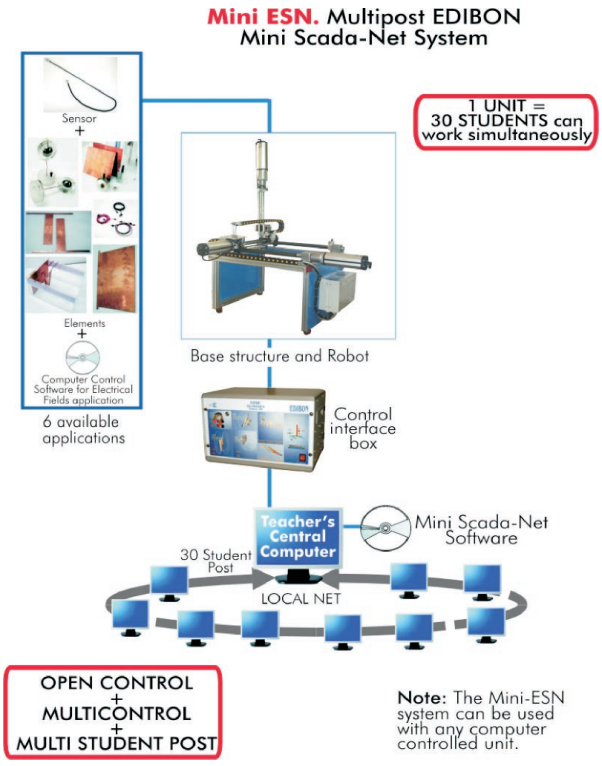
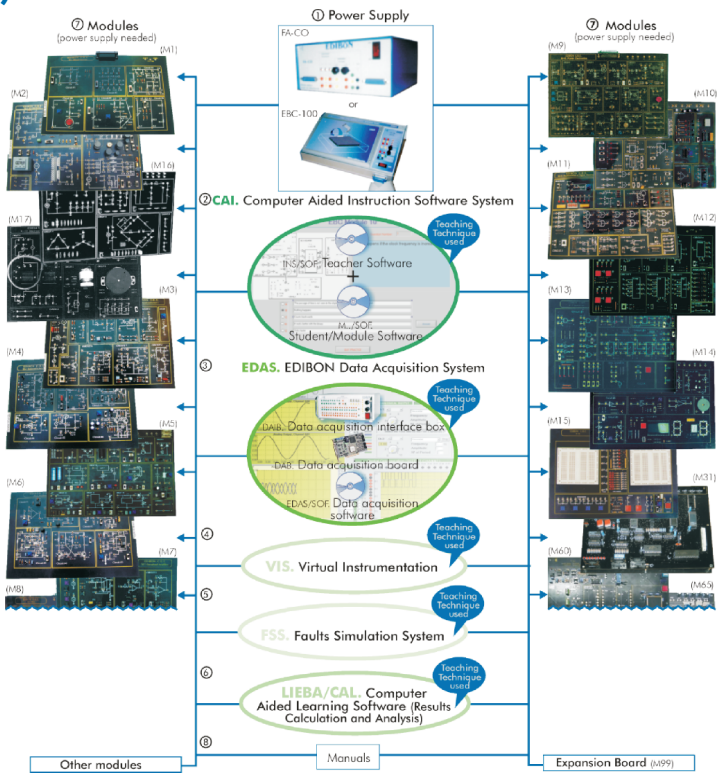
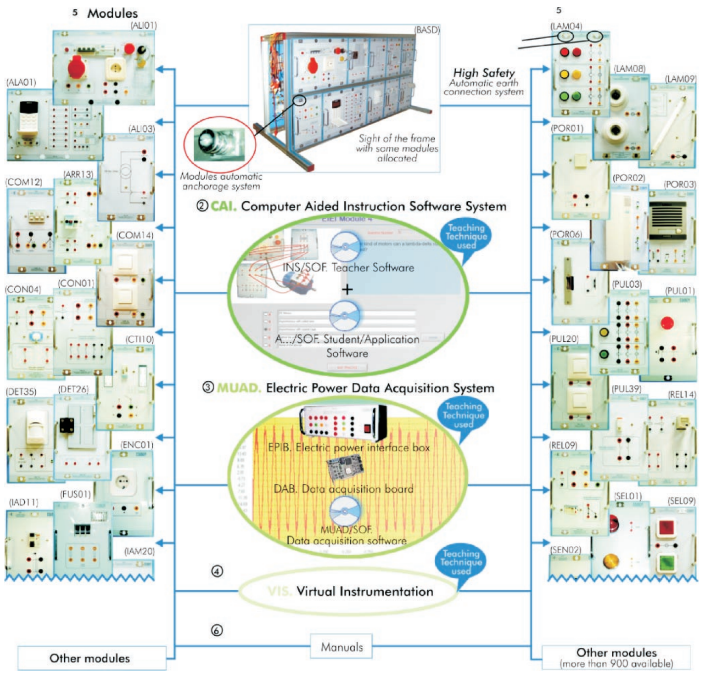
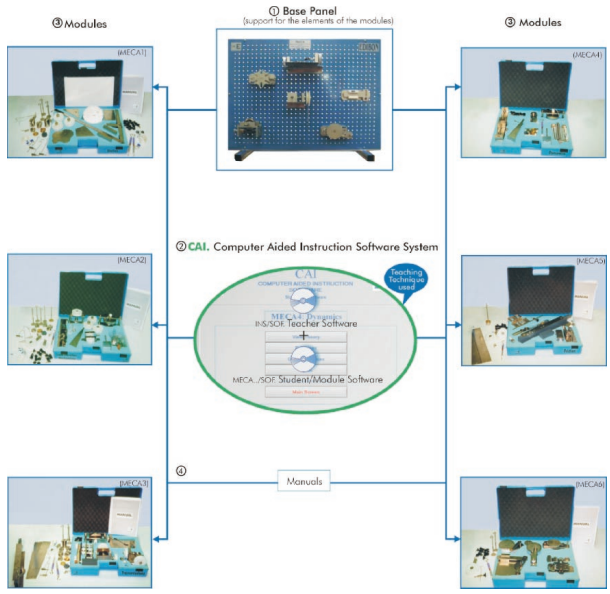
ADVANCED PHYSICS LABORATORY
(1AD)









* Center: "....."
* Country: "....."
* Date: "....."
* Issue: "....."

Quality Certificates:

ISO:9001-2000 Certificate of Approval. Reg. No. E204034

European Union Certificate

Certificates ISO 14001: 2004 and ECO-Management and Audit Scheme
(environmental management)

Worlddidac Quality Charter Certificate
Worlddidac Member

Advanced Physics Laboratory
(1AD)

Index

- Project content.

- Technical areas included.

- Economical Proposal.

- Classroom and Laboratory Lay Out (example)

- Main target.

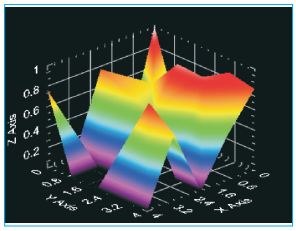
- Project options covered.

- Project conditions.

- Teaching techniques used.

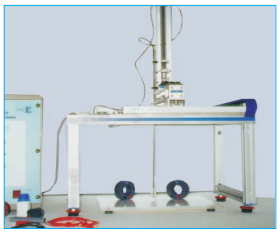
Project content

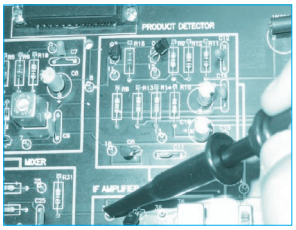
Modern design

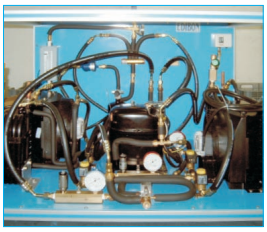


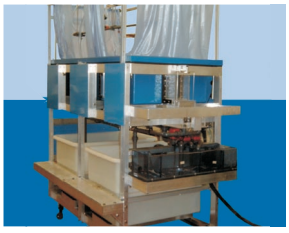
Main blocks

Products

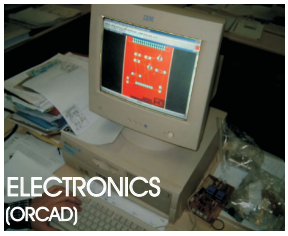


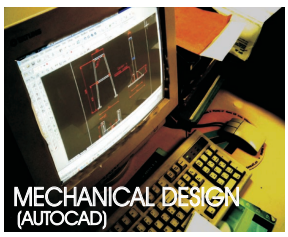






Full units design





Technical areas included

* Physics, Chemistry and Biology.

* Communications.

* Electricity.

* Energy.

* Mechanics and Materials.

* Fluid Mechanics & Aerodynamics.

* Thermodynamics & Thermotechnics.

* Process Control.

* Chemical Engineering.

* Food and Water Technologies.

* Complements, instruments and tools.

Note: The complete technical design "is ready" at our premises

Economical Proposal

Teaching Units:

"Priority 1"
0100 Physics, Chemisty and Biology
0110: 3D Physics Basic Module
0111:3D Physics (MINI-ESN) Medium Module
0112: Physics Module Advanced Module

"Priority 2"
0300 Communications
0321-310/10S: Analog Communications (10 CAI + CAL)
0400 Electricity
0433-430/10S: Industrial Electric Installations (10 CAI + CAL)
0433-431/10S: Industrial Electric Installations (10 CAI + CAL)
0700 Mechanics and Materials
0730: Foundry Basic Module
0800 Fluid Mechanics & Aerodynamics
0813-810/10S: Elementary Fluid Mechanics (10 CAI + CAL)
0830/10S: Pumps Basic Module(10 CAI + CAL)
0900 Thermodynamics & Thermotechnics
0910/10S: Refrigeration Basic Module (10 CAI + CAL)
0950/10S: Heat Transfer Basic Module (10 CAI + CAL)
1000 Process Control
1010: Process Control Basic Module
1100 Chemical Engineering
1110/10S:Chemical Engineering Basic Module (10 CAI + CAL)
1100/ESN: EDIBON Scada-Net for Thermodynamics, Process Control and Chemical Engineering Units

"Priority 3"
0300 Communications
0321-320/10S: Digital Communications (10 CAI + CAL)
0400 Electricity
0453-450/10S: Energy Installations (10 CAI + CAL)
0453-451/10S: Energy Installations (10 CAI + CAL)
0500 Energy
0530/10S:Basic Renewable Energies (10 CAI + CAL)
0700 Mechanics and Materials
0731: Foundry. Medium Module
0750: Photoelasticity. Basic Module
0800 Fluid Mechanics & Aerodynamics
0813-811/10S: Elementary Fluid Mechanics (10 CAI + CAL)
0900 Thermodynamics & Thermotechnics
0920/10S: Heat Pumps. Basic Module (10 CAI + CAL)
0953/10S: Heat Exchange. Basic Module (10 CAI + CAL)
1200 Food and Water Technologies
1210: Elementary Food Technology Basic Module

Complements, Instruments and Tools:

5100 Complements, Instruments and Tools
5110-1: Cupboard & Shelves Module
5120-10: Computer Module
5122: Teaching Aids Module
5124: Complete Health & Safety
5140-1: Mechanical Toolkit Module
5142-1: Electricity Toolkit Module
5143-20: Electronics Toolkit Module

Services:

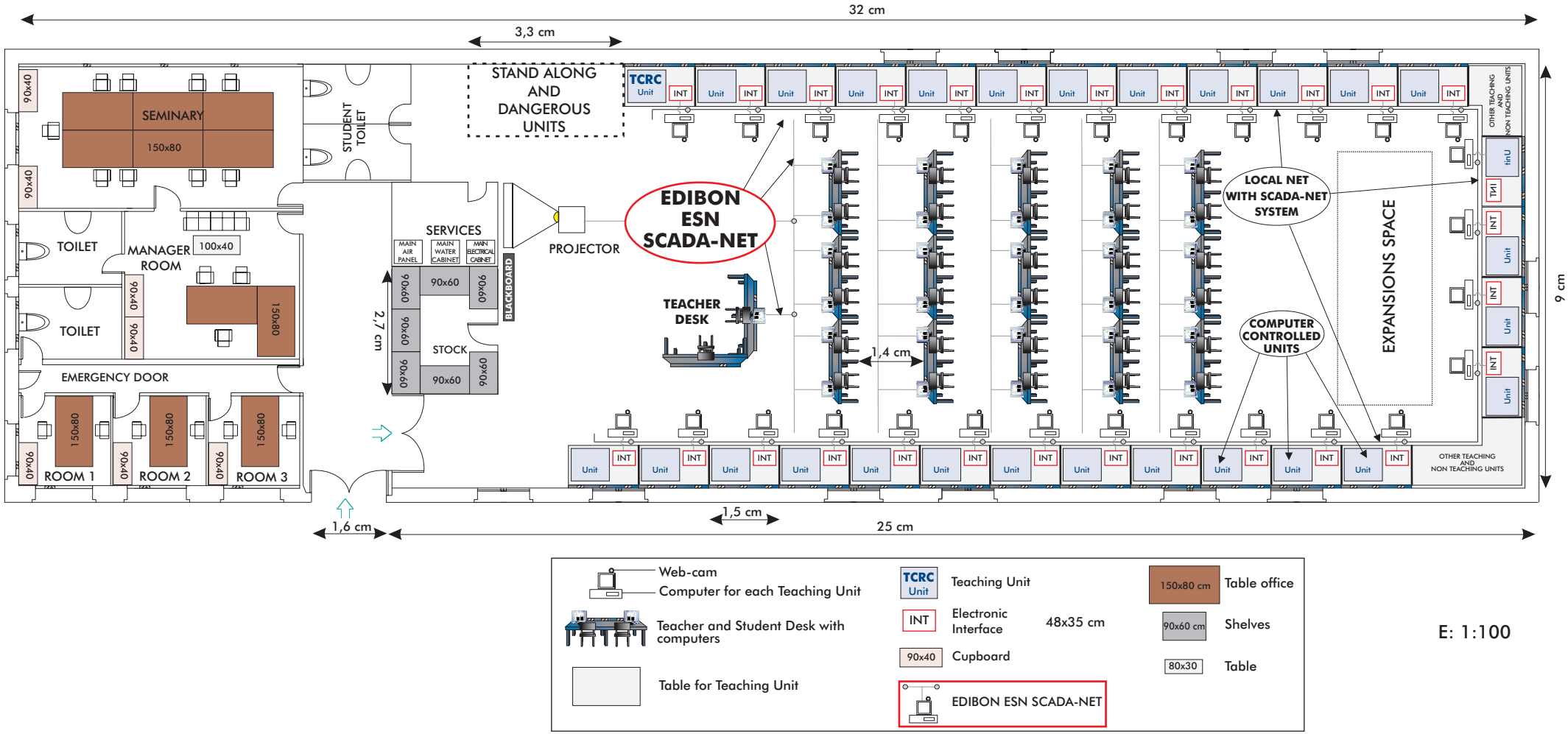
* Furnitures:
* Electrical, Water and Air Installation and others laboratory services
* Installation of all units supplied, Starting up, Training, Teacher Training and Technology Transfer

Note: The complete technical design "is ready" at our premises

Classroom and Laboratory Lay Out (Example)

ADVANCED PHYSICS LABORATORY

(1AD)



Main target

* To help the students:

  - By “quick” understanding.
  - By “clear” understanding (clear concepts).
  - By “saving” time.
  - By “extending” the laboratory to their homes.

* To help the teachers:

  - By “easy” teaching.
  - By increasing the teaching “efficiency”.
  - By “reducing” teaching costs (less time consume).
  - By “integrating” classroom and laboratory in the same place.

Project options covered

This *"Advance Physics Labortory"* will cover the following:

a) To train students at laboratory.
b) To train trainers.
c) To be used for training and update educators in current teaching technologies.

Project conditions

The *"Advanced Physics Laboratory"* includes the following technical and commercial conditions:

a) Technical conditions:

- Laboratories adaptation.
- Installation of all units supplied.
- Starting up for all units.
- Training about the exercises to be done with any unit.
- Teacher training related with the teaching unit and the teaching techniques used.
- Technology transfer.

b) Commercial conditions:

- Packing.
- Financing Charges.
- C.I.F. Charges.

c) Other conditions:

- 8 Manuals for each teaching equipment:

. Required services manual.
. Assembly and installation manual.
. Interface and software/control console manual.
. Set in operation manual.
. Safety norms manual.
. Practices manual.
. Maintenance manual.
. Calibration manual.

TEACHING TECHNIQUES USED

3D. EDIBON THREE DIMENSIONS SYSTEM

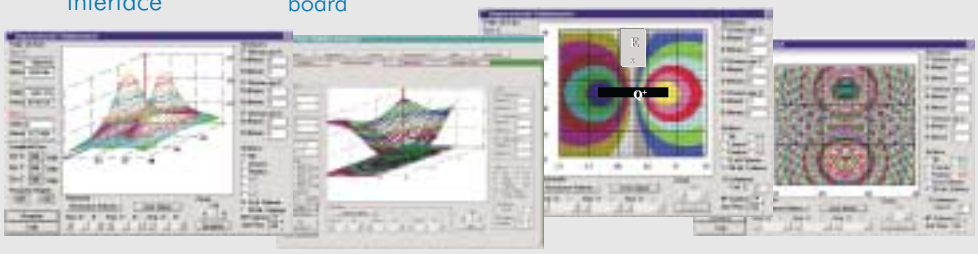

Unit


Interface


Data acquisiton board

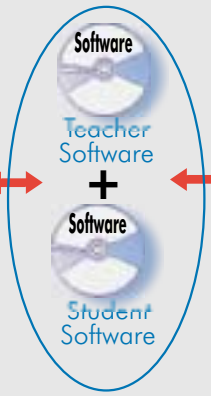
Software included:
-Control
-Data Acquisition
-Data Management

Used for:
Physics (Magnetic fields, Electrical fields, Mechanics, Acoustics, Optics, Thermodynamics and Fluid Mechanics)

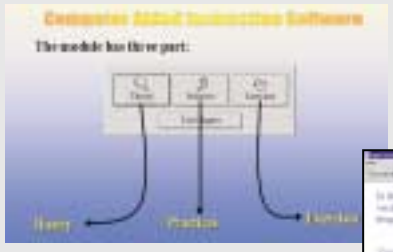


CAI. COMPUTER AIDED INSTRUCTION SYSTEM


Unit



Used for:
Basic Electronics and Electricity.
Communications.
Basic Mechanics.
Basic Fluid Mechanics.



EDAS. EDIBON DATA ACQUISITION SYSTEM

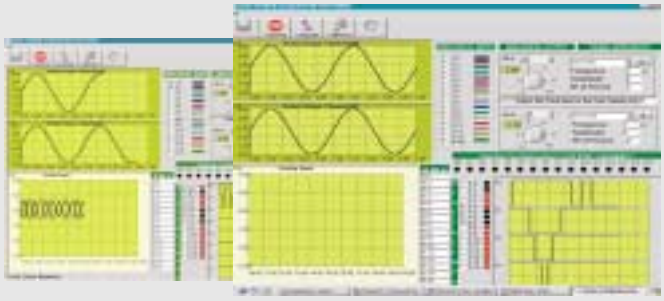

Unit


Interface


Data acquisiton board

Data Acquisition Software

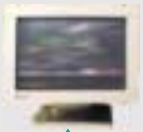
Used for:
Basic Electronics.
Communications.
Electricity.



RTC. EDIBON SYSTEM FOR HIGH ELECTRONICS (Real time control)


Unit

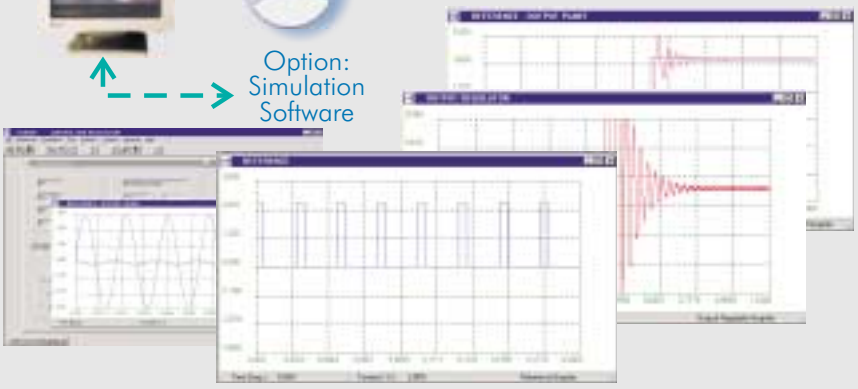

Data acquisiton board



Control Software

Option: Simulation Software

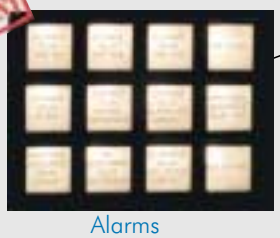
Used for:
High Tech Electronics (Control Electronics, Digital Electronics and Industrial Electronics).



HYBRID. **EDIBON TEACHING HYBRID SYSTEM (ENERGY)**

EDIBON PATENT

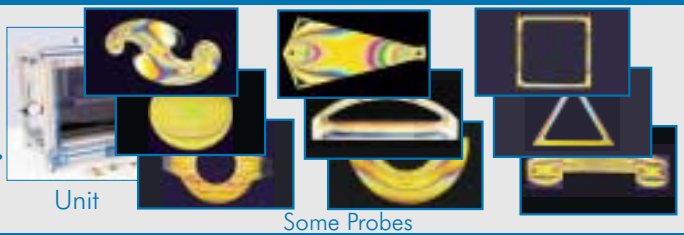
Used for:
Energy Power Plants.



Alarms

PHOTOELASTICITY

Used for:
Strength of Materials.

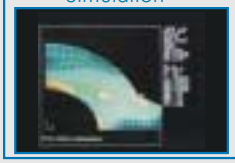


Unit

Some Probes

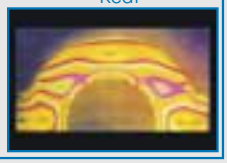
RESULTS

Simulation



Diferences between the simulation and the photoelastic reality.

Real



SACED. **EDIBON COMPUTER CONTROL SYSTEM:Control+Data Acquisition+Data Management**

EDIBON PATENT

Unit

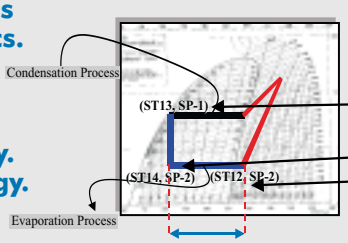
Interface

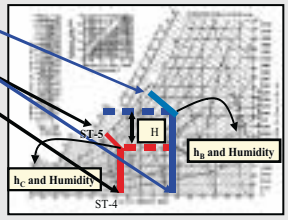
Data Acquisiton board

Software included:
-Control
-Data Acquisition
-Data Management

PLC option

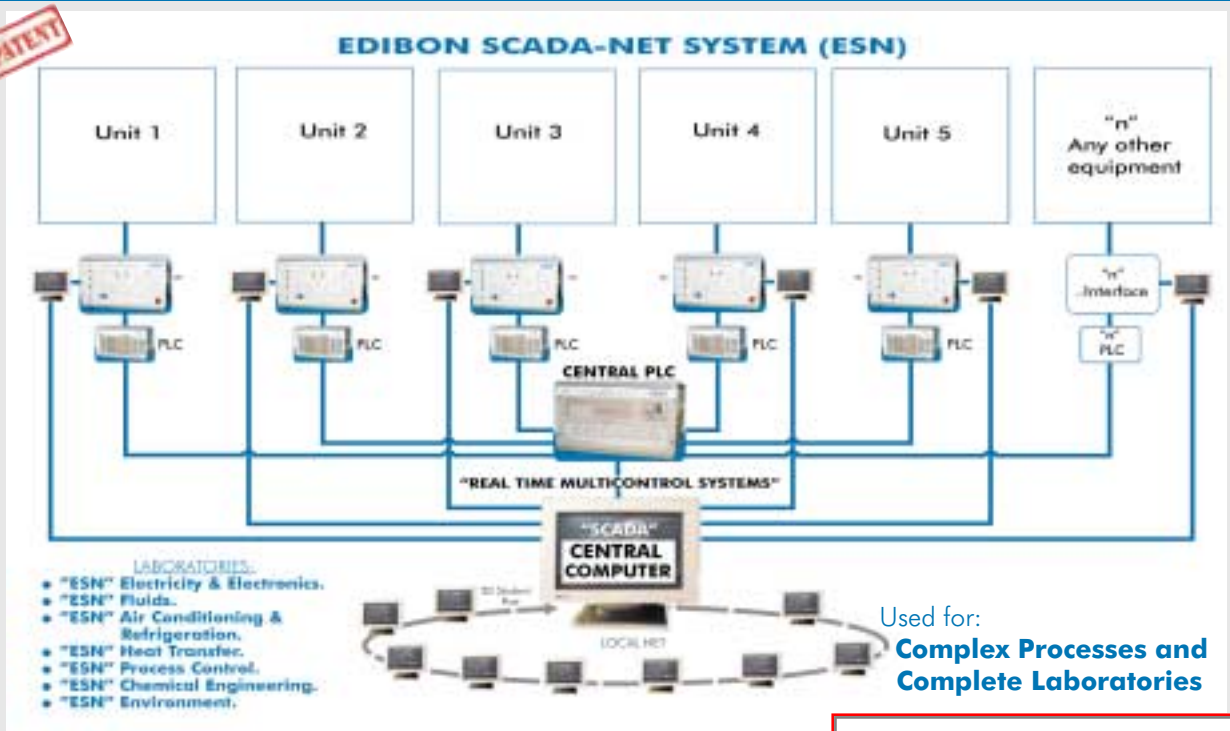
Used for:
Fluid Mechanics.
Aerodynamics.
Thermodymanics &Thermotechnics.
Process Control.
Chemical Engineering.
Food Technology.
Water Technology.
Environment.





ESN. **EDIBON SCADA-NET SYSTEM**

EDIBON PATENT



Used for:
Complex Processes and Complete Laboratories

WEB: www.edibon.com

Information in detail-CLICK HERE