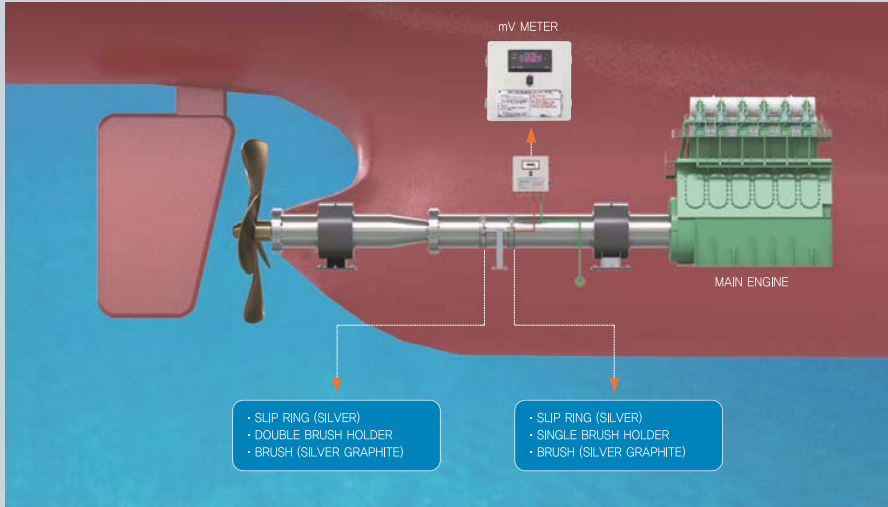




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Main Products CATHSED®

Shaft Earthing (Grounding) Device
 Supply Reference : 7,921 shipsets



Shaft Earthing Device



CATHSED® Shaft Earthing (Grounding) Device has been designed based on the ship's intermediate shaft out diameter, quantity and other requirements.

A turning propeller shaft on a ship becomes electrically insulated from the hull by the lubricating oil film in the bearings and by the use of non-metallic bearing materials in the tail shaft. When the shaft is insulated in this way an electrical potential can be measured between the shaft and the hull and this can accelerate corrosion in the ship. If the ship has a system of cathodic protection, whether it is sacrificial anode or an impressed current system, the shaft insulation will prevent the propeller and the boss from receiving protection.

The electrical potential between the shaft and the hull can cause a heavy current to flow in bearings when the oil film breaks down or is contaminated with seawater. This current can cause deep pitting of the bearing surface. Excessive wear on the shaft bearings can often be traced to this cause. Also trouble can be avoided and cathodic protection can be extended to the propeller if the shaft is properly earthed with a propeller shaft slip ring.

Our own tests indicate that high silver content brushes running on a silver track have repeatable low conductivity that can maintain these limits and ensure a low resistance contact is maintained even under dirty conditions.

The shaft earthing assembly comprises a pair of high silver content / graphite compound brushes mounted in balanced brush holder running on a silver alloy slip ring.

Each brush holder has an adjustable spring tensioner which is supplied preset to the standard pressure. With this arrangement our high quality brush is in excess of one year life.

Brushes for shaft earthing device get worn down by mechanic friction on slip ring for the drain of spark inside main engine and high electric potential from stern bearing/propeller. The readings of earthing are checked through mV meter which should be maintained below a level.

K.C. Ltd produces and delivers high quality silver graphite brushes and most reliable silver sliprings for longer life. The products on silver rich material are always strong enough to endure any tough conditions.

Our Shaft Earthing Device is well known to the world wide clients on following features.

- Very compact and light
- Fulfill the MAN Diesel's requirements
- Applicable both current(Amp) and voltage(mV) readings
- Data communication and alarm signal can be connected to ship's AMS
- Simple installation to all kinds of new building as well as retrofitting ships

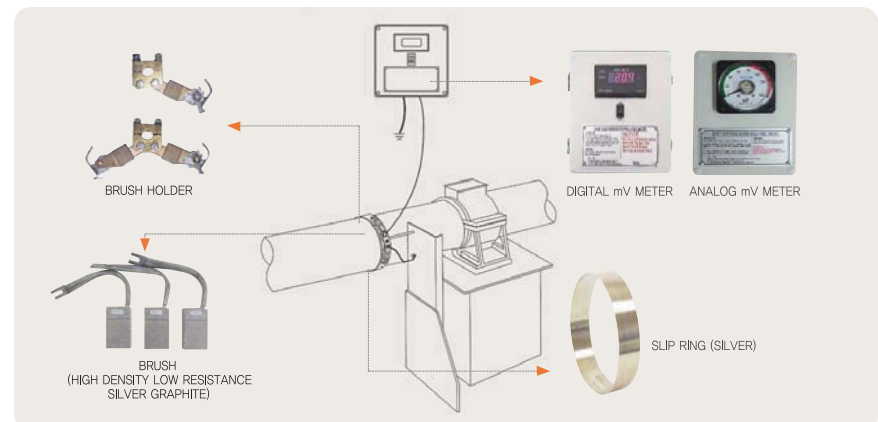
The world best system for Corrosion Protection



without K.C. SYSTEM [Before]



with K.C. SYSTEM [After]



Typical Arrangement and Installation