

INTRODUCTION

The cutaway units are actual models of elements of study that have been cut to observe their interior. It allows the student to recognize all the components and understand the construction and operation of the parts that make up the element.

Valves are one of the most important control instruments in the industry.

They allow to regulate the passage of a fluid.

Ball valves are open/close (on/off) valves type, allow or impede the passage of fluid, but do not regulate the flow. They are recommended for services, without strangulation, driving and cutting, under moderate temperature conditions, in cases of quick opening, mainly.

Among its advantages are the almost null probability of leakage, its excellent capacity, among others.

GENERAL DESCRIPTION

The Unit to Study a Ball Valve Cutaway Model, "BVCM", allows the students to visualize the inner parts of a ball valve, to evaluate the relation with each other accurately and to understand their function.

It is a device with mobile features that allows opening and closing a circulation path in order to allow, prevent or control the flow of fluids.

The regulating mechanism located in the interior is opened by turning the shaft attached to the perforated sphere, allowing the passage of fluid when the perforation is aligned with the inlet and outlet of the valve. The position of the actuation lever indicates the state of the valve (open or closed).

The cutaway model of a ball valve is composed of real industrial elements designed in such a way that its inner parts can be observed by the user, maintaining its mechanical and functional capacity.

The unit is attached to a base plate with handles for easy transport.

SPECIFICATIONS

Bench-top unit with adjustable legs.
Anodized aluminum frame and panels made of painted steel.
Fixed unit on a base plate with handles for easy transport.

Ball valve:

Materials:

Body: cast iron EN GJL-250.

Ball: stainless steel AISI 303.

Stem: stainless steel AISI 304.

Seats: PTFE.

Lever: steel.

Max. pressure: 16 bar.

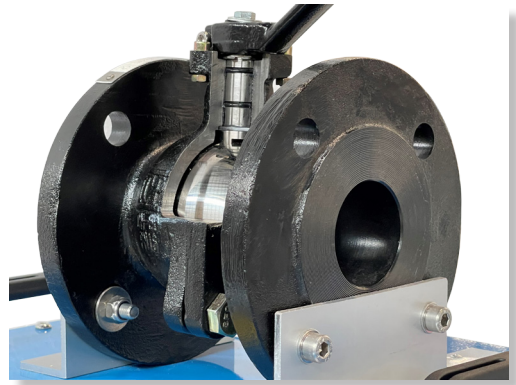
Nominal diameter: DN50.

Max. temperature: 180 °C.

Flow: water and non-aggressive fluids (not suitable for steam and compressed air).

$K_v = 416 \text{ m}^3/\text{h}$.

Manuals: This unit is supplied with the following manuals: Required Services, Assembly and Installation, Starting-up, Safety, Maintenance & Practices Manuals.



BVCN detail

EXERCISES AND PRACTICAL POSSIBILITIES

- 1.- Identification of the main components of a ball valve.
- 2.- Operation of a ball valve.
- 3.- Study and understanding of the maintenance of a ball valve.

DIMENSIONS AND WEIGHTS

BVCN:

- Dimensions: 400 x 300 x 250 mm approx. (15.74 x 11.81 x 9.84 inches approx.)
- Weight: 5 Kg approx. (11 pounds approx.)

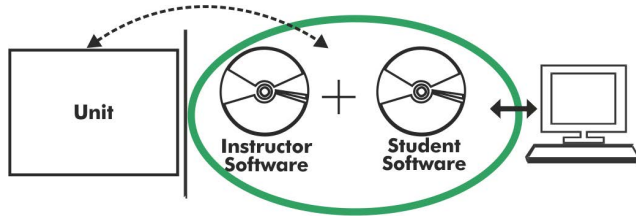
SIMILAR UNITS AVAILABLE

Offered in this catalog:

- BVCN: Unit to Study a Ball Valve Cutaway Model.

Offered in other catalogs:

- ANVCN: Unit to Study an Angular Needle Valve Cutaway Model.
- LNVCM: Unit to Study a Lift Non-return Valve Cutaway Model.
- NBVCN: Unit to Study a Non-return Butterfly Valve Cutaway Model.
- PMFCN: Unit to Study a Pipe Mesh Filter Cutaway Model.
- SNVCN: Unit to Study a Straight-way Needle Valve Cutaway Model.
- UHCM: Unit to Study an Underground Hydrant Cutaway Model.
- WMCM: Unit to Study a Water Meter Cutaway Model.

BVCM/ICAI. Interactive Computer Aided Instruction Software:

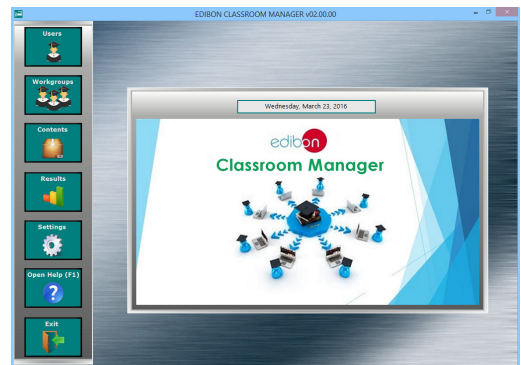
With no physical connection between unit and computer, this complete software package consists of an Instructor Software (EDIBON Classroom Manager -ECM-SOF) totally integrated with the Student Software (EDIBON Student Labsoft -ESL-SOF). Both are interconnected so that the teacher knows at any moment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

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

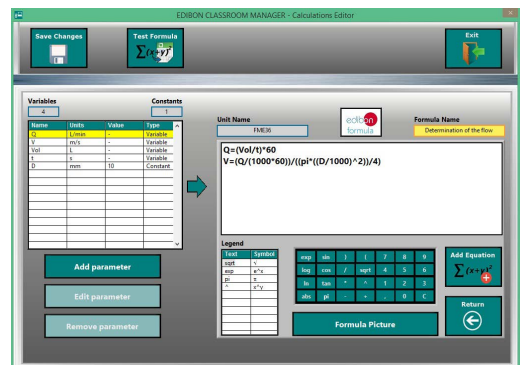
ECM-SOF is the application that allows the Instructor to register students, manage and assign tasks for workgroups, create own content to carry out Practical Exercises, choose one of the evaluation methods to check the Student knowledge and monitor the progression related to the planned tasks for individual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

Innovative features:

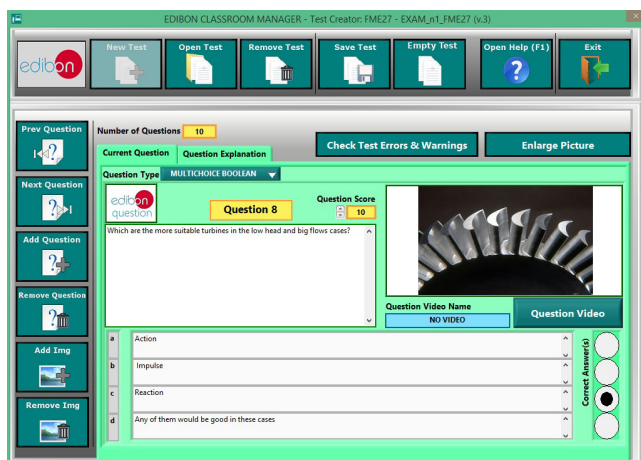
- User Data Base Management.
- Administration and assignment of Workgroup, Task and Training sessions.
- Creation and Integration of Practical Exercises and Multimedia Resources.
- Custom Design of Evaluation Methods.
- Creation and assignment of Formulas & Equations.
- Equation System Solver Engine.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



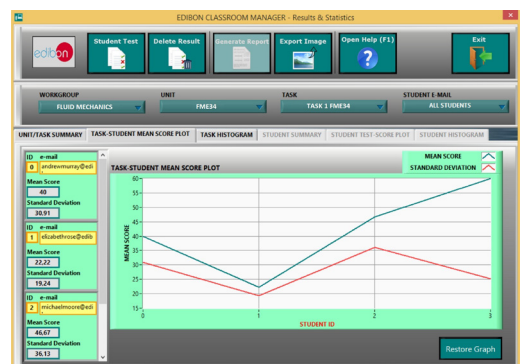
ECM-SOF. EDIBON Classroom Manager (Instructor Software) Application Main Screen



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:

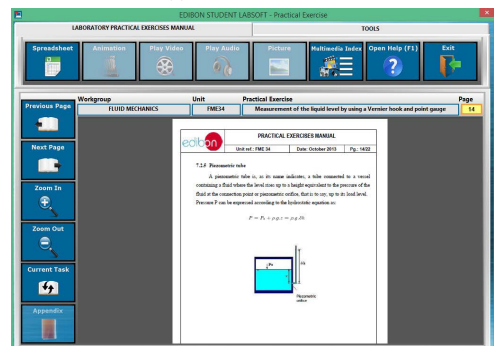
- Student Log-In & Self-Registration.
- Existing Tasks checking & Monitoring.
- Default contents & scheduled tasks available to be used from the first session.
- Practical Exercises accomplishment by following the Manual provided by EDIBON.
- Evaluation Methods to prove your knowledge and progression.
- 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:

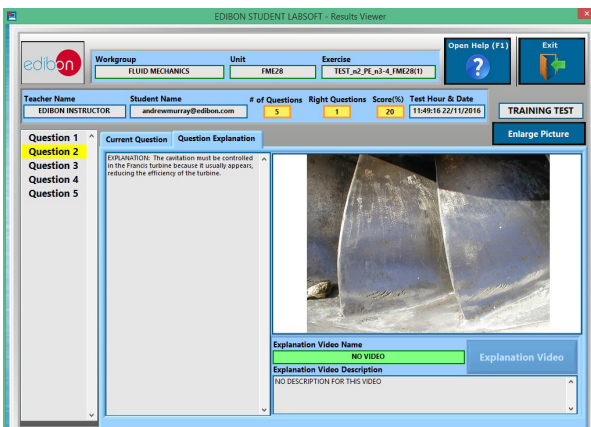
www.edibon.com/en/interactive-computer-aided-instruction-software



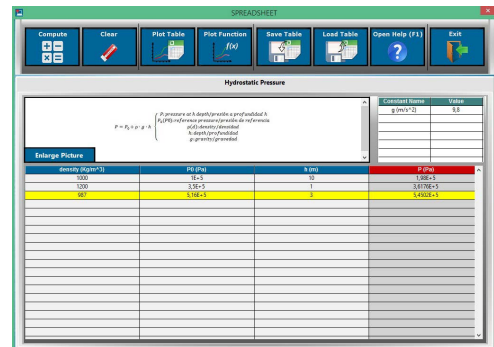
ESL-SOF. EDIBON Student LabSoft (Student Software)
Application Main Screen



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:

