ASC – smart in motion

Business Initiation Trip Portugal & Spain

Renate Bay | CEO

Sensor portfolio

Analog – Digital – Smart

Accelerometer [g]	Gyroscopes [°/s]	Tilt Sensors [°]	IMUs [g] [°/s]
MEMS capacitive	MEMS vibrating ring	MEMS capacitive	MEMS capacitive
MEMS piezoresistive		MEMS fluidic	MEMS vibrating ring
IEPE piezoelectric			

Running Dynamics (EN 14363)

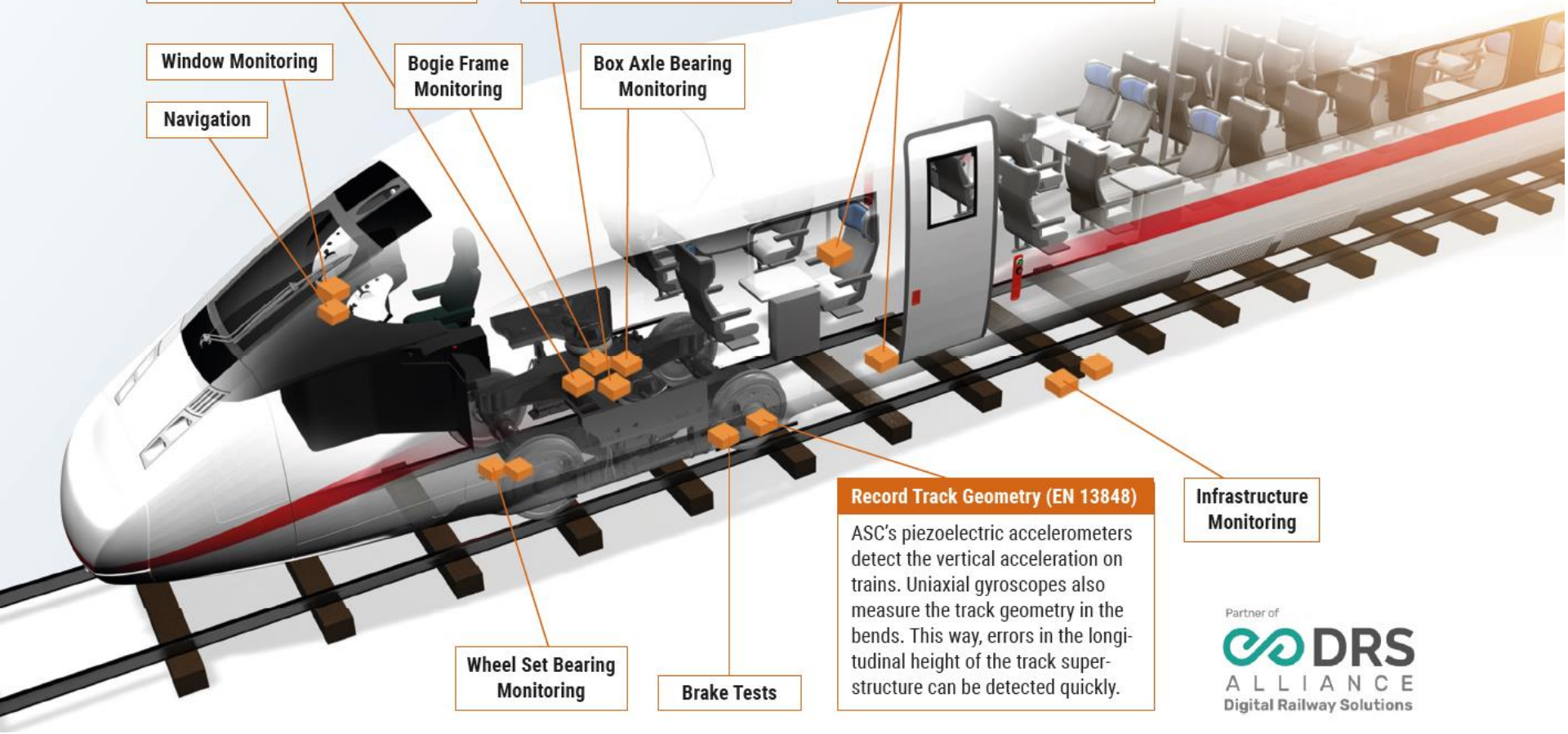
ASC accelerometers and IMUs record train drive dynamics and thus make it possible to assess derailment safety and other parameters. Furthermore, our ASC AiSys® smart sensor systems can even detect material weaknesses at an early stage.

Bogie Stability (EN 13749)

Train bogies are subject to heavy loads. ASC's OS series capacitive accelerometers are ideal for bogie stability testing because they can easily withstand heat, cold, humidity, and dust (IP68).

Driving Comfort Test (EN 12299)

Our accelerometers will win you over with their low frequency and measuring ranges. They are therefore ideal for ride comfort measurements, where the smallest of linear accelerations and low-frequency vibrations have to be recorded.



Record Track Geometry (EN 13848)

ASC's piezoelectric accelerometers detect the vertical acceleration on trains. Uniaxial gyroscopes also measure the track geometry in the bends. This way, errors in the longitudinal height of the track superstructure can be detected quickly.

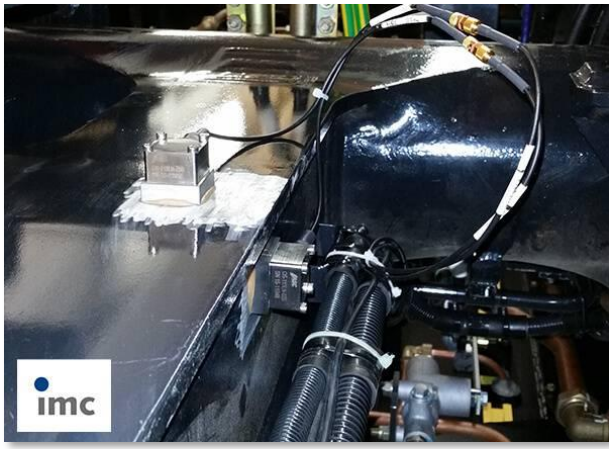
Partner of DRS ALLIANCE Digital Railway Solutions

Inertial sensor solutions for rail transport applications

Confirmed by several case studies

ASC sensors enable Deutsche Bahn to monitor tracks in real time and detect damages at an early stage

To keep passengers, trains and equipment safe, railway manufacturer Alstom relies on ASC sensors



Acceptance tests of a new long-distance train, measuring specialist imc utilized ASC sensors

According to international standards

EN 14363 – EN 13749 – EN 13848 – EN 12299

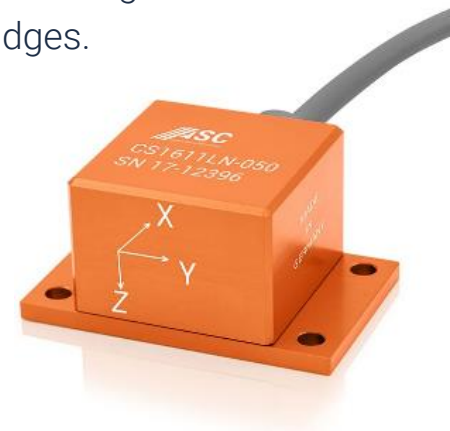
Case Study

Maximum safety in the construction sector

Enabling structural health monitoring systems around the globe

Due to their loss-free signal transmission, even in the case of very long cables, the sensors of the **ASC CS series** are used in continuous condition monitoring and structural health monitoring (SHM), such as infrastructure monitoring in rail transport or structural analysis of bridges.

Case Study



Structural analysis of bridges:

Particularly, as the world's longest bridge-tunnel sea crossing – the **Hong Kong-Zhuhai-Macao Bridge** of 55 kilometers in length, which was opened in 2018 – is already being monitored with ASC sensors.

Many countries are currently facing challenges due to ageing infrastructure

ASC's smart sensor systems for structural analysis of bridges

- Germany has also problems with dilapidated roads and bridges
- ASC is involved in the development of innovative, pioneering standards for digital building inspection and maintenance

➢ **Including: smart sensor systems of the ASC AiSys ECO series**

Case Study

DB InfraGO

BAM

Inside view of a box girder: Installed smart sensor system ASC AiSys® ECO-3321-008-CAN

ASC's Inertial Sensor Solutions - Trustworthy German Quality

Our customers

Thanks for attention

Your solution provider for inertial sensors

Analog – Digital – Smart