

FluidSIM® 5



For more than 20 years, FluidSIM® has been the world's leading circuit diagram design and simulation program for pneumatics, hydraulics, and now also for electrical engineering. Being able to freely design control systems is motivating, and promotes creativity and focus. Beyond that, FluidSIM® provides teachers with a wealth of text, images, and videos for multimedia-based lesson planning. Experience real-time simulations with apprentices, specialists, or students and celebrate successful learning at all levels!

One tool for all needs

As a teacher and trainer, you are the expert who masters tasks that are needed to prepare lessons. That is why FluidSIM® 5 offers the expert mode. Your trainees should initially concentrate on the essentials. They can work and learn successfully in the standard mode, which has a reduced range of functions and offers advantages for the learning process.

Testing in real time

Whether in a training environment or in an engineering office, the simulation of control systems and processes has long been standard in industry, helping to minimize losses due to crashes and ensuring greater efficiency and improved quality. The parameters of all components are identical to those of the training packages from Festo Didactic and can be fully adapted to the characteristics of other components.

The many aspects of GRAFCET

GRAFCET long-ago replaced the displacement-step diagram in training. FluidSIM® 5 does even more with GRAFCET:

- Editing – for documentation conforming to standards
- Visualizing – for maximum clarity
- Monitoring – colored signals indicate where the process is running correctly or not at all
- Control – for manufacturer-neutral control of all fluid systems and electrical systems

Speed made visible

The new simulation core of FluidSIM® 5 achieves simulation rates up to 10 kHz. The parameters of all actuators can be precisely adjusted. FluidSIM® 5 writes the simulation results in millisecond cycles and delivers them as a text file! The new simulated oscilloscopes make frequencies up to 100 kHz visible.

Learning with fun and success

Theory is necessary for learning, but real practice provides motivation and promotes successful learning! In many situations, FluidSIM® 5 can easily be used as a controller for the real system: the EasyPort makes it possible – convenient, digital and analog! New: with the joystick, FluidSIM® 5 is not only fun, but it now also allows several switches and valves to be operated simultaneously.

Wide range – maximum convenience

Pneumatics, hydraulics, electrical engineering: the libraries are available separately or together in the same program. The user decides which of the libraries to use in the program. All technologies interact optimally in a circuit diagram or project.

Flexible installation and use

Online registration, network license, usage at home: FluidSIM® 5 offers many licence models that facilitate economical learning scenarios in a school or in a company. A new learner administration function even allows you to provide and monitor licenses for learning groups and to use the software at home.

Professional CAD according to standards

- Convenient drawing with alignment lines and new snap functions
- Easy insertion of new symbols into existing connections
- Variable drawing frames
- Continuous scaling and rotation
- Dimensioning functions
- Intersection calculation of lines, rectangles and ellipses

Completely according to standards

- All symbols to DIN ISO 1219 or DIN EN 81346-2
- Connection identification according to new equipment identifier
- GRAFCET according to the current standard

Libraries for new technologies

- Libraries for all levels of pneumatics and hydraulics training packages, including control technology and proportional technology
- New: drives in pneumatics
- Vacuum technology
- Sensors in pneumatics
- Safety in pneumatic systems
- Mobile hydraulics
- Electrical engineering, electronics
- Circuits with contacts

GRAFCET in various modes

- GrafEdit: create GRAFCETs in compliance with the standard
- GrafView: visualize the control sequence represented as a GRAFCET
- GrafControl: control the process with the GRAFCET, including error simulation and process monitoring
- GrafPLC

Simulation in high definition

- Signal processing up to 10 kHz
- Virtual oscilloscope for frequencies up to 100 kHz
- Simultaneous simulation of all circuits in a project
- Simulated values can be shown at run-time
- Several switches can be operated with the joystick

Learning material included

- Slides, pictures, animations, sectional drawings, video sequences
- Description of the physical-mathematical simulation models
- Training program for FluidSIM® beginners
- Details of all components at the push of a button

- Completed sample presentations for your training course
- Language changeover at run-time
- Multilingual (standard German/English)

Convenient documentation

- Project administration, drawing sheets
- Individual drawing frames in all sizes
- Automatic bills of materials, flow path numbering, switching element tables, terminal diagrams, cables, wiring lists, and tubing lists
- Exports into all common formats

FluidSIM® for homework

- New expansion for administering external users over the Internet
- Administration of learning groups
- Integrated chat functions
- Simple administration by the tutor

System requirements

- Windows XP, Vista, 7, 8 or 10
- Processor with at least 1 gigahertz
- At least 1 GB RAM
- Dual core processor (recommended)