RFID identification Workstation

AE-PLC-RFID

PLC programming
software

Computer
(not included in
the supply)

Unit: AE-PLC-RFID. RFID identification Workstation

INTRODUCTION

Since the 1950s, the computer integration in the manufacturing systems has been a complete revolution, increasing productivity and quality of all type of products. These computer integration systems included a lot of component from very different technologies as hydraulic, pneumatic, electrical, robotics, chemical, etc. That is why these type of systems require a high skilled workers to ensure that they are working properly.

The RFID Identification Workstation, "AE-PLC-RFID", has been designed by EDIBON to study the RFID identification systems of the computer integrated manufacturing systems.

The "AE-PLC-RFID" workstation includes a set of practical exercises through which the student will understand how an industrial automatic system perform the quality control of the fabricated pieces.

GENERAL DESCRIPTION

The "AE-PLC-RFID" is a complete RFID identification system commanded by a PLC. The workstation can write, read and rewrite information in the pieces using the RFID technology. The "AE-PLC-RFID" includes a conveyor system to transport the incoming piece to the RFID identification area.

The "AE-PLC-RFID" workstation is designed as a modular system to facilitate the understanding of the unit. The main components are:

- The PLC: is composed by an AE-PLCB (with HMI devices, analog and digital input/output, etc.) unit and all the extra modules needed to perform a correct working of the workstation.

- The control panel: with start/stop button, emergency pushbutton, reset button, light indicators to show current state of the process, etc.

- The workstation: is composed by real industrial components used by the industrial RFID identification systems such as presence sensors, electric powered conveyor, etc.

The "AE-PLC-RFID" is an independent workstation that can work alone and/or in conjunction with other workstation to make up a complete Flexible Manufacturing system*.

*The Flexible manufacturing systems product list is available at "Flexible Manufacturing Systems (FMS)" area of the general catalogue.

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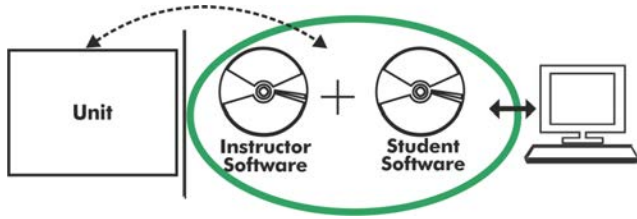
With no physical connection between unit and computer (PC), **this complete software package consists of an Instructor Software (EDIBON Classroom Manager -ECM-SOF) totally integrated with the Student Software (EDIBON Student Labsoft -ESL-SOF).** Both are interconnected so that the teacher knows at any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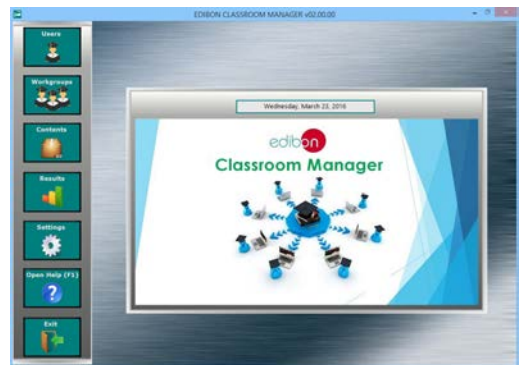
Instructor Software

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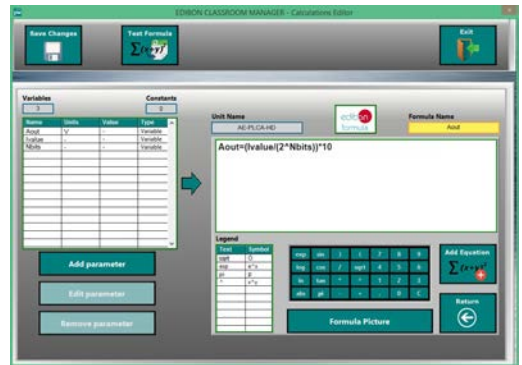
ECAL. EDIBON Calculations Program Package - Formula Editor Screen
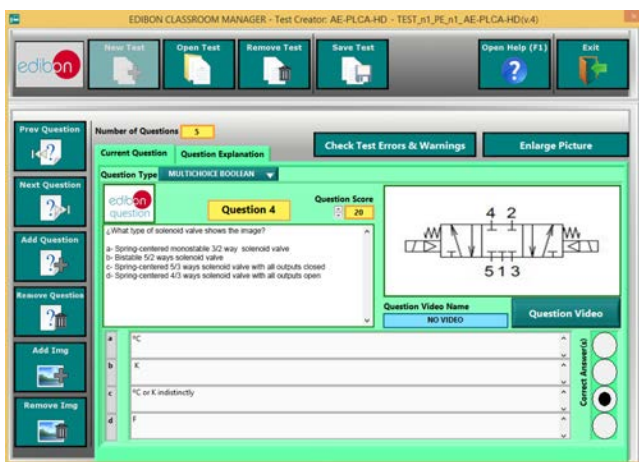
ETTE. EDIBON Training Test & Exam Program Package - Main Screen with Numeric Result Question

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

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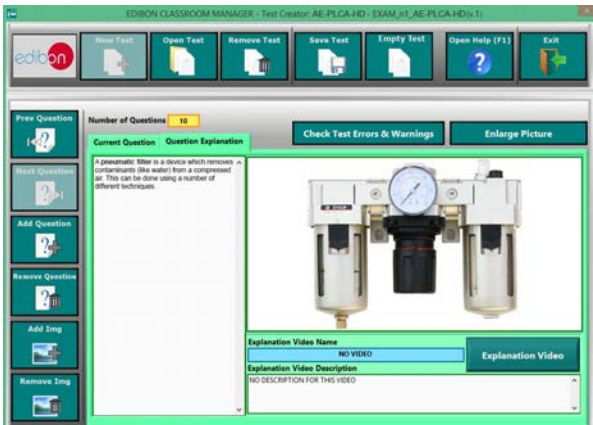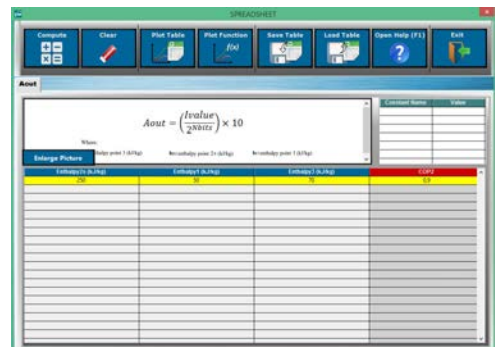www.edibon.com/en/files/expansion/ICAI/catalog

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: