

SIEMENS



SINORIX AL-DECO AX – ADVANCED EXTINGUISHING

The new mAXimum for your machines

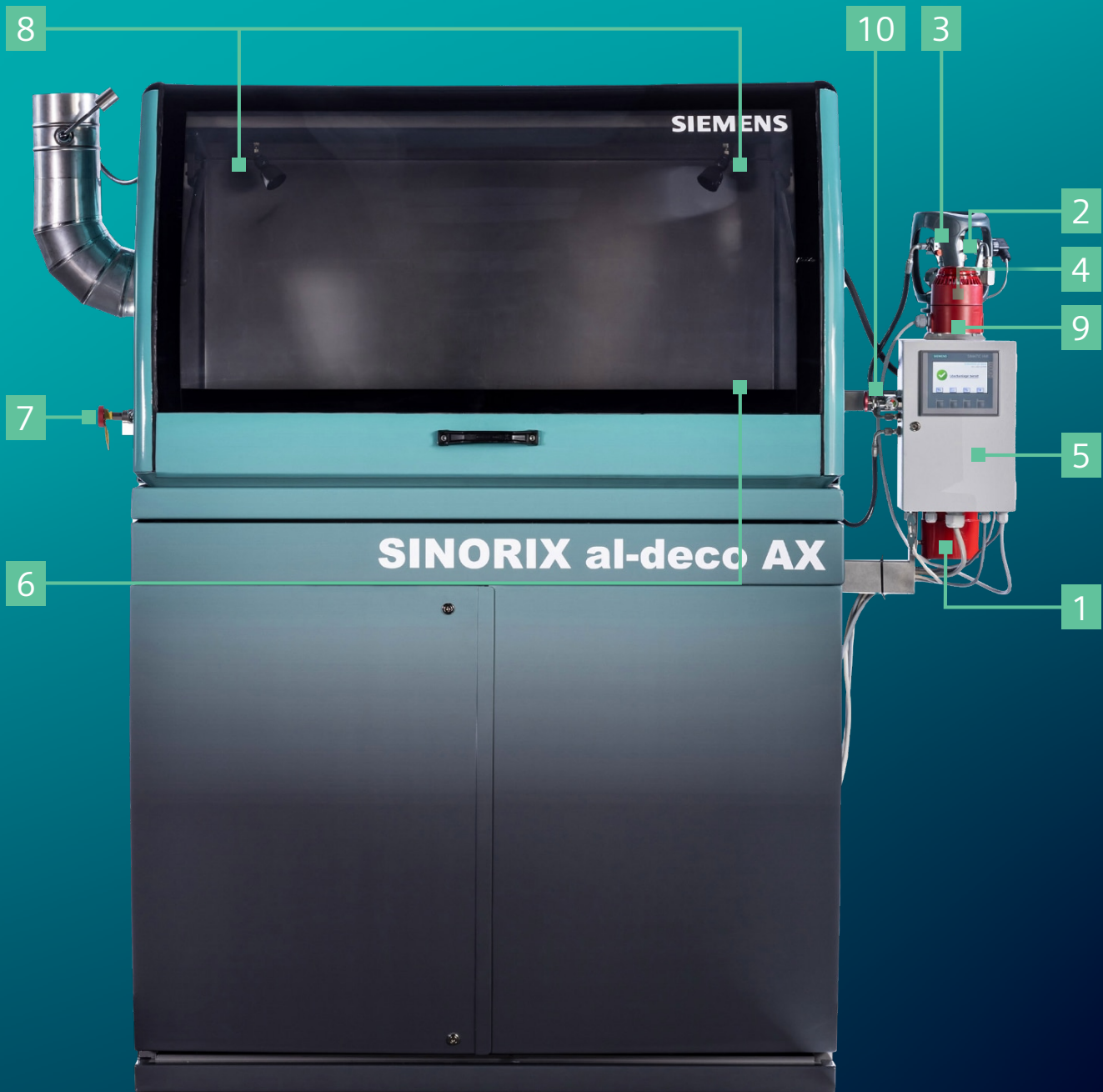
[siemens.com/al-deco](https://www.siemens.com/al-deco)

MAXimum protection for your machines and systems

The great strength of our Sinorix al-deco systems has always been their reliable and absolutely fault-resistant fire-fighting capabilities. Following integration of SIMATIC, they are becoming even more of an indispensable component of industrial and production automation – and therefore a decisive safety aspect in production systems of the future. Like our other object protection systems, Sinorix al-deco AX offers mAXimum technical reliability. In addition, your Siemens service partners are always there for you at all times to assure seamless operation within your company. This is the new mAXimum in terms of object protection. Siemens Sinorix al-deco AX – Advanced Extinguishing.

The key highlights at a glance





Key components

- 1. Extinguishing agent cylinder
- 2. Valve
- 3. Ball valve for activation/deactivation
- 4. Extinguishing agent quantity control
- 5. Sinorix al-deco AX Interface
- 6. Lifdes™ fire sensor
- 7. Manual triggering (optional)
- 8. Extinguishing nozzles
- 9. Alarming device
- 10. Manual triggering

MAXimum reliability with Sinorix al-deco AX

Take the fire safety of your machine tool up to the next level and achieve the new mAXimum in terms of fire safety.

- ✓ MAXimum reliability in the detection and extinguishing of fires and prevention of expensive false alarms
- ✓ Intuitive operation with touch panel for mAXimum comfort
- ✓ Easy to integrate into CNC control system and mAXimum ease of operation
- ✓ MAXimum safety thanks to CE conformity and TÜV testing
- ✓ Continuous monitoring of the quantity of extinguishing agent
- ✓ Extensive monitoring thanks to proven SIMATIC technology and recording of safety-relevant data can assist with liability issues – data retrieval takes place via USB interface
- ✓ Potential-free signal transmission for mAXimum compatibility
- ✓ Low life-cycle costs (no cleaning of sensors and no need for sealing air)
- ✓ Seamless connection to existing fire control panels and state-of-the-art online monitoring
- ✓ Fast installation (usually less than one day)
- ✓ Comprehensive range of training and maintenance as well as complete peace of mind with the supply of spare parts
- ✓ MAXimum sustainability thanks to energy-efficient solution and natural gas extinguishing agent

The ultimate level of automated fire safety

Fire protection for machines is essential – not only because the consequences of a fire are devastating, but also because there is a high probability of occurrence: In around ten percent of all installed machines, a fire incident occurs within the first two to five years. In particular when cooling is being performed by oil instead of water-based coolants, the risk of extensive and long-lasting damage in production is especially high.

With the increasing automation of modern systems, the risk of unnoticed fires also rises. The shift from manual to machine-based production makes it essential to fully integrate fire protection into the automated process, and thus comprehensively control all potential hazards. This is precisely where Sinorix al-deco AX, a made-to-measure fire safety system, can help you and your company.



Extinguishing nozzle

Innovative fire safety for the future of production

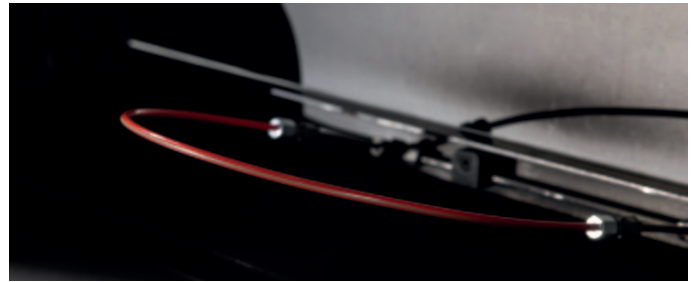
Sinorix al-deco systems offer a comprehensive range of protection features that exceed common industry standards while also complying with international safety requirements. When combined with the latest SIMATIC technology, non-electrical fire detection and automatic fire extinguishing become more advanced and efficient than ever. Events can be reconstructed clearly by monitoring all safety functions and automatic recording, making it easier to clarify liability-related issues. It is also an easy and quick process for operators to obtain visual access to data.

With SIMATIC, in addition to monitoring, it is also possible to obtain a direct connection to the fire control panel in the company. In addition, using the touch panel, signals can be tested and their parameters can be adjusted individually. This is what makes the Sinorix al-deco AX object protection so remarkably accessible and innovative.

MAXimum resistance to faults

At the heart of the system is a patented, tubular, linear fire sensor called Lifdes™ (Linear fire detection source), made from a polymer with a high molecular weight. This sensor, connected to an extinguishing agent cylinder by a valve, is under a permanent pressure of 15 bar. At the temperatures prevailing during a fire event, the fire sensor bursts open. As soon as the sensor has burst, the valve on the extinguishing agent cylinder opens and gas permeates the protected area.

At the same time, the emergency stop function of the machine gets activated. Since detection is a pneumatic process, the sensor is resistant to dirt, water, oil and vibration as well as to adverse technical factors such as power cuts and deception variables. Additional safety functions for our extinguishing system, such as door monitoring and door locking, can be implemented.



Lifdes™ fire sensor

More protection for complex systems

About 43 percent of all companies file for bankruptcy immediately after a fire. A further 27 percent survive for no more than the next three years. In addition to damage to the system and interrupted operations, business relationships also suffer when deliveries are late or fail to take place – damage to image of this kind can be irreparable. To prevent all of this, a mAXimum of safety is needed. Sinorix al-deco AX is intuitive to operate, it is fully automated and it can be integrated in virtually any production operation – making it a safe choice when

continuous operational integrity needs to be protected. By using the patented, pneumatic Lifdes™ fire sensor, detection and extinguishing of the fire are reliable and fail-safe to a mAXimum level – preventing operational downtime. In addition to systems, Sinorix al-deco AX also protects another asset that is essential for survival: our environment. Unlike chemical extinguishing agents, the use of a natural extinguishing gas avoids the creation of any harmful residues.

Professional planning, ultimate ease of operation

Sinorix al-deco AX makes fire safety more accessible than ever before. This system offers mAXimum flexibility and compatibility at all stages, from installation to maintenance to the restoring of operations in case of a fire. Thanks

to the integrated SIMATIC, this complex extinguishing system can be adapted to suit a wide range of operational requirements – we will of course support you at every stage, from planning to implementation and maintenance.





Smarter Protection Matters is our commitment towards safety, reliability and efficiency. It's all about protecting people and buildings all year-round while connecting the technology with purpose, so that undisturbed spaces can be sustained all day, every day.

Siemens AG Österreich
Smart Infrastructure
Fire Safety Application Center
1210 Vienna
Austria
al-deco.at@siemens.com



In an intelligent manner, Siemens Smart Infrastructure combines energy systems, buildings and industries to help the further development and improvement of the way we live and work. Together with our customers and partners, we create an ecosystem that responds intuitively to people's needs and helps customers make the best use of resources. An ecosystem that helps our customers to grow, that promotes the progress of communities and that favors sustainable development.

We reserve the right to make changes and errors. The information in this document contains only general descriptions or performance features which do not always apply in the form described in the specific application or which may change as a result of further development of the products. The desired performance features only become binding in nature if they were expressly agreed when a contract is concluded.

© Siemens AG Austria, 2023, author of photos is Siemens

[siemens.com/smart-infrastructure](https://www.siemens.com/smart-infrastructure)