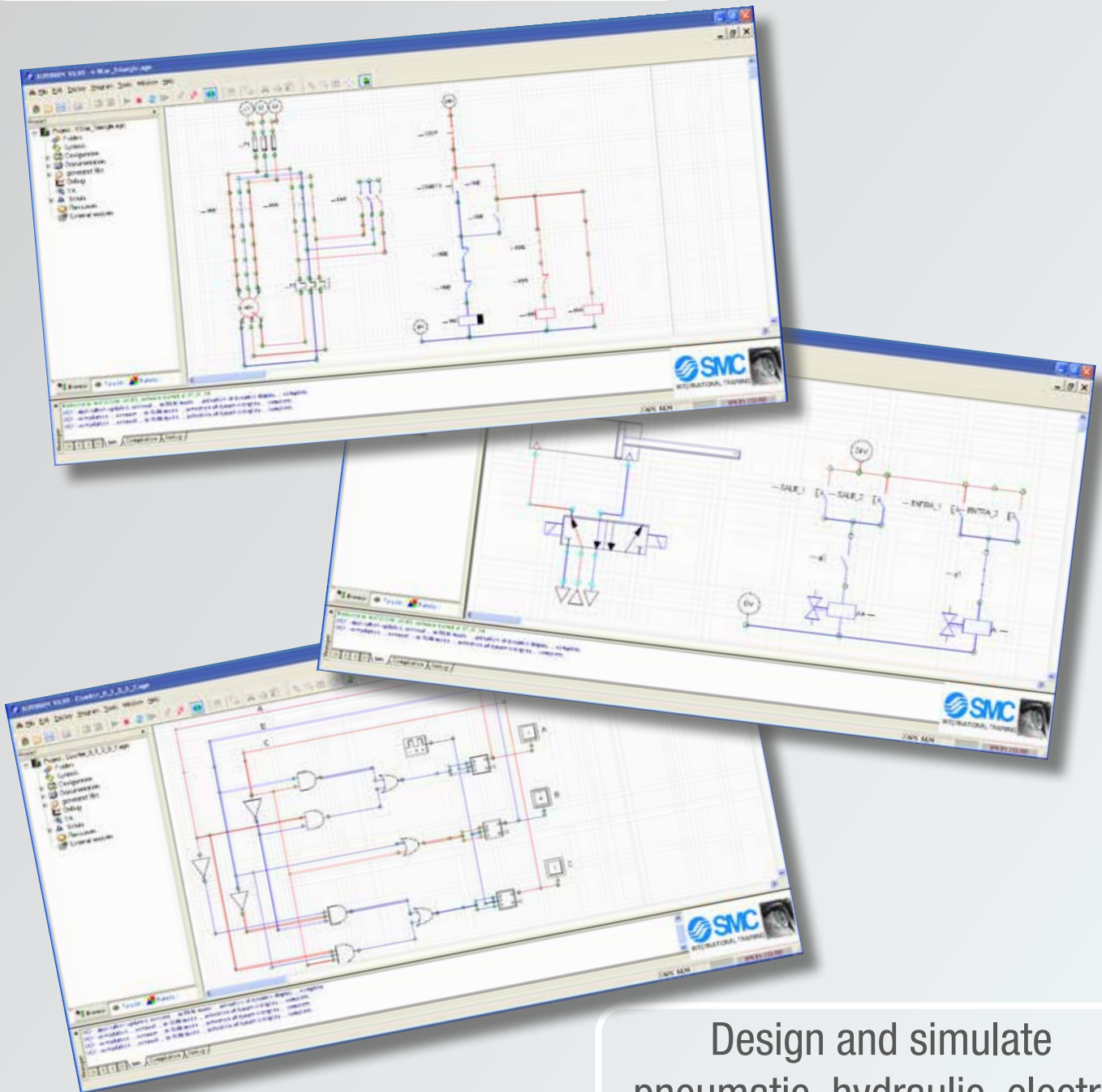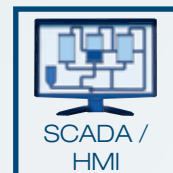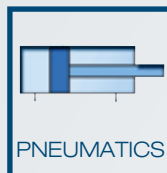# autoSIM-200
Automation Simulator

The best all-round automation simulator

Design and simulate pneumatic, hydraulic, electric and electronic circuits
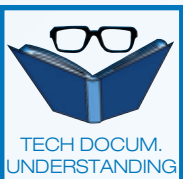
In the following TECHNOLOGIES...

HYDRAULICS	ELECTRICAL PANEL	PNEUMATICS	VACUUM	PROGRAMM. CONTROLLERS	SCADA / HMI

Develop the SKILLS...

Simulate, supervise and control our 3D applications from the autoSIM environment

3D

ANALYSIS

TROUBLESHOOTING

DESIGNING

TECH DOCUM. CREATION

TECH DOCUM. UNDERSTANDING

OPERATION

PROGRAMMING

autoSIM-200 - Automation Simulator

autoSIM-200 is a software for training in automation technologies that allows the user to try his / her programs on a virtual system before applying them to a physical system.

It represents the ideal complement to training equipment which, in turn, enables a more efficient use of the laboratory. It can also be used independently of actual training systems.

autoSIM-200 provides dynamic design and simulation plus control of 2D and 3D virtual machines (predefined by the user or developed by SMC International Training).


autoSIM-200 includes a virtual PLC to control the circuits / models under simulation and allows communication with our range of training systems.

Design and simulation

With autoSIM-200, it is possible to carry out dynamic, multi-colour simulations using pneumatic, electropneumatic, hydraulic, electrohydraulic, electrical and electronic circuits. It is also possible to carry out mathematical models of systems and acquire and process electrical signals (instrumentation).
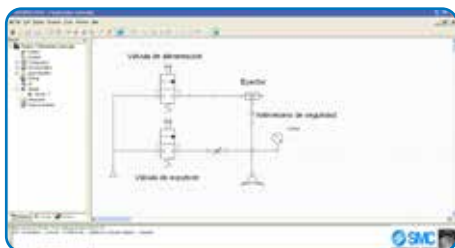
Library component categories are displayed by means of drop-down menus, showing individual standardised symbols. It includes conventional and proportional pneumatic and hydraulic valves.

autoSIM-200 can inter-connect different blocks (Virtual PLC, 2D, 3D models, etc.).

Programming
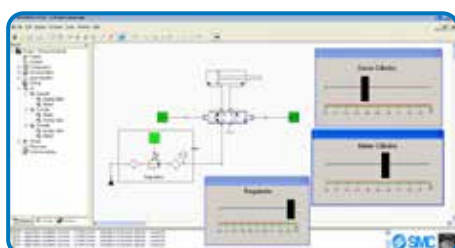
autoSIM-200 can be used to create Grafcet diagrams, Ladder, Logigramme (logic gates) and function blocks with structured text. By running the simulation, it is possible to monitor and control the application step by step.

It can also generate symbol tables to address variables and create timers, counters, etc.

Monitoring and control

Using autoSIM-200, it is possible to monitor and control 3D processes. Using a data acquisition card (SAI2443), physical inputs and outputs can be supervised and controlled.

This software can import three dimensional models from 3D Studio and Solidworks. SMC International Training has product applications from the range, ready to run with the system (see 3D applications section).
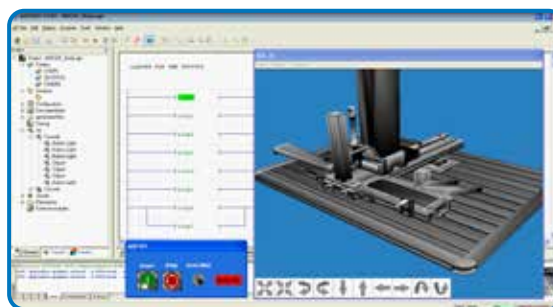
Communication with real, physical equipment is possible through the OPC server and I/O cards.

autoSIM-200 comes in 2 versions:

I/O card

• SAI2443 USB - autoSIM-200 Interface

• autoSIM-200
This is the standard version. An I/O card or an OPC server is used for communication.

autoSIM-200 PERMANENT (Electronic dispatch)		autoSIM-200 PERMANENT (Physical dispatch)		autoSIM-200 ONE YEAR (Electronic dispatch)	
• SAI1974-001	autoSIM-200, 1 educational licence	• SAI2252	autoSIM-200, 1 educational licence	• SAI1956-001	autoSIM-200, 1 educational licence
• SAI1974-008	autoSIM-200, 8 educational licence	• SAI2253	autoSIM-200, 8 educational licence	• SAI1956-008	autoSIM-200, 8 educational licence
• SAI1974-016	autoSIM-200, 16 educational licence	• SAI2254	autoSIM-200, 16 educational licence	• SAI1956-016	autoSIM-200, 16 educational licence

*Other packages on request.

*The valid time of the autoSIM-200 ADVANCED PERMANENT licences is unlimited.

*The valid time of the autoSIM-200 ADVANCED - ONE YEAR licences is 1 year.

• autoSIM-200 ADVANCED
Includes all the functional features of autoSIM-200 along with post-processors that can transfer and monitor the program generated in the simulation to the following brands of PLC: Siemens, Omron, Allen Bradley, Schneider and Mitsubishi.

| autoSIM-200 ADVANCED PERMANENT (Electronic dispatch)		autoSIM-200 ADVANCED PERMANENT (Physical dispatch)	
• SAI1982-001	autoSIM-200 ADVANCED, 1 educational licence	• SAI2352	autoSIM-200 ADVANCED, 1 educational licence
• SAI1982-008	autoSIM-200 ADVANCED, 8 educational licence	• SAI2353	autoSIM-200 ADVANCED, 8 educational licence
• SAI1982-016	autoSIM-200 ADVANCED, 16 educational licence	• SAI2354	autoSIM-200 ADVANCED, 16 educational licence

*Other packages on request.

*The valid time of the autoSIM-200 ADVANCED PERMANENT licences is unlimited.

*The valid time of the autoSIM-200 ADVANCED - ONE YEAR licences is 1 year.

autoSIM - 200

Communications
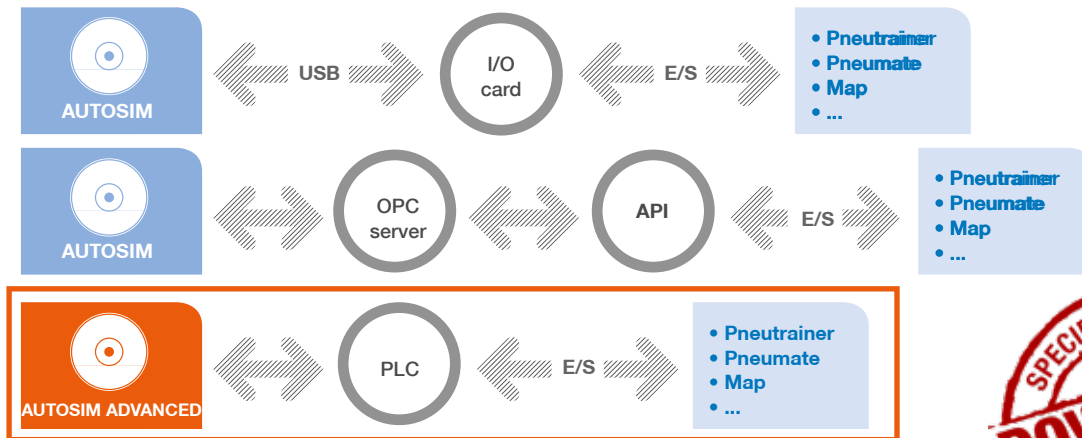
◗ autoSIM-200 - 3D applications

autoSIM-200 allows the user to simulate, control and supervise actual automated processes from a virtual environment.

SMC International Training has a series of 3D applications from real equipment, ready to be run in the system. autoSIM-200 or autoSIM-200 ADVANCED is required. Each application includes the following features:

• Compatibility with simulation software in automation applications.

• Independent window with 3D model, keypad and control commands.

• Access to the table of symbols for the generated program.

• Access to the libraries and to the simulation panel for components in pneumatics, electro-pneumatics, hydraulics, electro-hydraulics and electrics.

The available applications are as follows:

MAP-200 3D applications

3D applications included**
MAP-201, MAP-202, MAP-203, MAP-204, MAP-207

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1959-001	SAI1975-001	SAI2527
8	SAI1959-008	SAI1975-008	SAI2528
16	SAI1959-016	SAI1975-016	SAI2529

AUTOMATE-200 3D applications

3D applications included**
AUTOMATE-200A

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1968-001	SAI1976-001	SAI2530
8	SAI1968-008	SAI1976-008	SAI2531
16	SAI1968-016	SAI1976-016	SAI2532

* Other quantities, please consult.
** autoSIM-200 or autoSIM-200 ADVANCED is required.

autoSIM - 200

IPC-200 3D applications
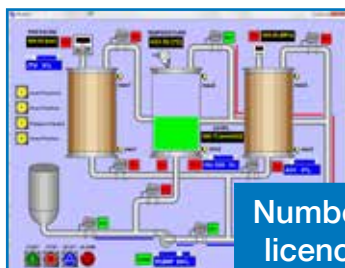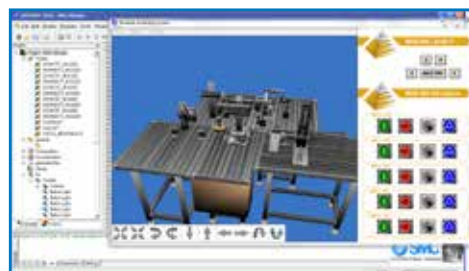

3D applications included**
IPC-201C

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1969-001	SAI1977-001	SAI2533
8	SAI1969-008	SAI1977-008	SAI2534
16	SAI1969-016	SAI1977-016	SAI2535

MAS-200 3D applications

3D applications included**
MAS-201, MAS-202, MAS-203, MAS-204, MAS-205

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1970-001	SAI1978-001	SAI2547
8	SAI1970-008	SAI1978-008	SAI2548
16	SAI1970-016	SAI1978-016	SAI2549

FAS-200 3D applications

3D applications included**
FAS-201, FAS-202, FAS-203, FAS-204, FAS-205, FAS-206, FAS-207,FAS-208, FAS-209, FAS-210, FAS-211, FAS-212, FAS-213, FAS-214, FAS-215, FAS-216,FAS-220

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1971-001	SAI1979-001	SAI2536
8	SAI1971-008	SAI1979-008	SAI2537
16	SAI1971-016	SAI1979-016	SAI2538

* Other quantities, please consult.
** autoSIM-200 or autoSIM-200 ADVANCED is required.

FAS-200 SPECIAL EDITION - INDUSTRY 4.0
3D applications

3D applications included**
FAS-200 SPECIAL EDITION - INDUSTRY 4.0

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1972-001	SAI1980-001	SAI2536S
8	SAI1972-008	SAI1980-008	SAI2537S
16	SAI1972-016	SAI1980-016	SAI2538S

FMS-200 3D applications

3D applications included**
FMS-201, FMS-202, FMS-203, FMS-204, FMS-205, FMS-206, FMS-207, FMS-208

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1973-001	SAI1981-001	SAI2523
8	SAI1973-008	SAI1981-008	SAI2524
16	SAI1973-016	SAI1981-016	SAI2525

FMS-200 SPECIAL EDITION - INDUSTRY 4.0
3D applications

3D applications included**
FMS-200 SPECIAL EDITION - INDUSTRY 4.0

Number of licences*	1 YEAR (Electronic dispatch)	PERMANENT (Electronic dispatch)	PERMANENT (Physical dispatch)
1	SAI1986-001	SAI1985-001	SAI2523S
8	SAI1986-008	SAI1985-008	SAI2524S
16	SAI1986-016	SAI1985-016	SAI2525S

* Other quantities, please consult.
** autoSIM-200 or autoSIM-200 ADVANCED is required.

autoSIM - 200

autoSIM-200 - With this system you could...

autoSIM-200 comes up with different practical activities targeting skills in the technologies featuring in the table (below).

TECHNOLOGIES

SKILLS	HYDRAULICS	ELECTRICAL PANEL	PNEUMATICS	VACUUM	PROGRAMM. CONTROLLERS	SCADA / HMI
ANALYSIS	■	▦	■	■	■	▦
TROUBLESHOOT.	▦	▦	▦	☐	▦	☐
DESIGNING	■	▦	■	■	■	▦
TECH DOCUM. CREATION	■	▦	■	■	■	▦
TECH DOCUM. UNDERSTANDING	■	▦	■	■	■	▦
OPERATION	☐	☐	☐	☐	■	■
PROGRAMMING	☐	☐	☐	☐	■	▦

■ This shows how the autoSIM-200 is suitable to develop skills in the specific technology.

▦ This shows that autoSIM-200 can help develop skills in the specific technology even though there are other more appropriate products in the range.

@ eLEARNING-200

Find out more about the theory behind the technologies developed in autoSIM-200 with our eLEARNING-200 courses.

RELATED eLEARNING-200 COURSES
Introduction to industrial automation (SMC-100)
Principles of pneumatics (SMC-101)
Introduction to electricity (SMC-102)
DC electricity (SMC-103)
AC electricity (SMC-104)
Solid state (SMC-105)
Introduction to wiring (SMC-106)
Sensors technology (SMC-108)
Programmable controllers (SMC-109)
Process controls (SMC-110)
Hydraulics / electrohydraulics (SMC-111)

See eLEARNING-200 chapter for more information

▪ autoSIM-200 - Configuration

• Steps to follow

1.- Choose your licence type (autoSIM-200, autoSIM-200 ADVANCED).

2.- Select the number of licences.

3.- Add any chosen options (applications with number of licences).

▪ autoSIM-200 - PC requirements

PC compatible computer with Windows XP, Windows Vista,Windows 7 or Window 10.
512MB free memory, graphic board (1024 x 768 x 65536 colour min.)