

# DESIGN, SIMULATION AND ANIMATION SOFTWARE FOR THE STUDY OF PNEUMATICS AND ELECTRO-PNEUMATICS

## Mod. SW-AIR/EV

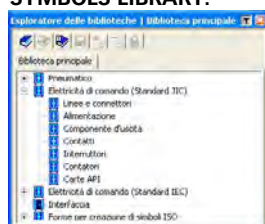
The software mod. SW-AIR/EV constitutes a very powerful educational tool to develop theoretical lessons and laboratory practical exercises. This software allows the user to design, simulate and animate circuits for the following technical fields:

- Pneumatics and Proportional Pneumatics
- Electrical control (standard IEC, JIC).
- Digital Electronics

It also allows:

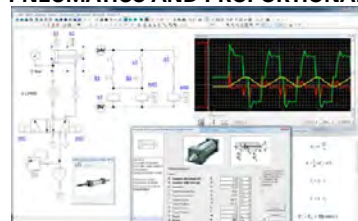
- Creating Grafcet sequences
- Interfacing with the real circuit

### SYMBOLS LIBRARY:



International symbols library for all the fields mentioned above, according to ISO, DIN, IEC, NEMA. The user is able to create partial or specific libraries to facilitate the design of new symbols. One important feature is the "Component Dimensioning" function, or the possibility to assign specific characteristics to the used symbols.

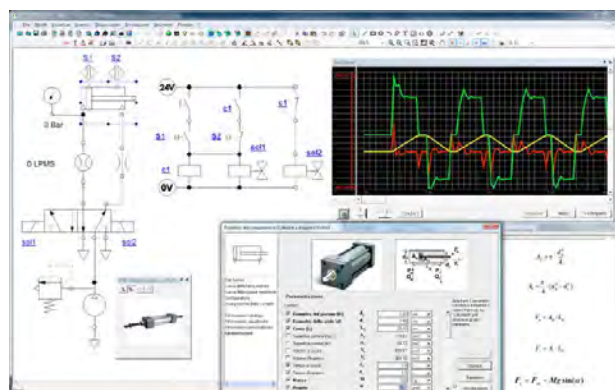
### PNEUMATICS AND PROPORTIONAL PNEUMATICS



The library includes all the necessary symbols to design a pneumatic circuit: compressed air sources, single and double effect linear cylinders, limit switches, push buttons, valves, timer, motors, etc. it is possible to create open loop and closed loop control circuits.

### ELECTRICAL CONTROL LOGICS

This library interacts with all the components of other libraries, and allows creating electrical control logic circuits. It is then possible to make electro-pneumatic projects. It includes push buttons, relays, coils, etc.

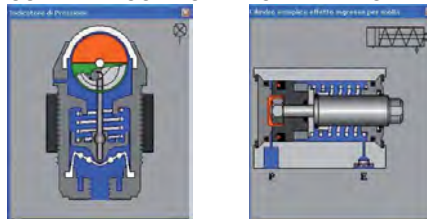


### DIGITAL ELECTRONICS



This library provides a wide range of standard logic components like inverters, logic ports, flip-flops, counters, scrolling registers, comparators, push buttons, LEDs, 7-segment displays, multiplexers, etc.

### CUT-AWAY COMPONENTS ANIMATION



The 3D animated cut-away components show the internal operation of the devices. The animations are synchronized with the circuit simulation.

## GRAFCET



This module allows the implementation of control structures according to IEC61131-3 standard. This universal method can be used together with other libraries to perform the control of complex pneumatics projects.

The Grafcet programming technique helps to develop complex automatic sequences and to test them before transferring them to the PLC. The programs developed with this software can be exported in a format compatible with Siemens S7 PLCs and in XML format.

### PC SYSTEM REQUIREMENTS

- 2 USB ports
- O.S: Windows 7

### SUPPLIED WITH

THEORETICAL-EXPERIMENTAL HANDBOOK  
WITH INTRODUCTION TO THE EXERCISES



### OPTIONAL

I/O INTERFACE:  
INTERFACE BOARD Mod. C2-IO/EV

