

Abstract

A DEVICE AND METHOD FOR MEASURING PITCH AND ROLL TORQUES

Embodiments of the invention provide a device for measuring pitch and
5 roll torques. The device comprises a sensor plate having a horizontal cross
member, a vertical cross member and a surrounding member connecting ends of
the horizontal and vertical cross members, wherein the horizontal cross member
and the vertical cross member intersect each other at a centre region of the
sensor plate; a VCM coil attached to the sensor plate and configured to generate
10 a pitch and a roll torque when an electrical current is applied to the VCM coil; a
first strain gauge attached to a surface of the horizontal cross member and
configured to detect a horizontal strain caused by the pitch and roll torques; and
a second strain gauge attached to a surface of the vertical cross member and
configured to detect a vertical strain caused by the pitch and roll torques.

15 (Figure 2)