

DEVICE AND METHOD FOR DETECTING CORROSION OF A METAL PART**ABSTRACT**

The present invention relates to a device for detecting corrosion of a metal part comprising a housing which is a hollow cylinder comprising a proximal end located proximate to the metal part upon installation of the device, and a distal end located away from the metal part upon installation of the device, a display having at least a part which is located inside the housing, a spring located inside the housing in a compressed manner, pushing the display outwardly and a sensor located in a manner that associates the housing with the display, comprising a corroded portion located outside the housing. According to this invention, the corroded portion of the sensor has a diameter in a range of 0.6 to 1.5 mm. Further, the present invention relates to a method for detecting corrosion of a metal part comprising installing the device according to this invention to the metal part. This invention provides advantages that the design of the sensor allows accuracy in the detection of the metal part corrosion, the design of the display gives a reliable operation, e.g. the display will not be interrupted when the sensor is broken, the installation of the device to the metal part can be performed conveniently and quickly in multi-directions, and it is possible and convenient to detach/re-attach the device from the installation in case the inspector needs to inspect the physical aspects of the device.

Fig. 1