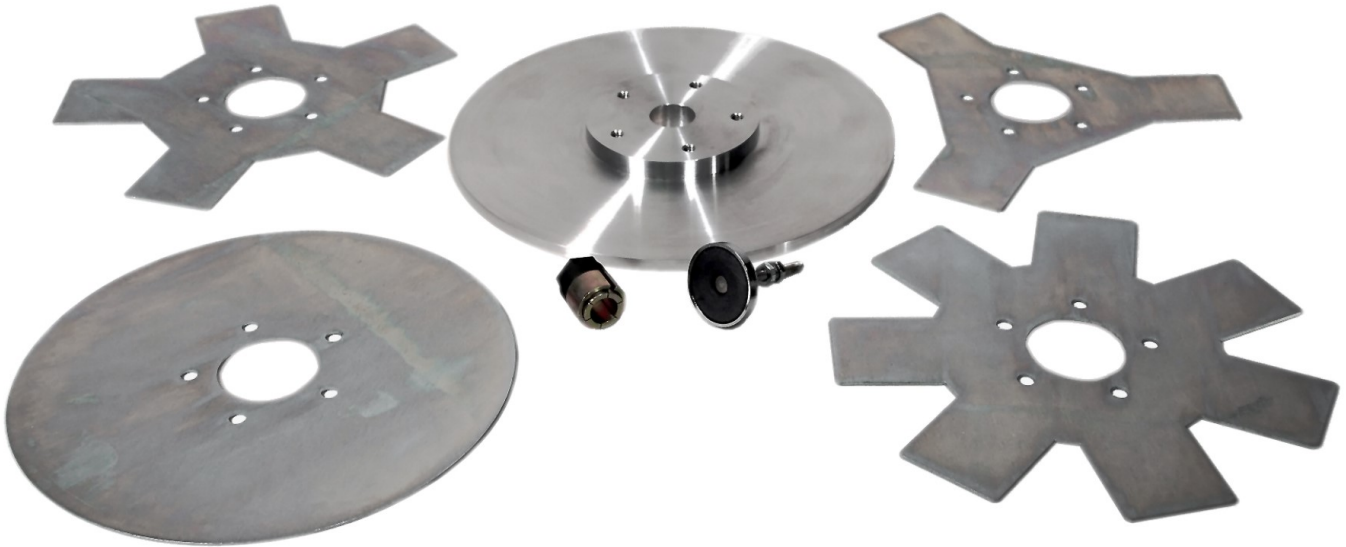




FAN VIBRATION MODULE HTM90F



Features

- Allows students to observe vibrational effects on a fan

Description

The HTM90F Fan Vibration Module is a module which attaches to the HTM90 base unit to simulate a system under load which then enables the students to observe the vibrational affects produced at different speeds and load forces. The module creates the vibrations as a function of torque and resistance. Vibration measurements on fans and blowers play a major role in field monitoring operations. In addition to the usual signals caused by bearings and imbalance, the vibrations induced by the fan blades can be measured. The vibrations are induced by inhomogeneous flow fields. The HTM90F module induces the vibrations magnetically. Three fan rotors with differing numbers of blades can be investigated. A guard plate covers the rotating fans. An obliquely-mounted inertia disk is used to investigate the gyroscopic effect. The magnets position can be modified to change the strength of the effect; frequencies of vibration can be calculated from the number of fan blades and speed of rotation. An extra collect is provided to allow assembly to the main HTM90 base unit. The HTM90F module can be used in conjunction with other HTM90 units.

Learning capabilities

- Introduction to vibration measurement methods on rotating machinery systems.
- Vibration measurement on fans.
- Measurement of blade frequency dependant on fan type.
- Identification of the vibration induced by the blades from the vibration spectrum.
- Effect of dynamic imbalance on the fan.
- Effect of shaft length on vibrations.

Technical Specification

- Sheet-steel fan rotor: 3, 5 and 7 blades, diameter 204mm set inside mounting plate.
- Zero blade disc also provided.
- Collar Provided.
- Mounting Disk: dia 220mm, aluminium.
- Adjustable magnet distance/ magnetic force to induce vibrations to the fan blades.

Essential Ancillaries

- HTM90 Base Unit

Weights & Dimensions

- Net dimensions: 350mm (L) x 100mm (W) x 200mm (H)
- Net weight: 3Kg

Ordering information

To order this product, please call PA Hilton quoting the following code:
HTM90F Fan Vibration Module

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