

# A company's most valuable exhibits & dossiers. Protected with 'state of the art' fire prevention & electronic access system.

**At first the customer's need seemed simple – to keep its archives and warehouses safe from both fire and intruders. However, when considering the weaknesses and age of the existing legacy system and the need for three subsystems (smoke detection, fire extinguishing and access control) to work seamlessly together, it became clear that a radical system overhaul was necessary.**

The Italian client, (whom, for safety reasons must remain anonymous) wanted to guard and protect significant artefacts and sensitive information. The system they chose had to be future-proof, reliable, flexible and easy to install and maintain. It also had to offer good value for the investment, in the short and long term – a challenging but perfectly valid list of requirements!

Winning the challenge set by this customer was S.I.A.M. (Solutions for Identity Access Management) Ltd in Aosta. SIAM operates in security, with decades of experience in the field of access control (and in particular, biometrics), strong authentication and encryption data. The company uses technology partners that represent the 'state of the art' in their respective sectors. For the fire suppression agent in this client system they opted for 3M™ Novec™ 1230 Fire Protection Fluid. Novec 1230 fluid, born from the innovation labs at 3M is a 'liquid' which doesn't wet, leaves no residue,

is neither corrosive nor conductive, and offers a wide margin of safety around people. It is a clean agent widely used in mission critical facilities, as, unlike water or dry chemicals, it does not damage sensitive equipment, media or paper documents. With zero ozone-depletion potential, a global warming potential of <1 and an atmospheric lifetime of only 5 days, Novec 1230 fluid has a strong, sustainable environmental profile.

For automatic identification of users and control access in and out of the client building, the solution was designed and produced by Elex srl of Turin. Elex is an Italian company specialising exclusively in electronic access control and detection in the workplace. The intelligent control system is connected via a LAN for each risk area, and card readers positioned near the archives and warehouses. RFID (Radio Frequency Identification) is used to determine access, and all movements are detected and reported in real time.

In event of fire the systems work in parallel. The access control system ensures that doors and windows are closed, enabling safe and effective extinguishing by the Novec 1230 fire protection fluid, and readmission to the building is prevented until a safe time.

The solution selected by S.I.A.M., using 3M Novec 1230 fluid, is produced by Teledata srl company in Milan, a manufacturer and distributor of devices for fire detection systems. In this specific case the analogue device uses smoke optical sensors, to prevent the automatic dispersion of Novec 1230 fluid if humans are detected in protected areas.

## **In short:**

An Italian organisation must preserve vital documents from both fire and theft. A new, sophisticated system is deployed with smoke detection, safe fire extinguishing and electronic access control.

## **Partners selected:**

Elex  
[www.elex.it](http://www.elex.it)  
3M (Novec 1230 fluid)  
[www.3mitalia.it](http://www.3mitalia.it)  
Teledata  
[www.teledata-i.com](http://www.teledata-i.com)  
S.I.A.M.  
[www.siam-srl.it](http://www.siam-srl.it)



Image of Novec 1230 gas being dispensed

3M™ Novec™ 1230 Fire Protection Fluid is an advanced clean agent fire suppression material, based on a proprietary chemistry from 3M. It was designed to address industry needs for clean agent fire protection that is safe and effective, while offering a sustainable environmental profile that no other halocarbon agent can match. This includes: Zero ozone depletion potential; a 5-day atmospheric lifetime, and a Global Warming Potential of 1. Because of these properties, Novec 1230 fluid is not targeted for phase-down or regulatory restrictions anywhere in the world. It is approved for use in total flooding fire suppression systems by the U.S. EPA and most major regulatory bodies. All of this makes Novec 1230 fluid today's sustainable choice for clean agent fire protection.

## The 3M™ Novec™ Brand Family

The Novec brand is the hallmark for a variety of proprietary 3M products. Although each has its own unique formula and performance properties, all Novec products are designed in common to address the need for safe, effective, sustainable solutions in industry-specific applications. These include precision and electronics cleaning, heat transfer, fire protection, protective coatings, immersion cooling, advanced insulation media replacement solutions and several specialty chemical applications.

3M™ Novec™ Engineered Fluids ■ 3M™ Novec™ Aerosol Cleaners ■ 3M™ Novec™ 1230 Fire Protection Fluid ■ 3M™ Novec™ Electronic Grade Coatings ■ 3M™ Novec™ Electronic Surfactants ■ 3M™ Novec™ Dielectric Fluids

<b>UK</b> 3M Electronics Materials Solutions Division 0800 032 0841	<b>Germany</b> 3M Germany Ltd. 49 2131 140	<b>Belgium</b> 3M Belgium N.V. 32 3 250 7521	<b>Czech Republic</b> 3M Czech Republic 420 2 61380111	<b>3M East</b> 41 4179 94040	<b>France</b> 3M France 33 1303 16161	<b>Israel</b> 3M Israel 972 9 9561490
<b>Spain</b> 3M Spain 34 91 3216000	<b>Russia</b> 3M Russia 7 495 7847474	<b>Hungary</b> 3M Hungary 36 1 270 7777	<b>Romania</b> 3M Romania 40 21 202 800	<b>Italy</b> 3M Italy 39 2 70351	<b>Poland</b> 3M Poland 48 22 739 6000	<b>Switzerland</b> 3M Switzerland 411 7249090

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