



# COUPLING MODULE HTM90C



## Features

- A set of different couplings for use with the HTM90 base unit
- Allows students to study differing alignment errors. Kit consists of four coupling types: 1. Clamp Coupling 2. Jaw Coupling 3. Barrel Gear Coupling 4. Rubber mould/ Shock Coupling
- Can be used with other HTM90 accessories to extend student learning and understanding

#### Description

To transfer rotation from a motor shaft to a driving shaft many types of couplings are available, this connection between motor and shaft is a vital link in any assembly. This module of the HTM90 series will allow the user to test four different coupling types (five including the standard unit coupling) and to see how the transfer of torque may differ and how this can affect the vibrations in the system. This add-on module to the HTM90 base unit is designed to show and analyse faults or benefits that can occur with a shaft in a rotating system when different couplings are used. With the use of vibration analysis this apparatus is designed to show how to diagnose problems and evaluate the differences between faults through the vibration results. The HTM90C module attaches to the HMT90 base unit, it is designed to simulate various faults and investigate the effects on vibration behaviour of different types of couplings. The properties of various coupling types can also be compared along with certain characteristics and examples with explanations of instances and applications where they are used. The clamp coupling, jaw coupling, barrel gear coupling and shock coupling are all additional coupling types supplied for this module. Coupling types are investigated and compared to the coupling supplied with the main unit which is a flexible beam coupling. The couplings are installed between the motor and the shaft. This module can be used as an extension to experiments on most of the HTM90 series setups and can constitute as an added variation to several of the module setups to further experiments. The HTM90D brake and load unit will also be required to investigate the behaviour of the couplings under load if required.



## Learning capabilities

- Effects of alignment errors on four different coupling types including, Clamp Coupling, Jaw Coupling, Barrel Gear Coupling, Rubber mould/Shock Coupling
- · Identification of coupling faults from the vibration signal
- Experiment familiarises students with the fundamentals of vibration measurement and joining shafts in a rotating system.
- Introduction to vibration measurement methods on rotating machinery systems

#### **Technical Specification**

- Set includes four different coupling types; Clamp, Jaw, Barrel Gear, Shock coupling.
- Comparison of couplings with different setups/ modules and experimental conditions.
- Examples of applications and characteristics of use.

## **Essential Ancillaries**

• HTM90 - Base Unit

## What's in the Box?

- 1 x Plastic Accessories Container
- 1 x Flexible Beam Coupling
- 1 x Jaw Coupling
- 1 x Barrel Gear Coupling
- 1 x Rubber Mould Coupling
- 1 x Manual

#### Weights & Dimensions

- Approximate Net Weight 1Kg
- Approximate Dimensions 100mm (L) x 100mm (W) x 50mm (H)

## **Ordering information**

To order this product, please call PA Hilton quoting the following code: HTM90C - Coupling Module

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