



# GRUPO **KOMTES**

## TRANSPORTATION

 **SIEX**

**AG** ● ● ● ●  
SPRINKLER

**Koneba®**

**Komttech** 

   
Macoin Ribô

  
**Tecno Envases**



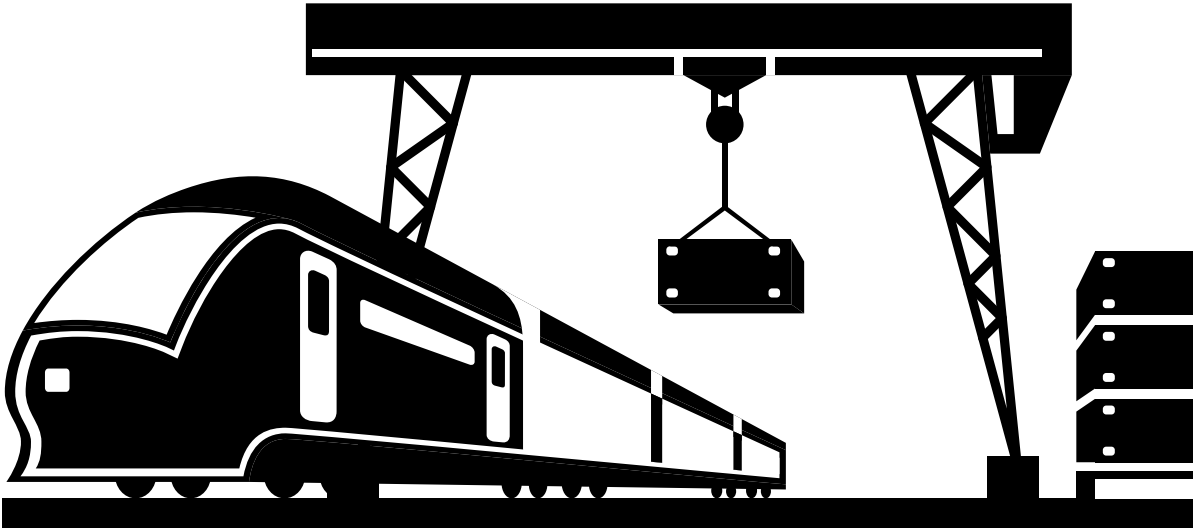


Transport infrastructures are characterized by the high number of users dependent on them and who may be affected in case of fire, both in their daily activity and in their physical safety.

These users are not required to know the protocols to be followed or how to use available means of fire suppression. In addition, we must bear in mind that such facilities are also used by people with disabilities. All of which highlights the utmost importance of proper and efficient fire protection in the transportation industry.



FIRE OUTBREAKS	PREPARATORY ACTIONS Zoning and evacuation plans		FIRE SOURCE EXTINCTION
	KONEBA	Zoning and partitioning	
	ACTIVE MEASURES		
	KOMTTECH <i>detection</i>	Analog control	
		Detection via aspiration (data centers, monitoring, etc.)	
	MACOIN/RIBÓ <i>manual methods</i>	Decorative equipped fire hydrant boxes specially made for rail and road tunnels, effective for automotive fuel fires.	
		Integrated modules: Equipped fire hydrant box + extinguisher + technical cabinet for stations	
		Water and AFFF extinguishers for tunnels and confined spaces	
		Dry columns, hydrants	
	AG FIRE SPRINKLER <i>automatic protection of people, property and structures.</i>	Normal and Extended Coverage Automatic Sprinklers	
		Sprayed water and foam systems for tunnels	
		Systems to control the pressure and flow rate as well as the optimization of water use in tunnels.	
	SIEX <i>clean systems</i>	Water mist: tunnels, rail cars, lobbies, escalators and corridors	
		Dry chemical powder: gas stations, fuel deposits, vehicles and engines	



# GRUPO **KOMTES**

*The long history of the KOMTES Group in all product ranges relating to fire suppression systems and their application in public use and transport infrastructure areas (ports, road and rail tunnels, interchanges, stations, gas stations, airports, etc.) provides us with in-depth expertise in every need and for each case.*



**SPECIFIC INDUSTRY  
KNOWLEDGE**

+

**MISSION-SPECIFIC  
SYSTEMS**

=

**PROTECTION  
TAILORED TO  
YOUR NEEDS**

## We offer proven solutions to specific challenges

### SOCIAL CHALLENGE



#### HIGH OCCUPANCY

##### KOMTES acts:

The profound public lack of familiarity with the location and its security protocols cause panic situations with possible jamming and trampling. Disabled individuals require longer evacuation times.

##### KOMTES offers: QUICK & HARMLESS LIFE-SAVING ACTION FOR PEOPLE

Protection of occupants should focus on minimizing the perceived danger (indoors, underground, etc.), facilitate the extension of evacuation time, improve visibility, avoid heat and toxic gases in the environment, and so on; using for this early detection techniques, effective zoning, and use of proper systems.

### FUNCTIONAL CHALLENGE



#### INTERCONNECTION OF MAJOR INFRASTRUCTURE

##### KOMTES acts:

Effective equipment for hidden, open or outdoor hazards. Minimal response and resumption- of-service times.

##### KOMTES offers: MINIMIZE DAMAGES AND LOSS OF SERVICE

Our systems offer optimal protection without influencing normal operation, reducing downtime and easing maintenance without limiting user accessibility.

### AESTHETIC CHALLENGE



#### ARCHITECTURAL AND INTERIOR DESIGN

##### KOMTES acts:

We supply decorative components with a low design and visual impact, matched to any finish.

##### KOMTES offers: ATTRACTIVE FINISHES

Greater coverage and component performance reduce the number of devices required and facilitates their placement while minimizing visual impact. Variety of finishes and customization options available.





# ZONING AND PARTITIONING

The first step in firefighting is detection of the source. In public buildings especially, this has to be done quickly and thus allow a rapid response of the firefighting service.

The aim is to prevent the fire from progressing and generating flames or smoke, producing situations of confusion and panic. Since a large number of users implies the presence of the disabled or those with limited capabilities, such as the elderly, it is essential to provide adequate evacuation times under the best possible conditions.

For this reason, partitioning is key to providing safe routes, protected from the toxic smoke and excessive heat which are incompatible with life.

**KONEBA** has spent years at the forefront of partitioning facilities with flexible barriers. Mobile curtains for public use are an optimal solution for **providing spatial fluidity during normal use**, with minimal visual impact thanks to their mobile and flexible design, custom-made to integrate curtain drawers and guides into the architecture unnoticed.



In case of fire, these curtains descend after a period of delay, isolating evacuation routes in the affected areas. Their resistance to fire and temperature is rated at E, EI and EW 180-1100°C (types and temperatures). **They are equipped with an irrigation system to prevent heat from radiating into the evacuation routes** and making them unusable.

It is the optimum solution for large crowds and public venues characterized by an abundance of open, interconnected spaces, such as is the case for transport hubs; airports; train, metro, and bus stations; and similar locations. The system is used in conjunction with smoke and heat control systems sporting an attractive design which, in the event of fire, allow for the evacuation of large volumes of hot and/or toxic smoke.



# MANUAL METHODS

Quick action by the public or the staff on hand who have been trained for this purpose allows many emerging outbreaks to be extinguished without further intervention. By necessity, transport infrastructure must be equipped with manual methods of fire suppression, such as equipped fire hydrant boxes, dry columns, fire extinguishers, other hydrants and automatic extinguishing equipment on the exterior.

To this end, **MACOIN / TIPSA** markets 25mm equipped fire hydrant boxes that can be integrated into the interior design and allow for use by untrained personnel. Simultaneously, the boxes are visually unobtrusive owing to the different finishes and styles available, including wall-mounted embedded boxes with a lid, which come with a portable fire extinguisher and a technical cabinet with alarms, lighting controls or even voice evacuation controls. These equipped fire boxes are easy to use and help to enable escape routes, even in the case of fuel fires.

For demanding application scenarios relating to large facilities, such as airports, protection of all types of hangars, and similar, **AG FIRE SPRINKLER** offers fixed or mobile monitors that can control large spills of flammable liquids.

These are easily manageable and transportable thanks to their integrated components, while at the same time they offer a large throughput and maximum autonomy, as they are shipped ready for immediate use. **SIEX** also has self-pressurized skid units with twin-agent: equipment with a double nozzle that allows the operator to alternatively switch between chemical powder and foam according to the progression of the fire.



## FIXED SYSTEMS FOR AUTOMATIC

To facilitate evacuation procedures, assist fire crews in working under safe conditions, and preventing structural collapse of the building, **AG FIRE SPRINKLER** systems protect the large open spaces, as well as their associated uses, and even ancillary installations.



## PROTECTION AND WATER CONTROL

Their automatic action, thanks to their thermal sensing devices, facilitates autonomous action even during power outs. Sprinklers are available for normal or extended coverage for all types of hazard, as well as in numerous color finishes.

For aesthetic purposes, as in the case of connecting halls and terminal buildings, we market hidden, discrete models, which can be embedded in walls or ceilings with a lid of the desired finish or color. Similarly, extended coverage models allow the protection of rooms, halls and corridors with greater reach, reducing the number of devices and thus making the installation even more discrete and unobtrusive.

**AG FIRE SPRINKLER** also sells all the necessary valves for controlling water in any type of installation. AG specializes in controlling water pressure and flow in these large installations, on the one hand allowing for optimized systems, and on the other ensuring the effectiveness of pumping systems and water reserves.





# SUMMARY OVERVIEW

PROTECTION AREA		Komtttech	Mocoin Ribó Tacho Envasas	AG SPRINKLER	Koneba	siex
INFRASTRUCTURE	Ports • Loading machinery • Containers • Cranes	-	Portable skid units Hydrants	Fixed and movable monitors. Foam Systems Monitors	-	Twin agent Movable equipment
	Airports • Hangars • Terminal (ceiling mounted)	Flame detection Aspiration/laser			THSECS Zoning and partitioning	
	Stations, Connecting Halls, Terminals	Thermal cable	Built-in boxes (fire hydrant + extinguisher)	Normal and Extended Coverage Automatic Sprinklers.	THSECS Zoning and partitioning	Water mist, FM-200
	Connecting Hallways	Extraction				
	Metro (Underground rail)	Extraction		Water spray (tunnels)	-	Water mist batteries
	Tunnels	Thermal cable	Fire hydrant boxes and hydrants. Fire extinguishers	Water spray Pressure and flow control systems.	-	Water mist
	Gas stations	Mechanical or pneumatic detection (fuses)	Dry chemical extinguishers. Hydrants	Monitors. Foam Systems	-	Dry Chemical
VEHICLES	Train, tram, metro • Wagons • Engines	Mechanical or pneumatic detection via aspiration (fuses)	Water-based fire extinguishers	-	-	Water mist batteries
	Buses					Chemical powder



## DETECTION SYSTEMS

- **OPTIMAX**
- **PREMIUM**

## INTELLIGENT

Analog and algorithmic systems with voice evacuation.

## CONVENTIONAL

Option for remote access via TCP/IP for system management.

## SPECIALTY SYSTEMS

- HIGH SENSITIVITY LASER DETECTION VIA ASPIRATION
- LINEAR THERMAL DETECTION VIA HOT-MELT TECHNOLOGY OR FIBER OPTICS
- SPECIAL TEMPERATURE PROBES
- THERMO GRAPHIC CAMERAS
- ASSORTED ATMOSPHERES

## AUTOMATIC PROTECTION SYSTEMS

### SPRINKLERS

- SPRINKLERS
- VALVE CONTROL SYSTEMS
- VALVES

### FOAM

- CONTROL VALVES
- STORAGE TANKS
- FOAM PROPORTIONERS
- PROTECTION OF FLAMMABLE LIQUID STORAGE TANKS AND TROUGHS
- GENERATORS
- MONITORS

### WATER SPRAY

- HIGH/MEDIUM VELOCITY OPEN SPRAY NOZZLE
- VALVE CONTROL SYSTEMS

## FIRE SUPPRESSION SYSTEMS

### CLEAN AGENTS

- SIEX-HC™
- SIEX-HC™ S-FLOW
- SIEX-NC™ 1230
- INERT-SIEX™
- INERT-SIEX™ CFT
- SIEX™CO<sub>2</sub>

### WATER MIST

- UAC (cylinder groups)
- UAP (electrical / diesel pump unit)

### DRY CHEMICAL POWDER

- STORED PRESSURE
- CARTRIDGE OPERATED
- STATIONARY / SEMI-PORTABLE HAND HOSE LINE DRY CHEMICAL EXTINGUISHING SYSTEMS UNITS
- HAND HOSE DRY CHEMICAL EXTINGUISHER TRAILERS
- TWIN AGENT

### FOAM PREMIX

### AUTONOMOUS DETECTION

### KITCHEN SYSTEMS

## MANUAL FIRE PROTECTION

### HOSE REEL CABINETS

- WITH SEMI-RIGID HOSE
- WITH FLAT HOSE
- ALARM AND EXTINCTION CENTERS

### HYDRANTS

- DRY BARREL
- WET BARREL
- BURIED
- CUSTOM CABINETS FOR HOSE AND ACCESSORIES

### EXTINGUISHERS

- WATER
- DRY CHEMICAL
- CO<sub>2</sub>
- SPECIAL APPLICATIONS (non-magnetic, etc.)

## FIRE, SMOKE AND TEMPERATURE CONTROL

### SECTORIZATION

- **SMOKE CONTROL:**
  - KORTEX SMOKE FIX 600 C°
  - KORTEX SMOKE AUTOMATIC 600 C°
  - KOTEX SMOKE AUTOMATIC 1100 C°
- **FIRE CONTROL:**
  - KORTEX FIRE E
  - KORTEX INSULATION FIRE EW
  - KORTEX RAIN FIRE EI

### ELECTRONIC MECHANISMS OF CONTROL

### EXPULSION OF SMOKE

- LOUVER (LAM)
- TWIN FLAP

