FS) measurement of pressure variations during engine tests.

OEM sensor projects

Integrated measurement technology that meets the highest quality standards

SELF BALANCING EXOSKELETON FOR PEOPLE WITH A SPINAL CORD INJURY



Nm



ATF 311 Reaction torque sensor

Integrated custom torque sensors are crucial for smooth movements and the balance of the exoskeleton.

PRESSURE TRANSMITTERS EN LINEAR POTENTIOMETERS FOR HARDT HYPERLOOP



bar

mm



MPM4730 and ELPC

Measuring ultra low pressure in vacuum, and displacement between the vehicle and the track.

AIRFLOW MEASUREMENT OF A PERSONAL ELECTRIC AIRCRAFT



A



Micro Air Data systems + conventional multi-hole probes

Airflow measurement device Aeroprobe efficiently measures flow parameters to ensure aircraft stability in the air.

PRESSURE SENSORS AVOID POTENTIAL HARM TO SPECIES AND ORGANISMS BECAUSE OF BALLAST WATER



bar



AGS4200

Special pressure sensors are used for thorough monitoring and control of ballast water from ships.

PROPELLER SHAFT EARTHING SYSTEMS



A



8047A-8047M

Complete system for propeller shaft earthing and potential monitoring.

TORQUE MEASUREMENT FOR MEDICINE BOTTLE SEALING MACHINES



Nm



SGR530/540 Torque sensor

TorqSense digital rotary strain gauge series (SGR) Transducers with non contact technology.

SUBMERSIBLE LEVEL TRANSMITTERS FOR OIL TANKS MANUFACTURER



bar



MPM489W

Submersible level transmitters for oil tanks manufacturer.

Test & Measurement sensor projects

Integrated measurement technology that meets the highest quality standards

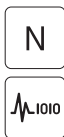
ROBUST AND ACCURATE INCLINATION MEASUREMENT FOR OFFSHORE HYDROHAMMERS



PNS-IP-24E Inclination system

For very accurate inclination measurement, and resistant against great vibrations and shocks.

LOAD SHACKLE FOR FORCE MEASUREMENT WHEN TOWING AN OCEAN CLEANUP SYSTEM OFFSHORE



ALS-B-1000 Load shackle

Load shackle for lifting and weighing in harsh environments, including submersible applications.

WIRELESS TORQUE MEASUREMENT IN AIRCRAFT TEST BENCHES



RWT410 / RWT420 Torque

Digital torque transducer with integrated electronics.

WIRELESS WHEEL LOAD MEASUREMENT SYSTEM FOR WEIGHING OF TRAMS AND SUBWAYS



A



Wireless wheel load measuring system

Designed for precise weighing and determining the balance of each individual axle.

MOBILE SYSTEM FOR MEASURING THE CENTER OF GRAVITY FOR HELICOPTER MAINTENANCE



A

N



HS-GL-20 Helicopter balancing system & Wireless weighing system

Tilt measuring system for turbine mounting.

INCLINATION MEASUREMENT FOR ALIGNING TURBINE BLADES DURING INSTALLATION



A

∠



NM1-IP-ACCU-BO3

Tilt measuring system for accurate alignment during mounting of blades.

EARTHQUAKE MEASUREMENT SYSTEM FOR MAKING REMOTE HYDROGEN INSTALLATIONS SAFE



m/s^2



VIB-3A-IP-24-SP-Z0033 Vibration monitoring

3-axial vibration system with 3 programmable safety switches for monitoring of earthquakes.

Test & Measurement sensor projects

Integrated measurement technology that meets the highest quality standards

PRECISE ALIGNMENT OF ANTENNA MASTS



Tilt measurement system

For aligning antenna masts or
Leveling platforms.

MEASUREMENT OF TAKE-OFF FORCES ON SKI JUMP SLOPES



AM Single-point load cell

Load cell for platforms 400 x 400mm.

AUTOMATED TRAM MEASUREMENT SYSTEM FOR PREDICTIVE MAINTENANCE



3D Wheel measurement system

Laster operated 3D individual wheel measurement
system and wagon weighing system.

WEIGHING GE HALIADE X WIND TURBINES WITH LOAD PINS



kg



Custom ALP load pin

Custom Althen ALP Load pins (rated for 1.680 tonnes each) ensure precise compensation of tower weights.

FORCE SENSOR AND PRESSURE TRANSDUCER FOR STREET LEGAL HYDROGEN CAR



bar



AGS4000

General purpose pressure transducer monitoring of oil, gas, water and other liquids in a wide range of industries.

SWAY MONITORING OF WIND TURBINE TOWER WITH ACCELEROMETERS



g



IEPE (piezo electric) and servo accelerometers

Wind turbine towers must bear great radial forces to avoid damage and our accelerometers are used to accurately measure the movement.

DRAW-WIRE SENSOR IN ROBUST SYSTEM FOR ICE MASS MEASUREMENTS



mm



FD115 Series

Draw-wire sensors (string pot) extremely compact, provides many different measuring ranges and almost suitable for any application.

IIoT sensor projects

Integrated measurement technology that meets the highest quality standards

SMART STRUCTURAL HEALTH MONITORING SOLUTION FOR CIVIL INFRASTRUCTURES



SmartBrick & dashboarding

Wireless, battery-powered, IoT, and high accurate inclination sensor. User-friendly data analytic solution to meet all measurement needs.

BATTERY POWERED IIOT WIRELESS MACHINE CONDITION MONITORING



Wireless Industrial IoT vibration sensor node

Wireless, battery-powered, IoT and high accurate inclination sensor.

HIGH-TECH, SCALABLE SENSOR SOLUTION FOR HEALTH CARE IMPROVEMENT AND WORKLOAD REDUCTION



SmartBed & SmartMatras

IIoT sensor solutions for healthcare beds to monitor the position, absence or presence of the client.

SMART IOT FIRE PREVENTION SOLUTION FOR DOZENS OF PROFESSIONAL KITCHENS



Health & safety monitoring

Scalable IoT sensor solution for professional kitchens and cooling equipment that signals fire causes early and prevents fire.

MONITORING SOLUTION FOR WORKER SAFETY



Job site monitoring solution

Fast accident detection, realtime worker count & location, integrated end-to-end solution.

CRACK MONITORING SOLUTION



SmartCrackr

Accurate and remote monitoring solution for cracks in 3 dimensions.

INDUSTRIAL VIBRATION MONITORING SOLUTION



Vibration monitoring solution

Predictive maintenance, vibration expert reports and API integration for monitoring vibrations.

What is your challenge?

Share your sensor or measurement project with us

Hardly any product is as versatile as a sensor. Whether it is in the automotive, aerospace, maritime, offshore, civil, or medical industry the possible needs and fields of applications are still growing with new and more challenging demands.

On our website you can find some exciting examples and insights into complex technical measurement solutions we have developed together with our customers. We hope to be able to add your success story soon!

ADDITIONAL INFORMATION
• althensors.com/projects



Some of our long term clients



The right solution for your challenge

Everything from one source


















Thanks to our decades of experience, we at Althen can provide both standard and highly specialized custom sensors as well as complete measurement systems for our customers.

Our product portfolio covers all physical measurements, and we use a wide range of technologies to ensure you always get the best solution for your measurement requirements. Thanks to our vast knowledge, technical expertise, our strong team of engineers from various professional backgrounds, and our broad range of products, we can offer you the most efficient solution for almost any application in every industry.

Our team will be happy to give you advice! You can call us at **+31 (0)70 3 92 44 21** and get in contact with one of our expert engineers, or send an email to sales@althen.nl.

Welcome to the world of Althen, we **integrate sensor solutions for the creators of tomorrow.**

Our product scope

 bar	PRESSURE	 mm	DISPLACEMENT	 m/s^2	VIBRATION		AUTOMATION
 N	FORCE	 α	ROTATION	 $\%/s$	ANGULAR RATE		TURN-KEY SYSTEMS
 Nm	TORQUE		JOYSTICK	 $^{\circ}\text{C}$	TEMPERATURE		
 ϵ	STRAIN		INCLINATION		SIGNAL CONDITIONING		
 kg	WEIGHT	 g	ACCELERATION		DATALOGGERS		



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Further information can be found at
www.althensensors.com