

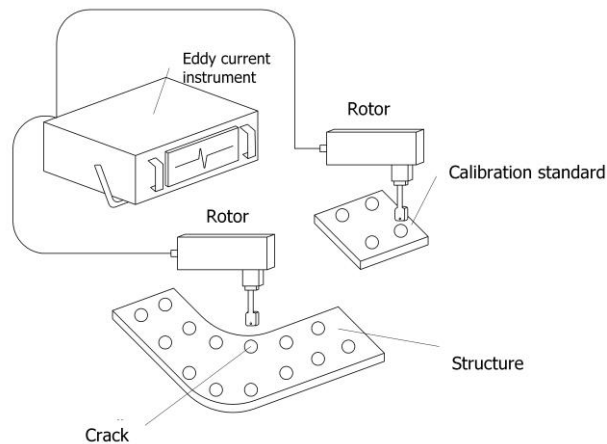
Bolt-hole eddy current (BHEC) rotary probes

Introduction

Fastener holes are generally given greater scrutiny, as they are often locations of crack initiation and propagation due to load transfer and stress concentration. The fidelity of BHEC inspections is greatly dependent on the quality and cleanliness of the hole.

Equipment

The basic equipment for BHEC inspection contains these devices, which are displayed in figure below.



Our company produces:

INDETEC ROTOSCAN 380 RB universal rotor is handheld rotor (380 rpm) and can be connected to any EC instrument (originally for Olympus Nortec 500). It includes battery and power supply.



EC rotary probes are manufactured in various diameters and designs from the smallest diameter $\text{\O} 3 \text{ mm}$ (0.1 in) up to customer sizes. They are available in design for only one hole diameter or to cover of multiple hole diameters. The probes are characterized by high durability and wear resistance compared to competitors in the same category.



Reference standards contain holes with EDM (Electrical Discharge Machining) notches.



Eddy current signals



EC signal without crack



EC signal of the crack