Slotted Link Mechanism

MBM1

GENERAL DESCRIPTION

The slotted link mechanism (MBM1), designed by EDIBON, is an example of a quick-return mechanism.

This mechanism is a combination of an inversion of the slider-crank chain and slider block.

The unit is assembled in an anodized aluminum profile structure, with steel painted panel.

The MBM1 is a mechanism able to transform circular movement into reciprocating movement. It is made of aluminum and consists of a rotary element (graduated disk), called crank, connected to a rigid bar, called connecting rod. When rotating the crank, the connecting rod moves back and forward. The rotation motion of a crank or crankshaft causes a rectilinear reciprocating motion of a piston or plunger.

It is a reversible system through which the connecting rod can be displaced by turning the crank and the other way round. If the connecting rod generates the input motion (as a piston in a car's engine does), the crank is obliged to rotate.

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.- Demonstration of the action of a simple crank and slotted link mechanism.

2.- Graphic determination of the relationship between the linear displacement of the sliding block and the angular displacement of the input crank.

Other possible practices:

3.- More advanced exercises may include the determination of the velocity and acceleration of the slider block by graphical differentiation and comparison with the valves obtained by velocity and acceleration diagrams.

DIMENSIONS AND WEIGHTS

MBM1:
- Dimensions: 400 x 300 x 100 mm. approx.
        (15.75 x 11.81 x 3.94 inches approx.).
- Weight: 3 Kg. approx.
        (6.6 pounds approx.).

MBM1/ICAI. Interactive Computer Aided Instruction Software System:
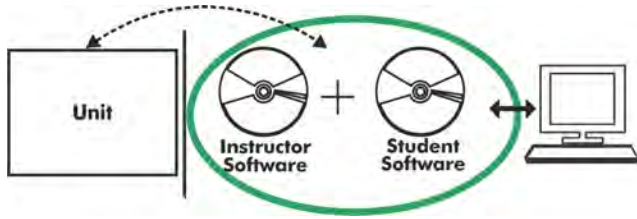
With no physical connection between unit and computer, **this complete software package consists of an Instructor Software (EDIBON Classroom Manager -ECM-SOF) totally integrated with the Student Software (EDIBON Student Labsoft -ESL-SOF).** Both are interconnected so that the teacher knows at any moment what is the theoretical and practical knowledge of the students.
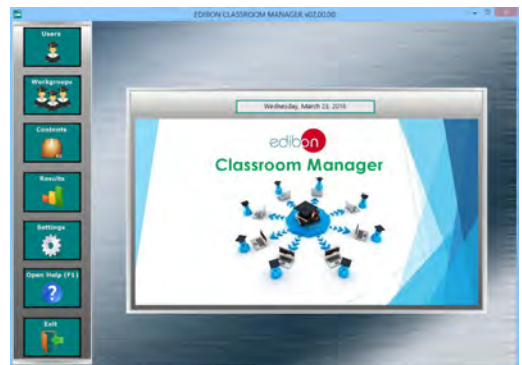

Instructor Software

### - 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
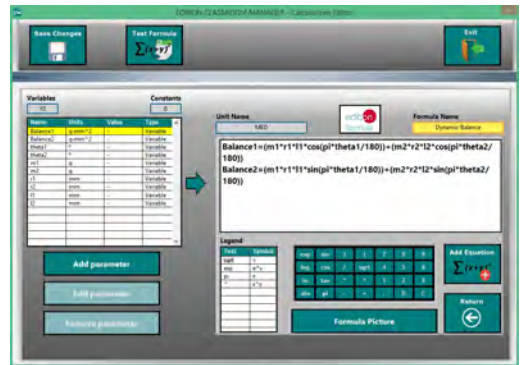
ECAL. EDIBON Calculations Program Package - Formula Editor Screen
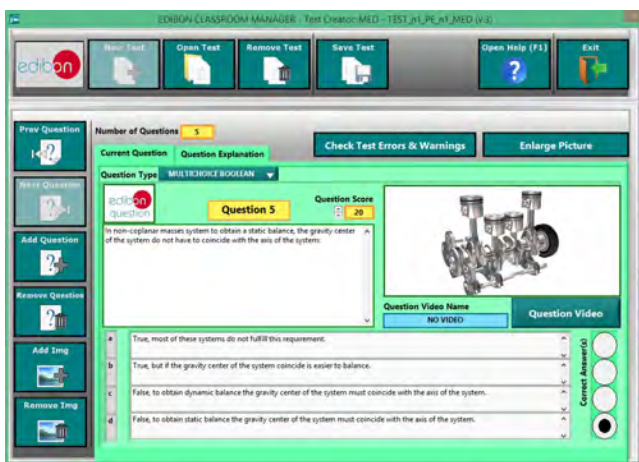
ETTE. EDIBON Training Test & Exam Program Package - Main Screen with Numeric Result Question

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

<u>Student Software</u>

- 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.

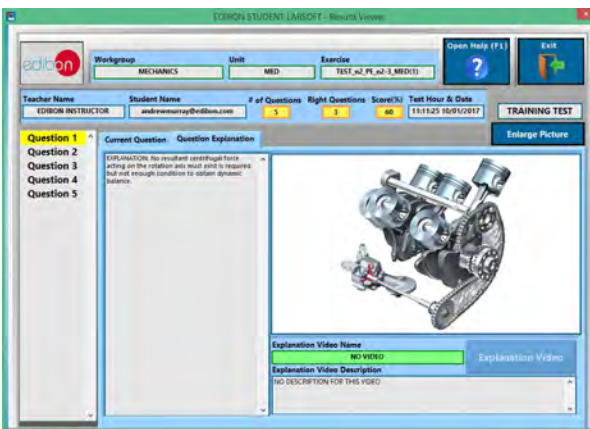For more information see **ICAI** catalogue. Click on the following link:

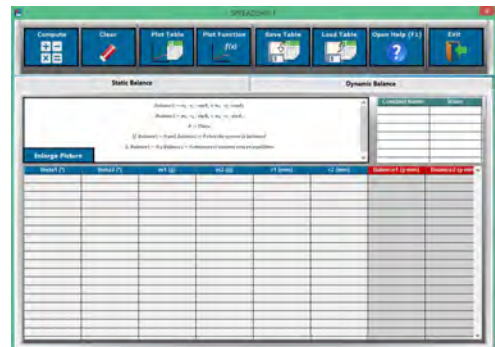www.edibon.com/en/files/expansion/ICAI/catalog

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.

REPRESENTATIVE: