

MOTOR-GEARBOX-PUMP FOR VIBRATORY MONITORING



Experimental capabilities

- **Diagnosis of major vibratory defects of an installation of the type motor- pump group**
- **Replacement of the defective elements**
- **Adjustment of the machine geometry**
- **Kinematic study of the machine by a vibration analysis**

Operating principle

The kit for predictive maintenance by vibratory analysis allows to implement various diagnostic techniques by vibration analysis

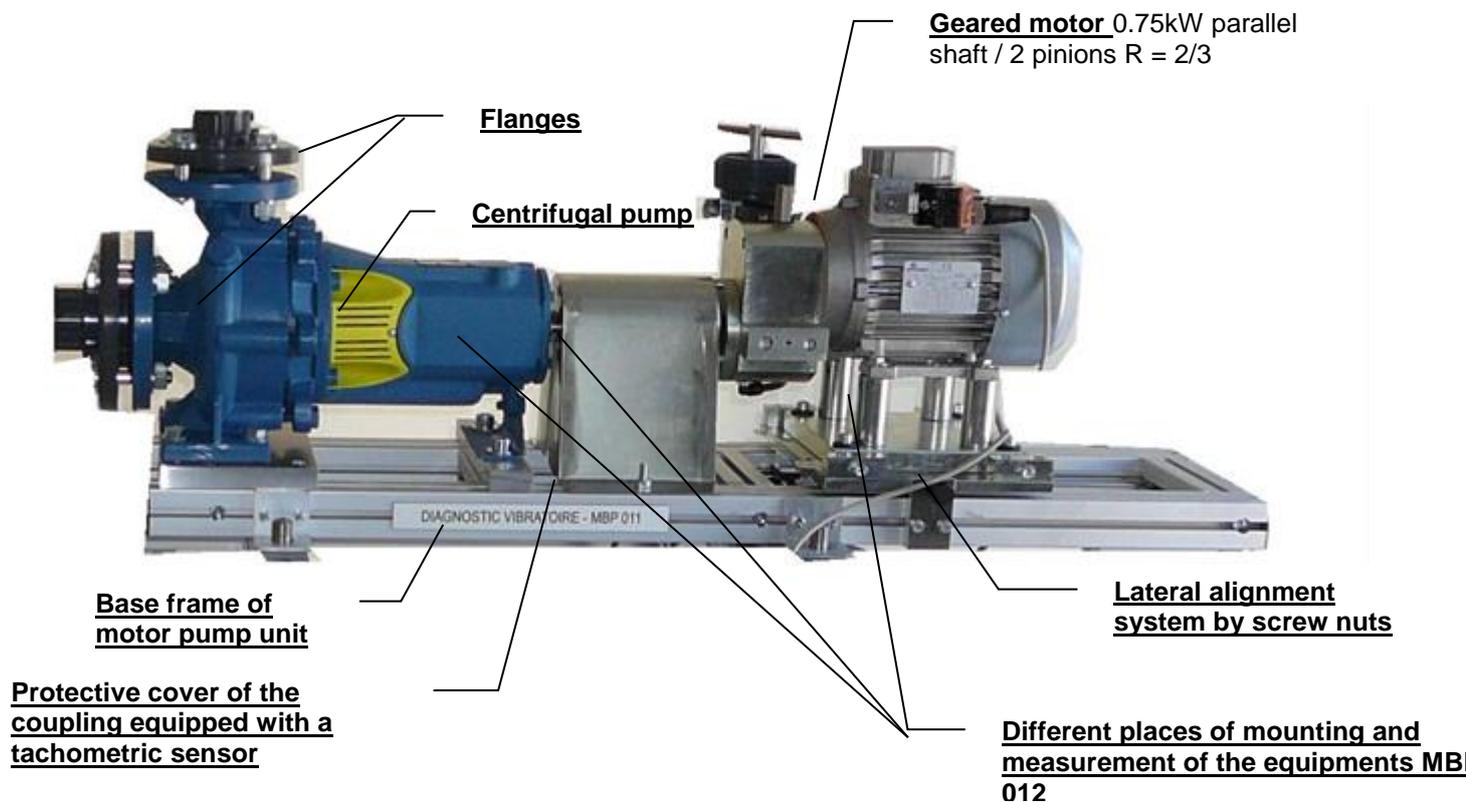
The robust design of this device makes it suitable for use in schools.

The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations Technical details



- 1 **centrifugal motor pump unit** consisting of:
 - ✓ 1 geared motor with parallel shafts with output speed 2000tr/min approximately
 - ✓ 1 centrifugal pump seal for generating cavitation by using the ball valve located at the suction on the bracket benches MBP010 or MBP101
 - ✓ Flanges at the suction and at discharge for connection with a bench MBP010 or MBP101
 - ✓ 1 coupling Holdham quickly dismantled
 - ✓ 1 lateral alignment system by jackbolt composed of an adjustment device by motor foot

- 1 **set of identifiable defects** by vibratory analysis (analysis device not included / available as reference MBP012 or 013) :
 - ✓ Hydraulic pump in which one of two **bearings is defective** for comparative vibratory analysis with the other sound bearing of the same pump
 - ✓ 1 shaft of reducer with 2 bearings and 1 **defected pinion**
 - ✓ 1 mechanical piece to create an **unbalance**

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Dans le cadre de l'amélioration permanente de nos produits, ce descriptif technique est susceptible d'être modifié sans préavis
As part of the continuous improvement of our products, this technical specification may be modified without previous notifying

MBP011



- ✓ 1 set of 50 wedges of thicknesses also allowing to create vibrational defects by **misalignment** of the system (obtained by disorder of the system/ to put the machine in perfect alignment the equipment MBP 020 or 021 is recommended)
- ✓ The needed material for the creation of defects is delivered in a suitcase compartmentalized



Services required

The MBP011 support needs to be mounted on the bench or MBP010 MBP101 to monitor the activities

- Dimensions: (LxWxH mm): 800 x 3500 x 400
- weight (Kg): 45

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

Recommended equipment

- MBP 011 is scheduled for this mounted in any of:
 - ✓ MBP 010 (BENCH OF MAINTENANCE OF PUMPS SIMPLIFIED)
 - ✓ MBP 101 (BENCH OF MAINTENANCE OF PUMP)
- MBP 011 constitutes the support for implementation of diagnostic activities and vibration analysis with:
 - ✓ MBP 013 (VIBRATION MONITORING OF INSTALLATION)
 - ✓ MBP 012 (KIT FOR DIAGNOSIS WORKSHOP VIBRATION)
- MBP 011 is also compatible with the use of rotating equipments of rotating machines alignment:
 - ✓ MBP 020 (LINEAGE KIT OF SHAFT)
 - ✓ MBP 021 (LINEAGE KIT OF SHAFT BY LASER SYSTEM)