

8.- FLUID MECHANICS

8.1. FLUID MECHANICS MODULAR LABORATORY

LIFLUBA

Basic Fluids Mechanics Integrated Laboratory

More than **35 different units** to perform basic experiments:

Base Units

FME00. **Hydraulics Bench**.
FME00/B. Basic Hydraulic Feed System.

Measurement

FME02. Flow over **Weirs**.
FME10. **Dead Weight** Calibrator.
FME18. **Flow Meter** Demonstration.
FME26. **Depression** Measurement System (vacuum gauge).
FME30. Transparent **Vortex** Flow Meter.
FME30/L. **Vortex** Flow Meter.
FME32. Static **Pitot Tube**.
FME34. Fluid Statics and **Manometry**.
FME36. **Rotameter**.

Hydrostatics

FME08. **Hydrostatic** Pressure.
FME11. **Metacentric Height** Demonstration.
FME11-A. Metacentric Height Demonstration of a "**V**" Shaped Floating Body.
FME11-B. Metacentric Height Demonstration of a "**U**" Shaped Floating Body.
FME33. **Pascal's Principle** Demonstration.
FME35. **Fluid** Properties.

Hydrodynamics

FME01. **Jet Impact** on Surfaces.
FME03. **Bernoulli's Theorem** Demonstration.
FME04. **Orifice** Discharge.
FME14. **Free** and **Forced** Vortex.
FME17. Orifice and **Free Jet** Flow.
FME19. **Cavitation Phenomenon** Demonstration.
FME22. **Venturi**, Bernoulli and Cavitation Unit.

Flow Visualization

FME06. **Osborne Reynolds'** Demonstration.
FME09. Flow Visualization in **Channels**.
FME20. **Laminar Flow** Demonstration.
FME25. Flow channel, length: 1 m.
FME31. Horizontal Osborne Reynolds Demonstration.

Hydraulic Machines: Pumps

FME12. **Series/Parallel** Pumps.

FME13. **Centrifugal** Pump Characteristics.

Hydraulic Machines: Turbines

FME16. **Pelton** Turbine.

FME21. **Radial** Flow Turbine.

FME27. **Axial** Flow Turbine.

FME28. **Francis** Turbine.

FME29. **Kaplan** Turbine.

Hydraulic Piping System

FME05. Energy Losses in **Bends**.

FME07. Energy Losses in **Pipes**.

FME15. Water **Hammer**.

FME23. Basic Pipe **Network** Unit.

FME24. Unit for the Study of **Porous Beds** in Venturi Tubes (**Darcy's Equation**).

8.2. MEASUREMENT



HEMP
Pressure
Measurement
Unit

8.5. HYDRAULIC CHANNELS

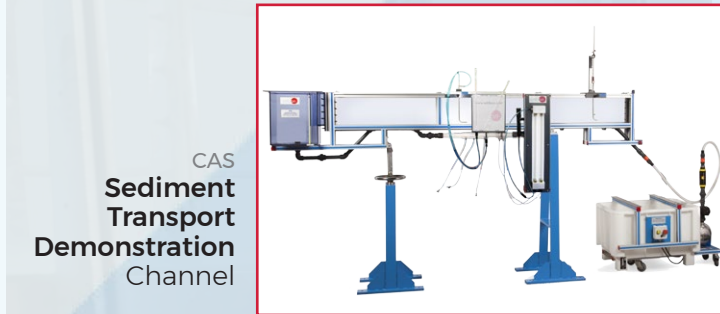


CFGC
Computer Controlled
Flow Channels
(different sections and
length)

8.3. HYDROSTATICS



BHI
Hydrostatics Bench
& Fluid Properties



CAS
Sediment
Transport
Demonstration
Channel

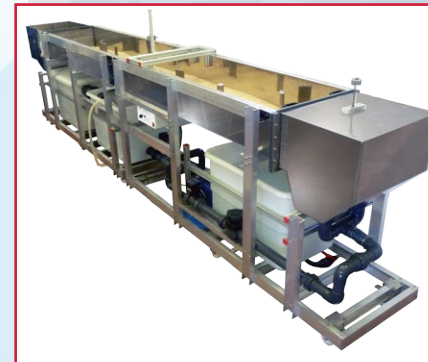
8.4. FLOW VISUALIZATION



TAVF180/100
Flow Visualization
Aerodynamic Tunnel



LFA
Laminar Flow Visualization
and Analysis Unit



HVFLM-4
Mobile Bed and Flow
Visualization Unit
(working section:
4000x610 mm)

HVFLM-2
Mobile Bed and Flow Visualization Unit
(working section: 2000x610 mm)

8.- FLUID MECHANICS

8.6. AERODYNAMICS



with EDIBON SCADA

TA300/300C
Computer Controlled **Aerodynamic Tunnel**,
300 x 300 mm

★ Ask us for different dimensions ★

8.8. FLUID PIPING SYSTEM



with EDIBON SCADA

HFCC
Computer Controlled **Flow of Compressible Fluids Unit**

with EDIBON SCADA



AFTC
Computer Controlled **Fluid Friction in Pipes**,
with Hydraulics Bench (FME00)

8.7. FLUID MACHINES

PBOC
Computer Controlled **Multipump Testing Bench**
(4 types of pumps)



with EDIBON SCADA

HCCC
Computer Controlled **Centrifugal Compressor Demonstration Unit**



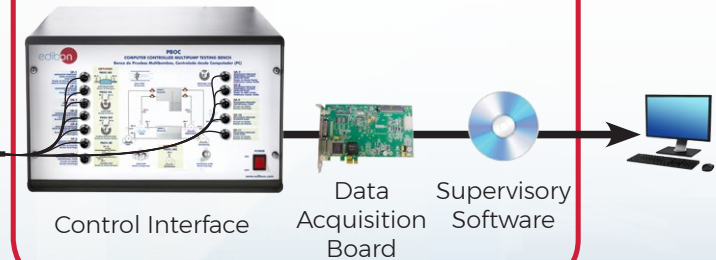
with EDIBON SCADA

PBSPC
Computer Controlled **Series/Parallel Pumps Bench**



COMPUTER CONTROLLED TECHNOLOGY

EDIBON SCADA System



8.9. INSTALLATIONS AND MAINTENANCE



PVFA
Pipes, Valves and Fittings Assembly Unit

TEV4V
Four-Way Mixing Valve Training Unit

