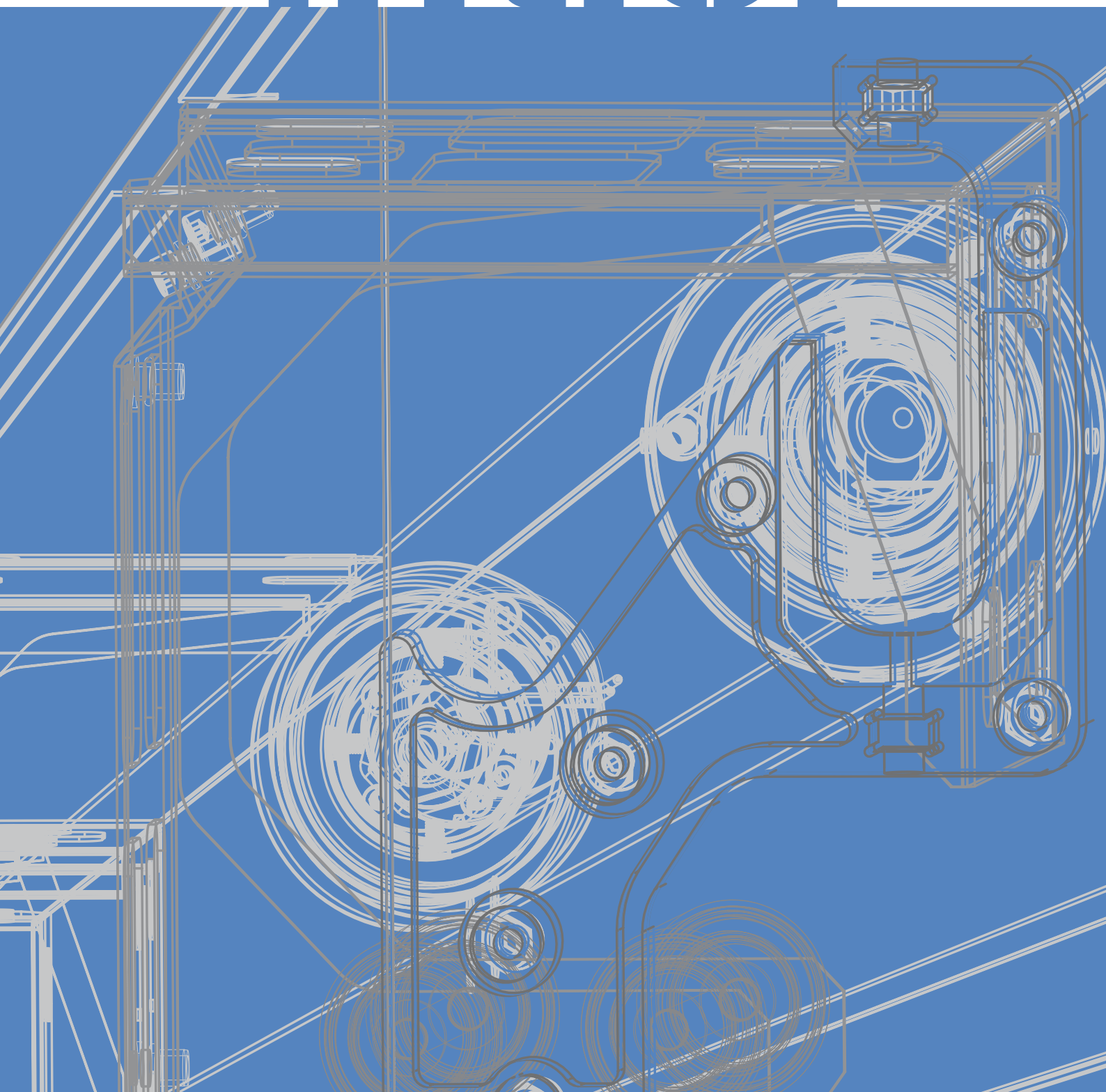
SMART FIRE CURTAINS **INTISI7**

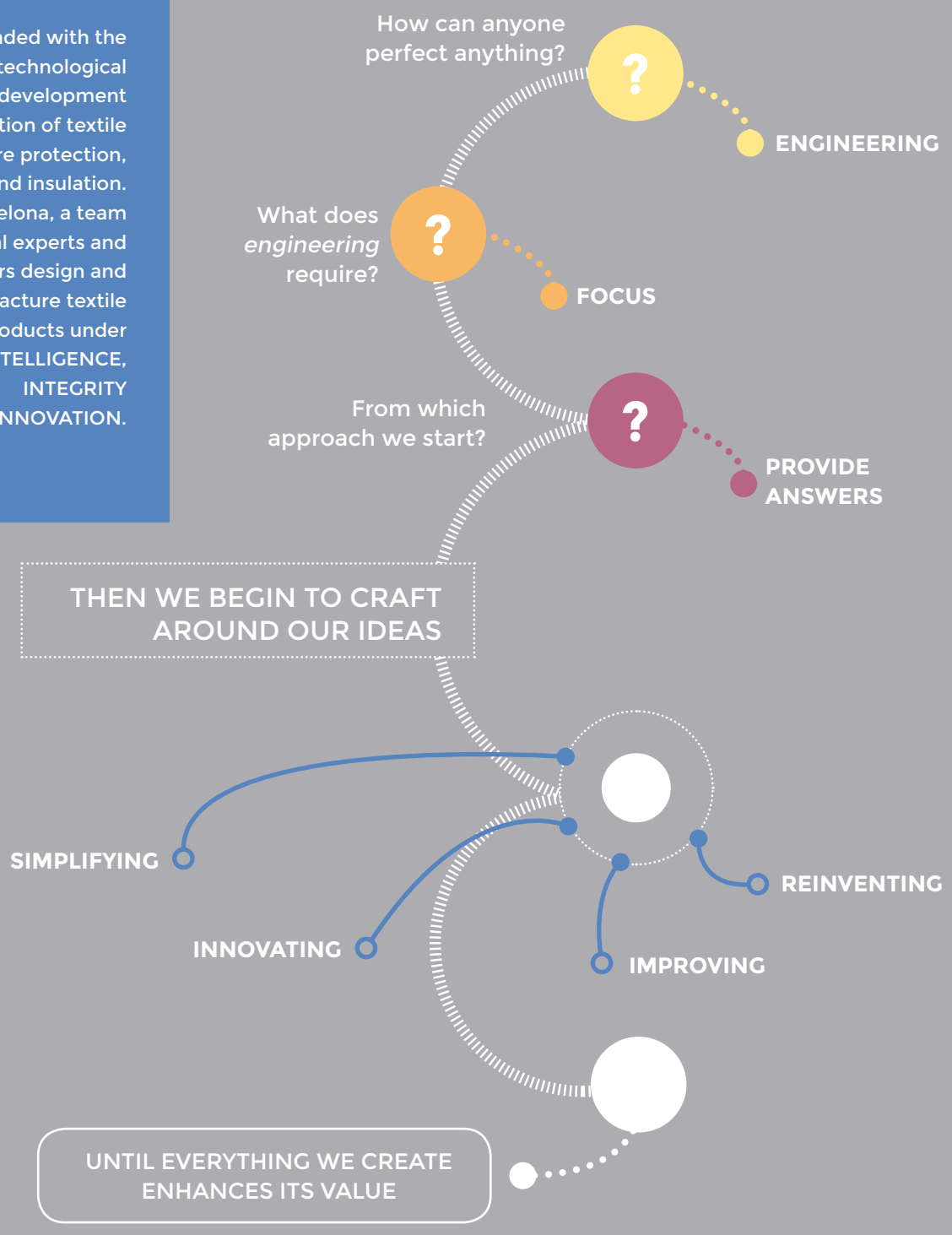
for invisible fire protection closures

intisi



INTISI I FIRE ENGINEERED FABRICS

Intisi was founded with the aim of being a technological partner for the development and production of textile solutions for fire protection, smoke control and insulation. From Barcelona, a team of technical experts and engineers design and manufacture textile technology products under premises of INTELLIGENCE, INTEGRITY and INNOVATION.



PERSONALISED PERIPHERAL SERVICES

- Technical advice and consultancy
- Repair of curtains at own Technical Service facilities
- Development of personalised solutions

INVISIBLE FIRE PROTECTION CLOSURES BY MEANS OF TEXTILE FIRE CURTAINS

REQUIREMENT
Construction regulations require dividing zones to prevent fire from spreading from one area to another in a building, containing the fire at the site of its source.

The standard UNE EN 1634-1 regulates fire resistance tests and classifies textile fire curtains as an asymmetric enclosure, since they consist of roll-up closures.

OBJECTIVE
Create fire protection closures under different protection requirements according to UNE EN 13501-2 standard.

ASYMMETRIC FIRE CLOSURES
In order to ensure the integrity against fire on both sides, asymmetrical fire curtains must be tested against fire on the side where its components are located (supporting items, guide rails and motor).

E	+ Integrity	+ Guarantee for containing flames and hot gases on the side exposed to fire.	
EI	+ Integrity + Insulation	+ Guarantee for containing flames and hot gases on the side exposed to fire. + Guarantee that heat transfer does not cause a fire on the side not exposed to the flames.*	
EW	+ Integrity + Reduced heat radiation	+ Guarantee for containing flames and hot gases on the side exposed to fire. + Limiting of heat radiation transfer, preventing ignition of materials and people damages on the side not exposed to the fire.	

* *Thermal insulation by means of sprinklers with low pressure closed nozzles and quick response thermal-fuses.*

INTISI FIRE CURTAIN DESIGN

1

CHASSIS

Metal chassis with dimensional stability to house the fabric and different system components. Its blunt edge design limits its friction with the fabric to ensuring full integrity and durability of the different components.

2

LTP24 MOTOR BLOCK

24V high performance tubular motor block, tested to 2350 continuous cycles, now more silent and reliable. The advanced *Gravity Fail Safe* technology ensures closing of the system by gravity which does not require any cooling stops during operation.

3

TUBULAR SHAFT WITH EASY-FAST SYSTEM

Ball bearing rotation mechanism to guarantee aligned spin of the fabric without rubbing, thus eliminating any risk of wear by friction, noise, and overloads on the LTP 24 motor.

4

ANCHORING SYSTEM WITH SKATIP DESIGN

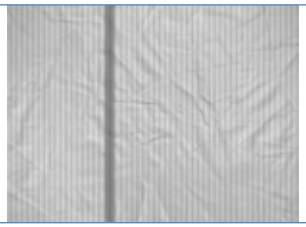
A 21 mm thickness, twin-body securing mechanism designed to guarantee system effectiveness and efficiency.

5

TELESCOPIC ROLLER BRIDGE

A bridge mechanism with telescopic ROLBRID system to support and align large size Intisi fire curtains (WIDE series).

6



Intisi tex TECHNICAL FABRIC

Latest generation technical fabric made from fibreglass reinforced with stainless wire to guarantee integrity at high temperatures.

7

GL SIDE GUIDES

The fabric guiding system consisting of rigid angular strengtheners, guiding bearings, stainless tubular axle and low-friction guiding ring to guarantee tightness and integrity of the Intisi fire curtain against gases and flames in the event of a fire.

8

SEALING STRIP

A compact angular rigid counterweight mechanism with joining nozzles and carriers to guarantee the secure operation of the Intisi fire curtain without electrical power by means of *Gravity Fail Safe* technology at a low and controlled speed. The device is attached to the Intisi tex fabric by means of a looping system over one securing axle.

INTISI 7 INVISIBLE VERTICAL FIRE CURTAINS

A change of perspective. Guaranteed safety, control and integrity

Intisi 7 is the future in textile fire curtains intended for an invisible fire protection closure, for it is the first smart fire closure system. Its advanced components mean a fire resistance classification E120, EI120 and EW120 up to 1100°C made out of one piece up to 22 metres wide. Intisi 7 fire curtains guarantee compliance with current European legislation.

SIMPLICITY IS NOT SOMETHING SIMPLE

GRAVITY FAIL SAFE TECHNOLOGY
Gravity closure at a controlled speed.

ULTRA SIZE
22 m non overlapped maximum dimensions certified as per EXAP prEN 15269-11.

INTELLIGENCE
All components are conferred with technology to enable fire curtains to solve problems.

REVERSIBLE
They are the only fire curtains certified to protect 2 fire sectors.

ULTRA COMPACT
The small size of the system means it can be fully integrated in the space.

EASY TO ASSEMBLE
The design of each part is ideal for simple assembly and maintenance.

CERTIFIED QUALITY
Intisi 7 fire curtains have been tested to the most demanding European standards.

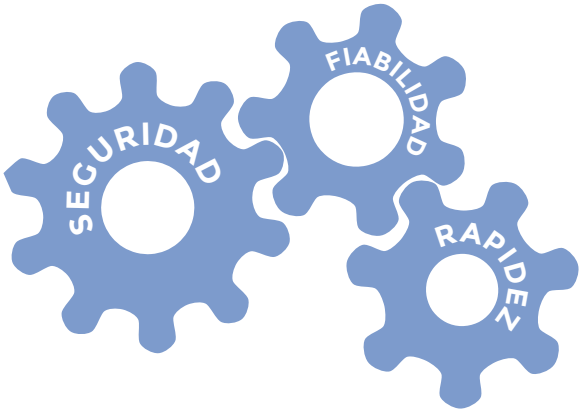
GUARANTEED SAFETY
All the advantages of Intisi 7 fire curtains are meant to provide complete safety against fire.

MINIMUM SPRINKLERS
Intisi 7 fire curtains are EI120 fire rated, with sprinklers distributed every 2 metres only.*

CLOSED SPRINKLERS
Invisible EI120 fire closure through the certified Intisi-SC sprinkler system.

The advanced technology applied to each Intisi 7 fire curtain component ensures optimisation of assembly and maintenance time, not disregarding the integrity of the system against fire.

*Advantages for the Intisi fire curtain range with EI120 fire rating.



INTISI 7
GUARANTEED "EI" INTEGRITY AND INSULATION

SUITABLE FOR PROTECTING TWO FIRE SECTORS

In order to guarantee complete effectiveness and reliability of vertical Intisi 7 fire curtains; as an ASSYMETRIC closure item, the curtains have been tested under the least favourable conditions, i.e.: "with all components exposed to direct attack from fire". This enables its installation to divide two fire sectors, in accordance with EN UNE 1634-1.

Fire curtain tested with the chassis and side guides outside the fire zone.

Valid for protecting areas with fire in **1 single fire sector.**

Intisi 7 vertical fire curtains

Fire curtain tested with the chassis and side guides inside the fire zone, for they are designed to withstand direct fire.

Valid for protecting areas with a fire affecting **2 fire sectors.**

INTISI-SC SPRINKLER SYSTEM

Intisi 7 vertical fire curtains are rated EI 120, based on the Intisi-SC closed nozzle sprinkler system.

- The only certified closed nozzle system
- K80 sprinkler with quick response bulb type thermal fuses.
- Sprinklers fitted every two linear metres of the system
- 1.1 bar working pressure.
- Fitting of sprinklers on the side opposite to the chassis
- First hidden sprinkler system above the false ceiling

INTISI 7 VERTICAL FIRE CURTAIN SERIES

INTISI 7 LIGHT

The **Intisi 7 light** vertical fire curtain, developed for fire protection closures of small areas with fire curtains.

System width (A)	System height (H)	Intisi tex Fabric	Chassis size (P x C)
≤ 5metres	≤ 3 metres	Tex-FPI EI120	COMPACT 190 x 200 mm
	≤ 1.7 metres	Tex-EW120	
	3 m < H ≤ 10 metres	Tex-FPI EI120	COMPACT+ 235 x 290 mm
	1.7 m < H ≤ 5.5 metres	Tex-EW120	

INTISI 7 WIDE

The **Intisi 7 wide** vertical fire curtain, developed when it is necessary an invisible fire protection closure in a large space.

System width (A)	System height (H)	Fabric	Chassis size (P x C)
5 > to ≤ 22 metres	≤ 8 metres	Tex-FPI EI120	COMPACT+ 235 x 290 mm
	≤ 4 metres	Tex-EW120	
	8 < H ≤ 10 metres	Tex-FPI EI120	COMPACT pro 286 x 315 mm
	4 < H ≤ 5.5 metres	Tex-EW120	
Telescopic roller bridges		Supporting mechanism for the Intisi 7 wide system.	

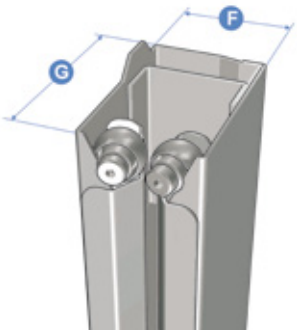
INTISI TEX FABRIC RANGE

Tex-FPI
Technical fabric to ensure integrity against fire based on fibreglass reinforced with stainless steel wire, to provide the system with tensile strength, and a primer coating which, depending on the required application, prevents the loss of properties of the textile technology. It is identified with a quality mark based on black coloured longitudinal threads. It reaches an E120 fire rating, and in conjunction with the Intisi-SC sprinkler system, guarantees an EI120 fire rating.

Tex-EW120
High temperature resistant textile technology, to guarantee the integrity while limiting the heat radiation of fire by providing EW120 rating thanks to the aluminized finish on both sides.

INTISI 7 GL SIDE GUIDES

Type	Guide size (G x F)	Max. height (H)	Max. width (A)
GL120	120 x 74 mm	≤ 6 metres	≤ 13 metres
GL175	175 x 95 mm	≤ 10 metres	13 < to ≤ 22 metres

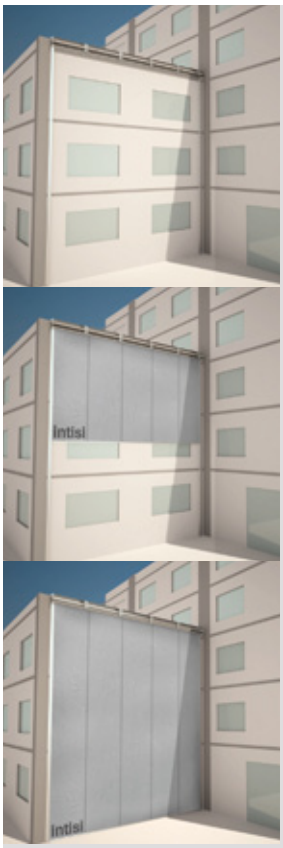


INTISI 7 APPLICATIONS

Intisi 7 indoor vertical fire curtains

- Indoor vertical fire protection closures
- Closure of inner windows
- Indoor fire closures of doors and lifts
- Protection for halls
- Kitchens or areas containing devices intended for preparing food that could cause ignition
- Fire closure for automatic extinguishing systems

Intisi 7e fire curtains for outdoor façades



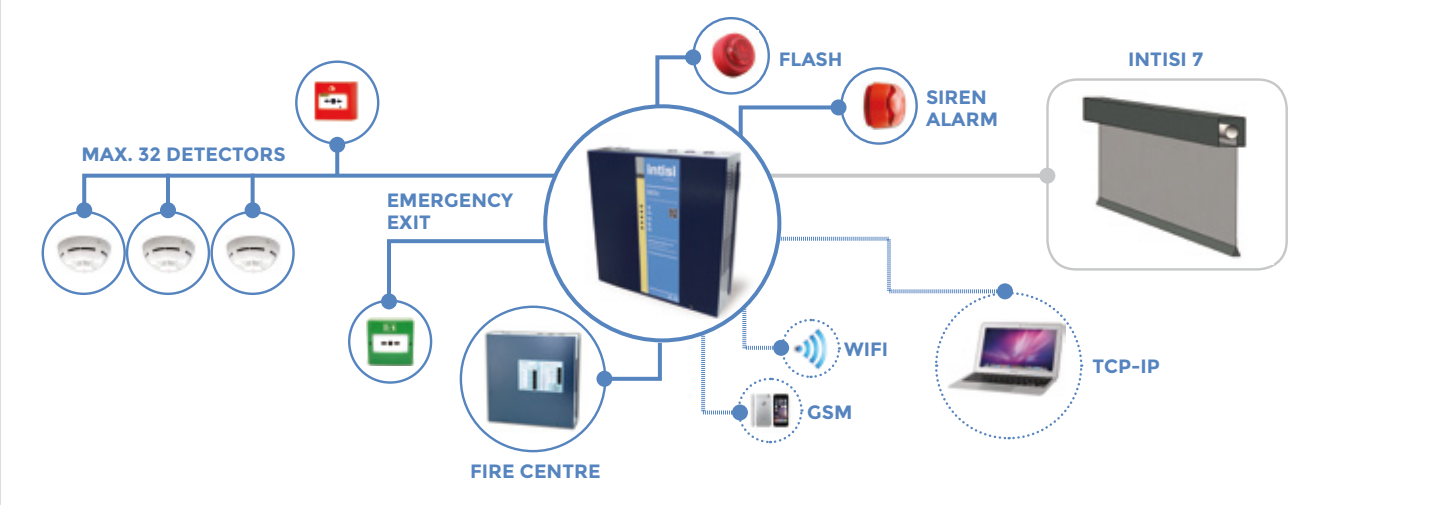
- Fire protection closure of building façades
- Vertical closure of façades on adjoining buildings
- Closing of windows on façades
- Fire closure of rooflight domes or skylights with façades
- Façade protection in inner courtyards

SMART CONTROL CORE **SI03c**
CONTROLLED SAFETY

FEATURES

- **Operability.** Makes the closure function of Intisi 7 fire curtains effective, in a controlled manner.
- **Personalised programming.** The advanced processor permits a large number of programming parameters to be stored.
- **Intelligence.** Enables Intisi 7 fire curtains to resolve problems autonomously through its permanent status of self-diagnosis and self-analysis.
- **Memory.** Up to 255 events can be stored.
- **Communication.** Users are provided information about the system status in real time, via WIFI, TCP-IP, GSM, etc.
- **Safety.** Permits evacuation of people found in the area of the fire and action by the firefighter.
- **Multi-purpose.** Fitted with an area to connect fire detection devices.

The Intisi SI03c smart control core governs the Intisi 7 fire curtains efficiently and effectively.



SPECIFICATIONS

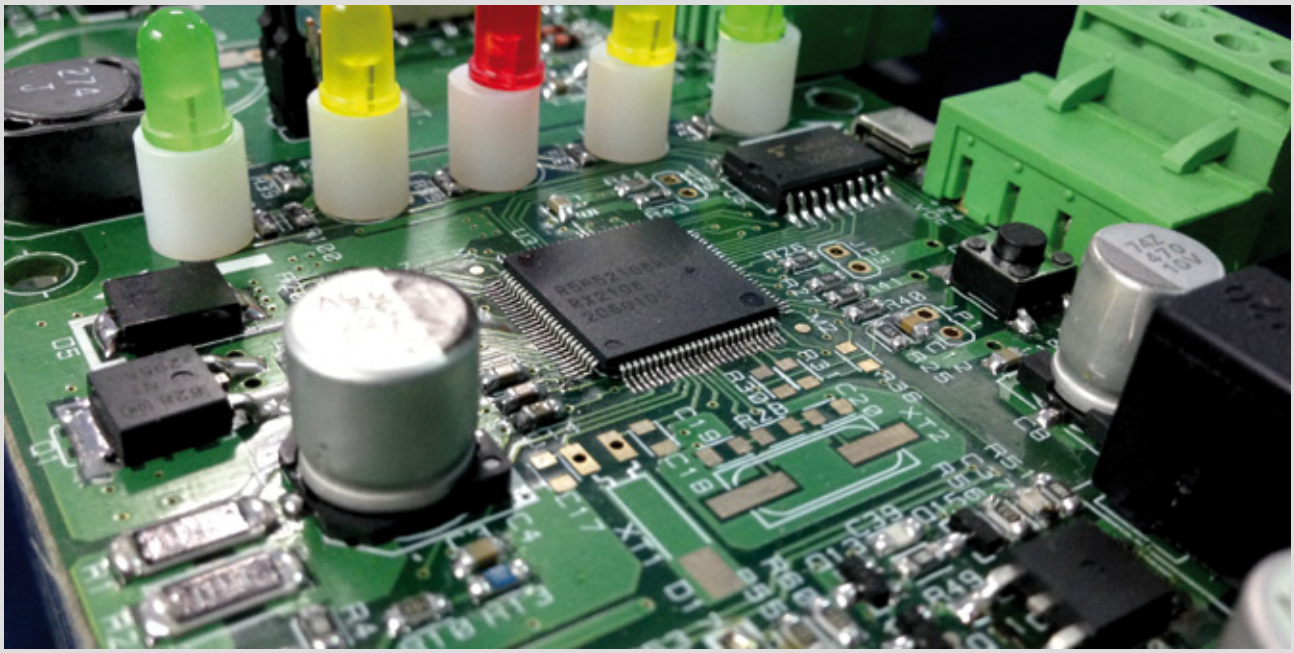
- Advanced i3 processor, designed with 32 bit architecture.
- Remote connectivity to advanced applications (WIFI, TCP-IP, GSM, etc).
- Pulse width modulation technique PWM.
- Hall effect encoder, providing over 6000 information bits per minute.
- 24V back-up UPS device with automatic monitoring and charging of its battery pack.
- 230V AC / 50 Hz power supply.
- Dimensions: 315 x 320 x 85 mm.

PROGRAMMING

The advanced technology featured in the SI03c Smart Core Control permits personalised programming to adapt to the requirements of each client.

- Basic programming is permitted directly from the Core Control.
- Advanced programming may be carried out through the Intisoft® application.
- A special programming option is available for emergency exit to evacuate trapped persons.

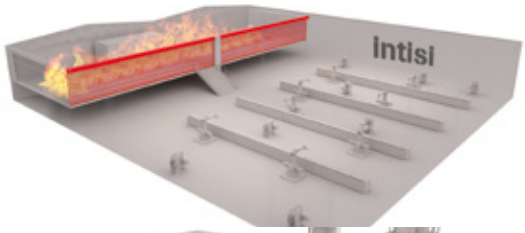
Intisoft® **Permits remote monitoring of events log and status (in real time) for the Intisi 7 fire curtains.**



WE ADAPT OUR SOLUTIONS TO YOUR NEEDS

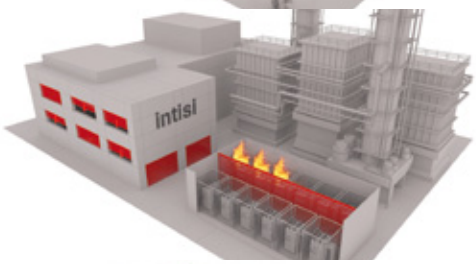
LOGISTICS SECTOR

Logistics centres are buildings that are carefully designed to optimise the logistics activity with maximum use of space.



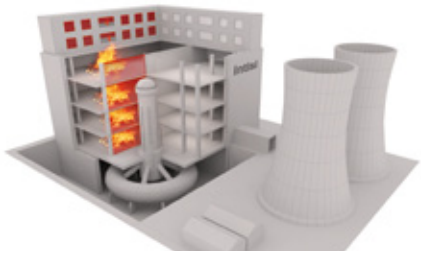
INDUSTRIAL SECTOR

Industrial activities require high levels of safety and protection with maximum optimisation of space.



PETRO-CHEMICAL SECTOR

Petro-chemical plants require a culture of preventive safety for the risks involved in their own activity.

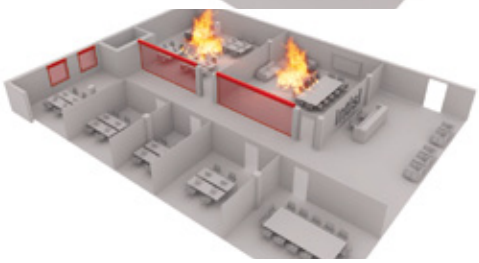


NUCLEAR POWER PLANTS

Nuclear power plants involve high specific risks which need to be controlled and foreseen.

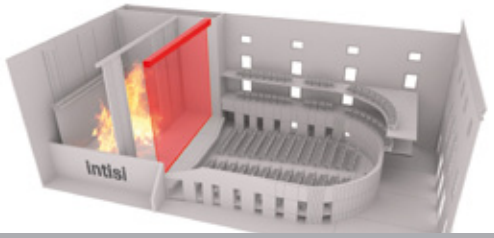
FOOD AND AGRICULTURE SECTOR

The food and agriculture industry must ensure the healthiness, hygiene and freshness of the products, and provide a safe environment for employees and animals.



MALLS AND BUILDINGS

Non-industrial establishments are pioneers in new construction trends, constantly facing new architectural challenges.



CULTURAL ESTABLISHMENTS

Theatres and concert halls are public establishments, that could involve the use of equipment and activities that can be hazardous to people and pose a threat to the integrity of the building.

CERTIFIED SAFETY AND INTEGRITY **INTISI APPROVALS**

Intisi systems prove their high quality, reliability and accuracy in many tests, certifications and approvals by accredited official laboratories, in accordance with European standards.

INTISI 7 TEXTILE FIRE CURTAINS

- Fire resistance test according to UNE EN 1634-1.
- Certified fire classification according to UNE EN 13501-2.
- Extended application test according to EXAP prEN 15269-11.
- Self-closing durability test to 2350 cycles according to UNE EN 14600 and UNE EN 12605.
- Technical evaluation of suitability for use.

All this is in accordance with current European standards.

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intisi

Fire Engineered Fabrics

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