# Simple Hydraulic System



www.edibon.com



GENERAL DESCRIPTION

The Simple Hydraulic System, "MSH", has been designed for mechanical engineering and motor vehicle studies. It is used to demonstrate how a liquid can be used to transmit a force.

The unit can also be used to carry out experiments to study the relationships between the force on the plungers, the cross section area of the plungers and the fluid pressure in the system.

# SPECIFICATIONS

This unit is mounted on an anodized aluminum structure and painted steel panel.

The unit consists of three cylinders and plungers whose cross-section areas are in the ratio 1, 2 and 6. These three cylinders and the pressure gauge are connected in parallel. Using the on/off taps included in the circuit any of the cylinder units can be isolated from the system.

Load hangers are supplied.

Engineering and Technical Teaching Equipment

In order to carry out some practices with "MSH" unit, two "B type" set of weights is required. (See "Required Accessories" section)

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









# **REQUIRED ACCESSORIES (Not included)**

- 2 "B type" set of weights. Each "B type" set included:
  - 6 weights of 200 g. (0.44 pounds)
  - 6 weights of 100 g. (0.22 pounds)
  - 2 weights of 50 g. (0.11 pounds)

  - 2 weights of 10 g. (0.022  $\ensuremath{\mathsf{pounds}}\xspace)$
  - 1 support hook of 100 g. (0.22 pounds)

# DIMENSIONS AND WEIGHTS

## MSH:

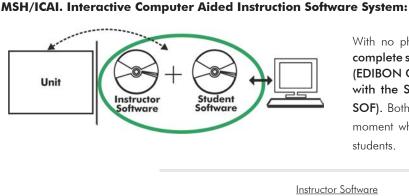
-Dimensions: 710 x 600 x 810 mm approx.

(27.95 x 23.62 x 31.88 inches approx.)

-Weight: 25 Kg approx.

(55 pounds approx.)

### Optional



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.

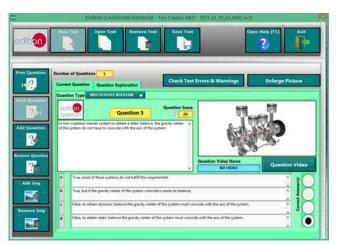
Instructor Software

#### - 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.



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



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



ECAL. EDIBON Calculations Program Package - Formula Editor Screen



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

#### Optional

#### Student Software

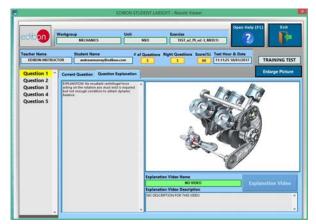
## - ESL-SOF. EDIBON Student Labsoft (Student Software).

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



ERS. EDIBON Results & Statistics Program Package - Question Explanation



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



EPE. EDIBON Practical Exercise Program Package Main Screen

			SPREADSHEET				
	1	PletTable	Plot Function	Save Table	Lose Table	Open Help (F1)	, MA
Static Balance				Dynamic Balance			
Enlarge Picture	1.84	Estanoi - m <sub>1</sub> - 1 8 Interest - 2 and Estano					
Bess 1	9443 ()	ent lab	m2 ()	i jangi	12 (som)	Romert grand	

ECAL. EDIBON Calculations Program Package Main Screen

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

**REPRESENTATIVE:** 

4



C/ Del Agua, 14. Polígono Industrial San José de Valderas. 28918 LEGANÉS. (Madrid). ESPAÑA - SPAIN. Tel.: 34-91-6199363 Fax: 34-91-6198647 E-mail: edibon@edibon.com Web: **www.edibon.com** 

Edition: ED01/18 Date: January/2018