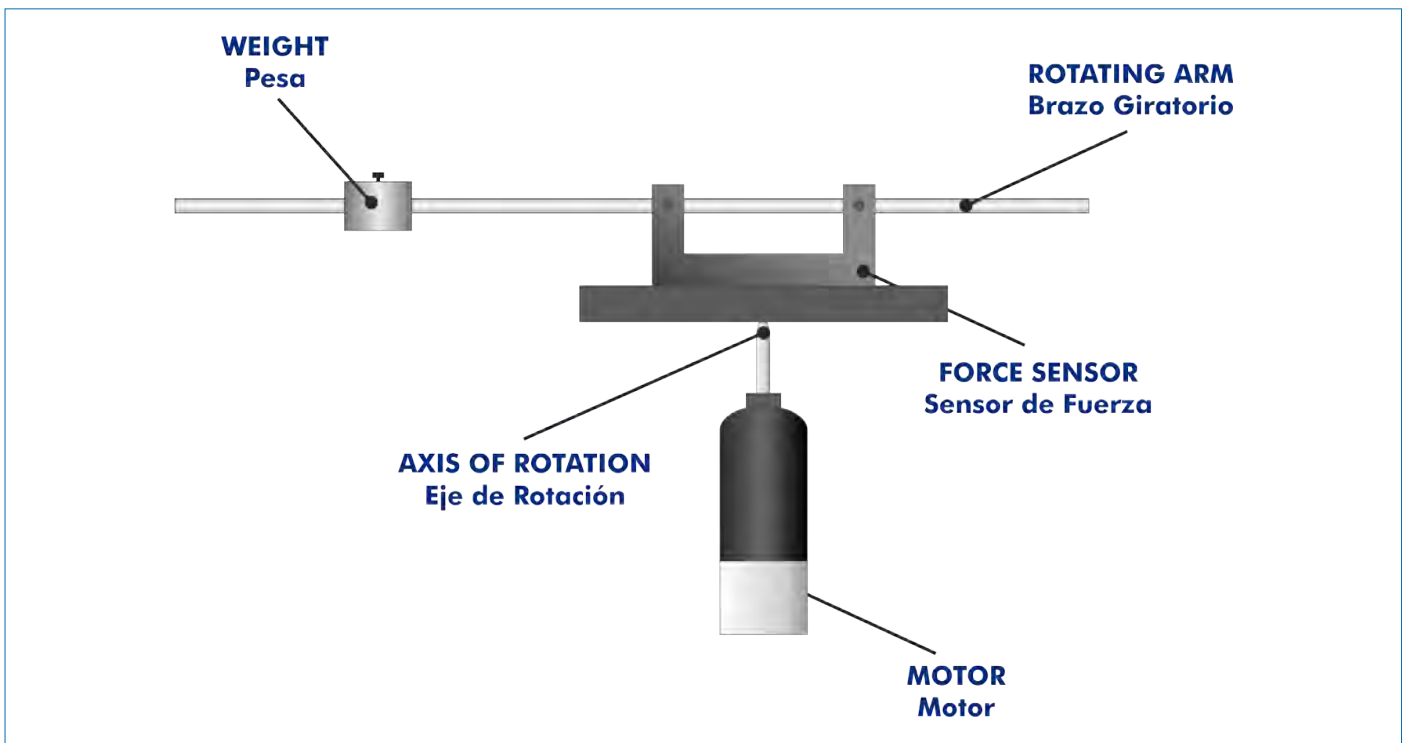
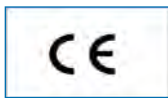


PROCESS DIAGRAM AND UNIT ELEMENTS ALLOCATION



ISO 9001: Quality Management (for Design, Manufacturing, Commercialization and After-sales service)



European Union Certificate (total safety)



Certificates ISO 14001 and ECO-Management and Audit Scheme (environmental management)



"Worlddidac Quality Charter" and Platinum Member of Worlddidac

INTRODUCTION

The centrifugal force is the apparent force that draws a rotating body away from the center of rotation. It is caused by the inertia of the body as the body's path is continually redirected.

The Centrifugal Force Unit, "MFCE", allows to study the centrifugal force and the angular velocity on rotating masses and the laws of the behaviour of rotating masses.

GENERAL DESCRIPTION

The Centrifugal Force Unit, "MFCE" is used to demonstrate the relationship between centrifugal force, the rotational speed, the mass of a rotating body and the distance from the axis.

The unit consists of a vertical axis of rotation and a rotating arm. There are several weights, which are anchored to the arm in retaining holes. The exerted centrifugal force is transmitted from the arm to a bending bar.

A force sensor measures the bar deformation (proportional to the force) and it is visualized in a digital display in an electronic console.

The unit is supplied with an electronic console with two digital displays to show the motor speed and force and a speed controller for the motor.

A transparent protective cover provides protection against the rotating parts and enables different experiments to be observed.

SPECIFICATIONS

Anodized aluminum frame and panels made of painted steel.

Main metallic elements made of stainless steel.

Diagram in the front panel with distribution of the elements similar to the real one.

Motor:

Speed range: 0-600 r.p.m.

The motor speed is controlled through the electronic console and the value of the speed is visualized in the digital display.

Five different path radii: 25 mm, 50 mm, 75 mm, 100 mm, 125 mm.

Four different rotating weights (made of stainless steel) of 55g, 80g, 105g and 130g.

Force sensor, range: 0-25N, resolution: 0.1N.

A transparent protective cover, made of plastic, provides protection against the rotating parts and enables different experiments to be observed.

Electronic console (in separate metallic box), including:

Motor connector.

Motor speed controller.

Digital display for the motor speed.

Force sensor connector.

Digital display for the force sensor.

Cables and accessories, for normal operation.

Manuals: This unit is supplied with the following manuals: Required services, Assembly and Installation, Starting-up, Security, Maintenance and Practices manual.

EXERCISES AND PRACTICAL POSSIBILITIES

- 1.- Verification of the relationship between centrifugal force and the mass of a rotating body.
- 2.- Verification of the relationship between centrifugal force and the distance from the axis of rotation (radius of rotation).
- 3.- Verification of the relationship between centrifugal force and the rotational speed.
- 4.- Comparison of the experimental results with the results calculated from theory.

REQUIRED SERVICES

-Electrical supply: single-phase, 220V/50Hz or 110V/60Hz.

DIMENSIONS AND WEIGHTS

MFCE:

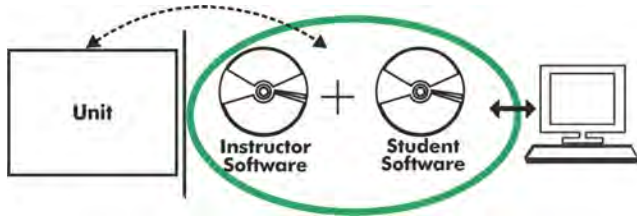
Unit:

- Dimensions: 400 x 400 x 400 mm approx.
(15.75 x 15.75 x 15.75 inches approx.)
- Weight: 20 Kg approx.
(44 pounds approx.)

Electronic console:

- Dimensions: 300 x 190 x 130 mm approx.
(11.81 x 7.48 x 5.12 inches approx.)
- Weight: 2.5 Kg approx.
(5.5 pounds approx.)

MFCE/ICAI. Interactive Computer Aided Instruction Software System:



With no physical connection between unit and computer, this complete software package consists of an Instructor Software (EDIBON Classroom Manager -ECM-SOF) totally integrated with the Student Software (EDIBON Student Labsoft -ESL-SOF). Both are interconnected so that the teacher knows at any moment what is the theoretical and practical knowledge of the students.

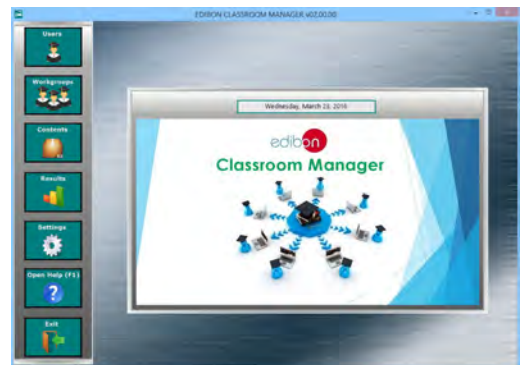
Instructor Software

- ECM-SOF. EDIBON Classroom Manager (Instructor Software).

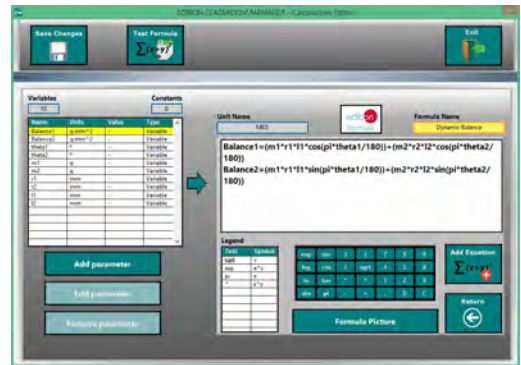
ECM-SOF is the application that allows the Instructor to register students, manage and assign tasks for workgroups, create own content to carry out Practical Exercises, choose one of the evaluation methods to check the Student knowledge and monitor the progression related to the planned tasks for individual students, workgroups, units, etc... so the teacher can know in real time the level of understanding of any student in the classroom.

Innovative features:

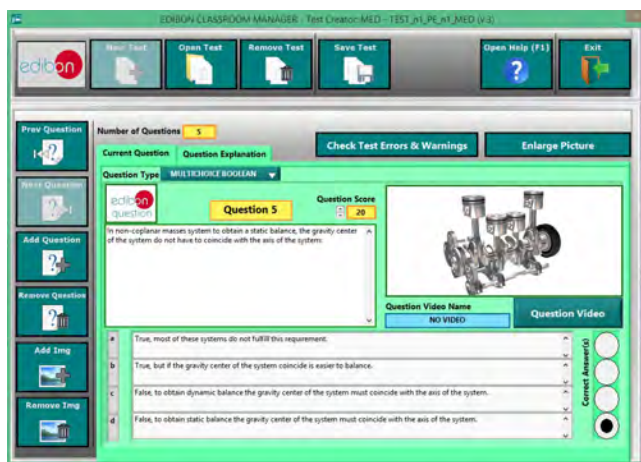
- User Data Base Management.
- Administration and assignment of Workgroup, Task and Training sessions.
- Creation and Integration of Practical Exercises and Multimedia Resources.
- Custom Design of Evaluation Methods.
- Creation and assignment of Formulas & Equations.
- Equation System Solver Engine.
- Updatable Contents.
- Report generation, User Progression Monitoring and Statistics.



ECM-SOF. EDIBON Classroom Manager (Instructor Software) Application Main Screen



ECAL. EDIBON Calculations Program Package - Formula Editor Screen



ETTE. EDIBON Training Test & Exam Program Package - Main Screen with Numeric Result Question



ERS. EDIBON Results & Statistics Program Package - Student Scores Histogram

Optional
Student Software

- ESL-SOF. EDIBON Student Labsoft (Student Software).

ESL-SOF is the application addressed to the Students that helps them to understand theoretical concepts by means of practical exercises and to prove their knowledge and progression by performing tests and calculations in addition to Multimedia Resources. Default planned tasks and an Open workgroup are provided by EDIBON to allow the students start working from the first session. Reports and statistics are available to know their progression at any time, as well as explanations for every exercise to reinforce the theoretically acquired technical knowledge.

Innovative features:

- Student Log-In & Self-Registration.
- Existing Tasks checking & Monitoring.
- Default contents & scheduled tasks available to be used from the first session.
- Practical Exercises accomplishment by following the Manual provided by EDIBON.
- Evaluation Methods to prove your knowledge and progression.
- Test self-correction.
- Calculations computing and plotting.
- Equation System Solver Engine.
- User Monitoring Learning & Printable Reports.
- Multimedia-Supported auxiliary resources.

For more information see ICAI catalogue. Click on the following link:

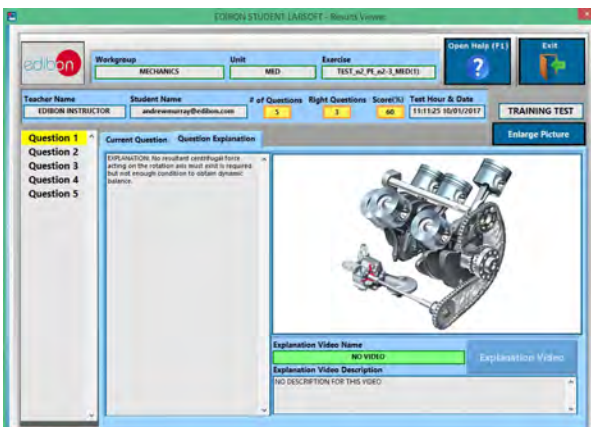
www.edibon.com/en/files/expansion/ICAI/catalog



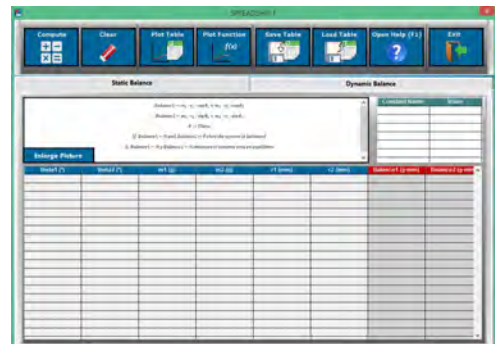
ESL-SOF. EDIBON Student LabSoft (Student Software)
Application Main Screen



EPE. EDIBON Practical Exercise Program Package Main Screen



ERS. EDIBON Results & Statistics Program Package - Question Explanation



ECAL. EDIBON Calculations Program Package Main Screen

* Specifications subject to change without previous notice, due to the convenience of improvement of the product.



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REPRESENTATIVE:

