



# PROPELLER SHAFT EARTHING SYSTEMS



Your expert partner in sensors & controls

[althensensors.com](http://althensensors.com)

**ALTHEN**  
SENSORS & CONTROLS

# INFORMATION ABOUT ALTHEN SENSORS & CONTROLS

Althen Sensors & Controls stands for pioneering measurement and sensor solutions. Since we are constantly looking to innovate we accept every measurement challenge, our engineers are only satisfied when the perfect solution for your measurement task is found. We develop customer-specific solutions in our in-house production facilities. Althen is partner of many recognized universities and leading organizations. We find ourselves in an intensive knowledge transfer, developing future technologies. Althen is one of the first companies in its branch with a certification by the German technical inspection association in Hessen (TÜV PROFICERT) in accordance with DIN EN ISO 9001:2015.



Our sensor solutions are divided into three main application areas: OEM, Test & Measurement and IIoT solutions.

Our in-house design and manufacturing capabilities allow us to develop customized sensor solutions and turn every measurement challenge into a sensor solution. In addition to our sensor solutions we offer complementary services such as: calibration, design & engineering, training and renting of measurement equipment. Your benefits of working with Althen: high quality sensor solutions, flexibility in developing a customized solution and fast prototyping.

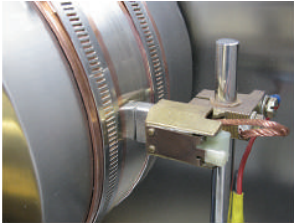
## **Connecting the dots**

Our main market is Western Europe and USA, with offices in Germany, the Netherlands, France, Sweden and the USA. With over 40 years of experience in sensor technology, Althen is your expert partner for sensor and measurement solutions.

For more information please visit our website [www.althensensors.com](http://www.althensensors.com) or [www.althencontrols.com](http://www.althencontrols.com)

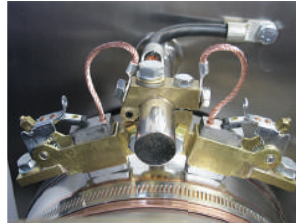
# PROPELLER SHAFT EARTHING SYSTEMS

## S SLIPRINGS



- Copper slipring with solid silver inlay
- Shaft diameters Ø100 - Ø1400 mm

## S BRUSH HOLDERS



- Single or double brush holders

## S BRUSHES



- Silver graphite brushes
- High composition of silver

## S MONITOR



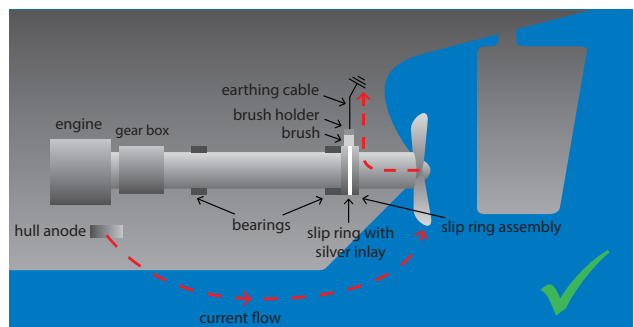
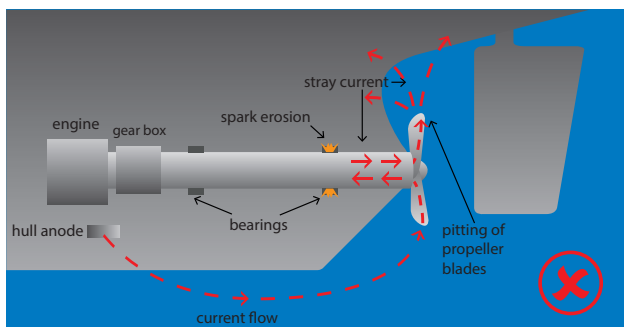
- Potential monitoring
- To verify effectiveness

## S COMPLETE SYSTEM



## S WORKING PRINCIPLE

It is absolutely necessary to electrically ground the ship's propeller shaft to the hull. Because a rotating propeller generates a voltage potential difference between the shaft and the hull, which in time will cause damage to the propeller and the bearings. This voltage potential difference is generated because of the lubricating oil films in bearings and non-metallic materials resulting in electrical isolation of the shaft. The heavy electrical current flowing through the bearings and gearbox to the hull will be minimized by our earthing system, in order to prevent corrosion and damage. The system is optimized by using silver graphite brushes with high silver composition and double brush holders for optimal contact at lowest resistance.







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