



Reliable fize extinguishing systems



EVERY SECOND COUNTS, WHEN A FIRE STARTS!

#### 18 YEARS OF TRADITION

INTERNATIONAL REFERENCES AND RECOMMENDATIONS

PRESENT IN MORE THAN 25 COUNTRIES AND 5 CONTINENTS

INTERNATIONAL AND SLOVENIAN CERTIFICATES

SOLUTIONS FOR PROTECTION OF YOUR HOME

PROFESSIONAL SOLUTIONS FOR INDUSTRY

SPECIALISTS FOR FIRE CLASS F

SELF-ACTIVATED SOLUTIONS



### YOU AGAINST THE FIRE!

Bonpet - The best way of protecting lives and property.

»The great and innovative idea brought safety into working and personal spaces. Many costumers already talk about, how the devices saved their lives and belongings.«

»Only the highest expectations are those, which assure us the perfect reliability of our products, which is proven by the acquired certificate ISO 9001:2008 ...«



#### Respectfully,

when the fire breaks out, it is too late to think about how you could prevent it. The only right thing to do is, to be prepared all the time. And it is important how you are prepared. The hardest battles are exactly the ones fought against the fire, so it is necessary to invest into fire extinguishing systems, that will activate at the right place and at the right time. We are proud and glad to present to you fire extinguishing systems Bonpet.

### Bonpet – unique fire extinguishing liquid, environment and human friendly.

Bonpet liquid is known for its great effect on fire extinguishing with very little liquid and its unique property, which takes away the energy of the fire, and lowers the temperature in the area. Today, after fourteen years of operating not only domestically, but also in foreign markets, Bonpet courageously "lives" in many homes and companies. Slowly, but persistently, piece by piece, we are building the mosaic of succes.

### With Bonpet you will be stronger against the fire than ever before.

Bonpet fire extinguishing ampoule and fixed Bonpet fire extinguishing system are fire extinguishing products, which are self-activated. When you install them into your premises, they become a part of your collective and constantly, 24 hours a day, check if a fire broke out. The great and innovative idea brought safety into working and personal spaces. Many costumers already

talk about, how the devices saved their lives and belongings. Our greatest motivation for constant development of new products is exactly your contentment. We try our best to exceed your expectations and to include your needs and wishes for safer living.

### We assure reliability with strict measures in the production process.

Only the highest expectations are those, which assure us the perfect reliability of our products, which is proven by the acquired certificate ISO 9001:2008, released by Bureau Veritas. The fact that all our devices and systems had turned on and extinguished the threats when it was necessary, also speaks on our behalf.

#### Bonpet liquid has adopted many shapes.

Your needs are guiding us into a development of new products, which all have in common our unique Bonpet liquid. That is how all our products have been made: automatic fire extinguishing ampoule, fire spray, fixed firesafety system, BFE extinguisher, extinguishing grenade, automatic fire extinguisher, fire extinguishing trailer and kitchen fire extinguishing system. Your problems or your restrictions while extinguishing fire, are our challenge, to develop and improve our existing and newly created fire extinguishing products.

#### With us you are safe against the fire!

Matej Škerbič, direktor



### LET THE CLIENTS SPEAK

#### **BONPET AUTOMATIC FIRE EXTINGUISHING AMPOULE, SLOVENIAN CUSTOMERS:**

- HSE Velenje
- Petrol
- Petrol Energetika
- KZ Sevnica
- Aguafill (Yulon)
- ZZV Maribor
- TEŠ
- Cetis
- Telekom Slovenije
- Toplarna Ljubljana
- · Banka Slovenije Zavarovalnica Triglav
- Zavarovalnica Sava
- Zavarovalnica Adriatic Slovenica
- Thermana Laško

#### **FIXED FIRE-SAFETY SYSTEMS. SLOVENIAN CUSTOMERS:**

- Gorenje
- Lafarge cement
- Arcont
- Savske elektrarne • SGS
- OMV Vrtojba Komel Hoče
- Tanin Sevnica
- · Gospodarska zbornica Slovenije
- Elrad International

#### **FOREIGN USERS:**

- NAFFCO
- Transocean
- Gazprom Rusija
- Bridgestone
- NATO
- Mercedes, Ford and Hyundai Siemens
- Toshiba
- · Sanyo electric
- HP
- Holiday Inn
- Olympic Games Rio 2016
- ... and many other satisfied customers!

Both fires were quickly extinguished with Bonpet's self-activated fire extinguishing ampoules. Damage was minimal due to the efficient fire extinguishing capabilities and it did not affect the ability of transformer distribution station and transformer cell. When the first fire broke out only one contact was damaged, which can be seen from the pictures. Comparing the data we have collected from other fires in transformer cells, we have estimated that due to the fast fire extinguishing, we have saved from 80.000€ to 120.000€ of the average damage cost; in this price the cost of not operating is not included. \*\*

Petrol Energetika d.o.o., Jurij Bizjak, field of electricity

\*\* Fire, which has suddenly started in the garbage bin on the container platform, was dangerously close to our offices, but luckily it did not surprise our security guards. With the help of Bonpet's fire extinguishing ampoule, which was thrown into the center of the fire, the threat was successfully removed and it prevented the fire to spread to the building. Material costs were reduced and lives of our employees were not in danger. Bonpet's fire extinguishing ampoule has proven its efficiency in accordance with its given properties and assurance. \*\*

Podjetje Promišlenoje Snabženije, Rusija, Genkin G.F., director

Bonpet fixed fire-safety system which includes Bonpet liquid, was installed on vacuum line, where the overheating and melting took place. The overheating caused the ignition of a PVC plate, which lead to the activation of fixed fire-safety extinguishing system. This happened on 18th of July 2007 at 1:38 in the morning. Two hours later vacuum line was ready to work, because there was no damage done due to the fast intervention of the fire extinguishing system. \*\*

Gorenje d.d., Peter Kobal, assistant manager of investment and maintenance

### TRADE MARKS AND APPLICATIONS



#### **VERTICAL SOLUTIONS IN YOUR HOME AND COMPANY:**

- ELECTRICITY PRODUCTION AND DISTRIBUTION
- OIL PRODUCTION AND DISTRIBUTION
- RETIREMENT HOMES AND SHELTERED HOUSING
- COMMERCIAL LAUNDRIES
- CHEMICAL INDUSTRY AND WASTE MANAGEMENT INDUSTRY
- FLATS AND HOUSES
- PRODUCTION AND INDUSTRY
- HEALTH CENTRES AND HOSPITALS
- VEHICLES, VESSELS AND PUBLIC TRANSPORT
- SCHOOLS AND PUBLIC INSTITUTIONS
- TELECOMMUNICATIONS AND IT EQUIPMENT
- PRINTING AND PAPER INDUSTRY
- BANKS AND INSURANCE COMPANIES
- HOTELS, KITCHENS AND COTTAGES
- OTHER SERVICE ACTIVITIES











### **BONPET LIQUID** AQUEOS SOLUTION THAT EXTINGUISHES, COOLS

### AND MAKES REPEATED IGNITION IMPOSSIBLE

#### Made by a unique formula.

»The gasses, that are produced during the endothermic decomposition of Bonpet liquid, suffocate fire directly on burning surface ...«

Bonpet liquid is a water solution of inorganic salts and organic compounds. Contact of a water solution and a fire causes, that the energy from a fire is used to heat and evaporate water and for endothermic decomposition of chemicals added in fire extinguisher.

#### Endothermic reaction and the release of gasses, suppressing fire on its surface.

The components of Bonpet liquid cause a fast transport of the heat on a chemical part, using water when they get in contact with hot surface. Wet chemicals decompose into gasses (CO<sub>3</sub>, N,) which suffocate fire directly on burning surface, by preventing fire to get to the oxygen.

The gasses suffocate fire directly on burning surface (intensive cooling and approximately 60-times bigger volume comparing to the size of a drop) due to this relatively small quantity of chemicals is needed to effectively put out a fire.

#### Compared to a gas extinguisher

By its effectiveness of extinguishing can be compared to extinguishing with gas. The difference is that with Bonpet liquid you do not have to fill up the whole room, just a thin layer of few millimeters above the surface of a fire is enough. While decomposing endothermically, Bonpet liquid takes some 10 times more energy from a burning surface, than gas would. Extinguishing a fire with gas can cause reignition, if the gas runs off too quickly. However, that cannot happen while using Bonpet liquid.

#### Compared to a water extinguisher

The amount of water for the same extinguishing effect, is higher when extinguishing with only water, especially because it is really hard to extinguish a fire on a vertical surface. After conducting a series of tests on an A standard fire with 6% of Bonpet liquid solution, our results have shown, that we have used 20-times smaller consumption of wet chemicals than extinguishing with water. This also means, that the collateral damage caused by a fire extinguishing product is smaller when extinguishing with Bonpet liquid.

#### Bonpet liquid prevents the fire to re-ignite

Non-decomposed components of Bonpet liquid that remain on the surface after the fire has been extinguished, have the ability to disintegrate and cool the surface, if there is a slight increase of temperature.

#### Tests have shown:

After conducting standard fire extinguishing tests our results have shown, that only a small amount of Bonpet liquid is necessary to extinguish a fire. The only thing that needs to be done is to coordinate appropriate input of fluid dynamics, which depends on the intensity and the class of the fire. Experiments were carried out on our own and based on our own findings on the effectiveness of extinguishing and according to the requirements of the examiners.





»After conducting

extinguishing tests our

results have shown,

that only a small

amount of Bonpet liquid is necessary to extinguish a fire.«

#### Comparison chart of different extinguishing media

	Bonpet liquid	CO <sub>2</sub>	Dust	Foam	Water
A-regular fire (solid burning material)					
B-fire of inflammable liquids(oil)					
F-fire of organic fats and oil					
Efficiency					
Cooling effect					
Mixture with water					
Self-activated function					
Usable in fixed fire-safety systems					
Human and environment friendly					
Collateral damage					

\* Bonpet liquid can, if not cleaned off for longer time, cause corrosion on non-ferrous metals (copper, brass).

LEGEND: - Yes - partly, conditional - No



# PRODUCTS, FILLED WITH BONPET LIQUID

	AUTOMATIC FIRE EXTINGUISHING AMPOULE	EXTINGUISHING GRENADE	FIRE EXTINGUISHING SPRAY	FIRE EXTINGUISHER 2 L / 6 L	AUTOMATIC FIRE EXTINGUISHER	FIXED FIRE-SAFETY SYSTEM	MINI STABLE SYSTEM  ***********************************	FIRE EXTINGUISHING TRAILER
Function	self-activated	manual	manual	manual	self-activated	self-activated / manual	self-activated / manual	manual
Life expectancy of a product	10 years	5 years	2 years	20 years	20 years	20 years	20 years	at least 10 years
Warranty	10 years	2 years	1 year	2 years	1 year	1 year	1 year	2 years
Maintenance cost	none	none	none	in accordance with law	in accordance with law	determined with contract	determined with contract	determined with contract
Fire class	A, B, F	A, B, F	A, B, F	A, B, F	A, B, F	A, B, F	A, B, F	A, B, F
Dimensions	length 300 mm, ¢60 mm	height 200 mm, ¢60 mm	height 300 mm, ф65 mm	375 mm / 580 mm	check out page 17	depending on the project	depending on the project	glej stran 22
Weight	1,2 kg	850 g	800 g	4 kg / 10,2 kg	4 kg / 7 kg /12,8 kg / 25,7 kg	depending on the project	depending on the project	Bonpet 500: 1300 kg Bonpet 750: 1550 kg Bonpet 1000: 2200 kg
Volume	600 ml	500 ml	600 ml	2 L / 6 L	2 L / 4 L / 6 L / 12 L	depending on the project	depending on the project	500 L, 750 L, 1000 L
Purpose of use	Self-activated fire extinguishing of an indoor area.	Helping to extinguish any initial fire.	Helping to extinguish any initial fire.	Efficient for extinguishing any starting fires.	Automatic extinguishing of initial fires in closed places and individual machine parts.	Protecting assets, especially in the case of a open fire and when larger areas or machines are in a fire risk.	Fire extinguishing system for kitchens or other smaller areas.	Extinguishing any type of fire even those that are harder to reach.
More about product find on	page 12	page 14	page 15	page 16	page 17	page 18	page 20	page 22

Fire extinguishing effects: A-regular firelsolid burning material) B-fire of inflammable liquidsloil) F-fire of organic fats and oil

### SOLUTIONS IN YOUR HOME ...

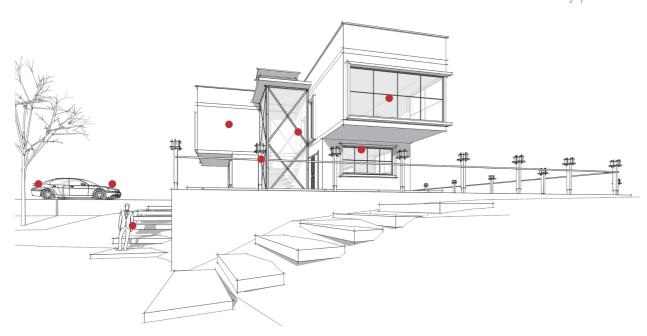
### ... AND IN YOUR COMPANY

#### FIRE EXTINGUISHING SPRAY

- vehicle / vessel
- kitchen
- workshop
- hallway

# AUTOMATIC FIRE EXTINGUISHING AMPOULE

- kitchen and boiler room
- electrical cabinet
- server rooms and cabinets
- business and auxiliary premises



#### FIRE EXTINGUISHER

- boiler room
- hallway
- workshop
- business premises
- auxiliary premises

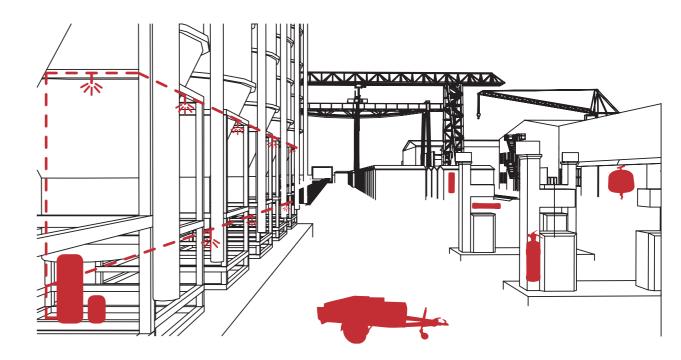
#### EXTINGUISHING GRENADE

- workshop
- boiler room
- hallway
- places for protection
- security guards on by-pass

### Ó

### AUTOMATIC FIRE EXTINGUISHER

- protection of endangered areas
- machines and devices
- boilers and boiler rooms
- crane lifts



#### FIXED FIRE-SAFETY SYSTEM

- machines and devices
- boilers and boiler rooms
- transformer stations
- aggregates
- distribution (electricity, oil, diesel)

#### FIRE EXTINGUISHING TRAILER

- protection of industrial zones and places with limited access
- ... AND OTHER SPECIAL SOLUTIONS



### AUTOMATIC FIRE EXTINGUISHING AMPOULE

The most effective product for extinguishing a fire in small and indoor areas without being constantly present and a fire extinguishing product with an esthetic appearance.

»It takes the energy from the fire and starts to cool the area. As a side product of this endothermic reaction...« Bonpet's automatic fire extinguishing ampoule is indispensable everywhere you assume that the temperature will rise rapidly, when the fire starts (ceiling or wall close to the potential location for a fire). The best effect for extinguishing fires of class A is when the ampoule covers approximately 8 m<sup>3</sup> of an area. Suitable for extinguishing fires of classes A, B and F.

#### Advantages:

- Self-activation.
- Usable in indoor areas.
- Easy to assemble or dismantle.
- It has a 10-years product life expectancy and therefore 10-years warranty.
- No need for maintenance.
- Works for all fires of classes A,B or F.
- Human and environment friendly (no halons).
- Can be thrown into the origin of a fire.
- No false alarms, it activates only when the temperature rises.
- Does not causes any damages during the fire extinguishing and its remaining components are easily cleaned.
- Aesthetic look.
- Slovenian product.

#### **Function**

When a fire breaks out in a small enclosed area and temperatures rise, extinguishing liquid simultaneously begins to heat and as a result of that the liquid starts to extend in the glass ampoule. When the temperature of the liquid extinguisher is approximately 85°C + 5°C the glass breaks into pieces which allows the liquid to drop into the area where endothermic process begins. It takes the energy from the fire and starts to cool the area. As a side product of this endothermic reaction, small quantities of nitrogen and carbon dioxide are released. Their function is to prevent the entrance of oxygen to the burning area. Remaining components that do not decay form a protective layer over the surface of the extinguishing liquid, which prevents re-ignition.

#### Additional possibilities

We can protect the Bonpet ampoule with a safety net to prevent glass injury.

#### Three ways of implementation

Automatically, by throwing or as mixture with water.

#### Pick your color

Ampoule is available in many color combinations and in combination with chrome: white, white-chrome, red, redchrome, blue-chrome, silver. If you order a large amount of ampoules, they can be manufactured in other colors by arrangement.

#### Technical characteristics

Dimensions: 300 × 60 mm Combine weight: 1200 g Volume: concealed glass ampoule contains 600 ml of Bonpet liquid.

#### We conducted series of testing

In Slovenia Bonpet liquid was tested by The Slovenian National Building and Civil Engineering Institute in Ljubljana (IP 653/99-530-2: extinguishing an oil fire in the kitchen, P 651/99- 530-1: extinguishing a fire of highly flammable fluids).

Based on the technical agreement number URSZR GS 01 02 01 00, which was issued by the Ministry of defense of the Republic of Slovenia, Management of protection and rescuing, we issue the statement of comformity for the ampoules.

#### We have added aesthetics to functionality

Even though people should have bought a fire extinguisher, they do not because of their industrial looks. That is why we have developed a fire extinguishing ampoule that has an aesthetic look and looks like a lamp. You can even get them in your favorite color.



### EXTINGUISHING GRENADE

## With the "throw and extinguish" way we have added a new dimension of convenience and safety.

»...in smaller concealed places, where with throwing the grenade we can actually extinguish the fire from a distance.« Bonpet grenade is used for extinguishing fires of classes A, B and F, in smaller concealed places, where with throwing the grenade we can actually extinguish the fire from a distance. Grenade is the most practical fire extinguishing product, which can be attached to an accessible and frequent enough place. It can be used by security guards on longer security patrol.

#### Advantages:

- The grenade can be thrown in to the source of a fire.
- Does not causes any damages during the fire extinguishing and its remaining components are easily cleaned.
- Human and environment friendly.
- 5-years product life expectancy and 2-years warranty.
- No maintenances costs.
- Easy to assemble or dismantle.
- Slovenian product.

#### **Function:**

The grenade is thrown in to the source of a fire.

#### Technical characteristics

Dimensions: 200 × 60 mm Combined weight: 850 g

Volume: 500 ml of Bonpet liquid in

plastic ampoule



### FIRE EXTINGUISHING SPRAY

#### Effective product for extinguishing all kinds of initial fires.

»... innovative and universal product, reusable and meant for safety purposes.« Fire extinguishing spray Bonpet is innovative and universal product, reusable and meant for safety purposes. It is an effective side product for extinguishing fires of classes A, B and F in your home, garden, when camping, in the car, etc.

#### Advantages:

- It is easy and safe to use.
- 2-years product life expectancy and 1-year warranty.
- No maintenance costs.
- Human and environment friendly.
- Reusable.
- Slovenian product.

#### Way of extinguishing

Manually. We remove the safety switch, and we point a sprayer to the way of a fire, while pressing on the handle to extinguish a fire, with the distance of at least 1 meter.

#### Technical characteristics

Dimensions: 300 × 65 mm Combined weight: 800 g Volume: 600 ml of Bonpet liquid Range: 4-5 m

Extinguishing ability: 5A, 13B, 5F Time of extinguishing: 40 seconds



### FIRE EXTINGUISHER 2 L / 6 L

### Easy and safe to use, a fire extinguisher for everyone who likes classics.

»...especially for extinguishing burning fats and oil in restaurants, kitchens, cantinas, engine houses, workshops...« The fire extinguisher is used for extinguishing initial fires, especially for extinguishing burning fats and oil in restaurants, kitchens, cantinas, engine houses, workshops, farms, warehouses, etc. Fires of classes A,B and F.

#### Advantages:

- Manual usage.
- Usable everywhere.
- Human and environmental friendly.
- 2-years warranty and 20-years life expectancy, if properly mantained.
- Slovenian product.

#### Technical characteristics BFE 2L

Dimensions: 375 × 110 mm Combined weight: 4,0 kg Extinguishing ability: 8A, 55B, 25F Volume: 2 L of Bonpet liquid

#### Technical characteristics BFE 6L

Dimensions: 580 × 150 mm Combined weight: 10,2 kg Extinguishing ability: 27A, 144B, 75F Volume: 6 L of Bonpet liquid



### AUTOMATIC FIRE EXTINGUISHER

We gave new dimension of usability to classic fire extinguisher.

»Different activation temperatures, from 57°C to 182°C, depending on the customer's request. « Automatic fire extinguisher is used in indoor areas for extinguishing initial fires types A, B and F. It is suitable for installation in boiler rooms, workshops, for protection of certain sets of machines as well as other areas exposed by burning fats, oils or oil.

#### Advantages:

- Automatic usage.
- Possibility for different activation temperature.
- Adapting to the needs of the size of the space with the size of the vessel (2, 4, 6 or 12 L).
- 1-year warranty and 20-years life expectancy, if properly mantained.
- Slovenian product.

#### Activation

When the fire breaks out comes to a rapid increase of temperature. The ampoule on the sprinkler nozzle falls apart and pressure in tank thought nozzles steadily begins to put/spread out extinguish liquid on the fire.

The place of installation of automatic fire extinguisher must be available for maintenance and control pressure gauge.

#### Technical characteristics

Extinguisher type	Dimensions	Weight (kg)	
B2 - 2 L	380 × 110 mm	4,0	
B4 - 4 L	430 × 140 mm	7,0	
B6 - 6 L	360 × 218 mm	12,8	
B12 – 12 L	350 × 300 mm	25,7	





### FIXED FIRE-SAFETY SYSTEM

Simple, reliable and uncomplicated way to protect your wealth and property, especially in large open areas threatened by fires.

»Bonpet's fixed firesafety system offers not only self-activation but also manual activation for extinguishing a fire.«

»Based on the inspection of the building and of the drawings of the rooms with technological equipment the designs are elaborated with taking into account the valid rules regulating the field of active fire protection.«

Bonpet's fixed fire-safety system uses Bonpet liquid and it was designed as zone fixed fire-safety system, which can be used indoors. It is used to extinguish fires of classes A, B and F. Bonpet's fixed fire-safety system offers not only self-activation but also manual activation for extinguishing a fire. It is suitable for varnishing chambers, transformers (outdoor and indoor), hydraulic generators, vacuum thermoforming plastic machines, warehouses of inflammable fluids, wood industry (filters, etc.), warehouses, tunnels (in testing), etc.

#### Advantages:

- Does not causes any damages during the fire extinguishing and its remaining components are easily cleaned.
- It is human and environment friendly.
- At regular maintenance unlimited product life expectancy.
- Cost of maintenance are signed with a contract.
- Slovenian product.

#### **Function**

It works by spraying the fire extinguishing liquid. The installation of pipelines and jets is similar to the ones for water spraying system, the only difference is the quantity of extinguishing used. The main purpose when using water spraying system is, that the spraying water enables intervention of firefighters and that is why it has to spray longer. The main purpose of Bonpet's fire extinguishing liquid, is to extinguish the fire and because of its effect the spraying time is shorter (around 20 seconds) and it does not need an irrigation. Because of this extraordinary features the tank

contain relatively small amount of Bonpet's liquid (calculated according to an area of extinguishing).

Nitrogen creates pressure in the container with the extinguishing liquid Bonpet. Flow of the extinguishing liquid into the pipeline is suppressed with automated ball valves which are opened by a signal from the fire fighting control centre and thus enable the flow of liquid to the nozzles in the fire extinguishing zones.

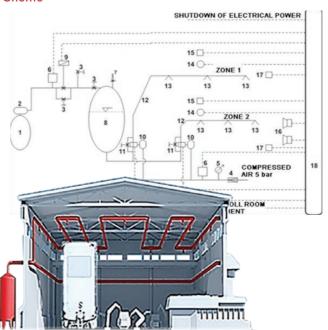
#### Technical agreement

Ministry of defense of the Republic of Slovenia has issued a technical agreement in year 2001, number URSZR GS 01 02 01 00.

#### Equipment

Fixed fire-safety extinguishing system is formed from elements of mechanical and electrical equipment and is one of the low pressure systems with a working pressure of extinguishing up to 5 bars. Pipe and tube fittings used for construction of a piping system have 7,5 bar of a low pressure test (plumbing installation).

#### Sheme



#### Planning

Based on the inspection of the building and of the drawings of the rooms with technological equipment the designs are elaborated with taking into account the valid rules regulating the field of active fire protection. The determining of the number of fire extinguishing zones which in turn depends on the lay-out of plant and equipment or material in the rooms shall constitute the basis for calculating the necessary quantity of Bonpet liquid. The largest quantity stipulated per each container determines the size of the pressure container - this determines also the size of the module, which contains the elements of the plant with the container.

#### Procedure of installing the system

As a part of installing a fixed fire-safety extinguishing system we make and prepare:

- a project documentation, assembly, system pressure test,
- filling in with the fire extinguishing liquid Bonpet,
- inspection of the plant by a company authorized to inspect the systems of active fire protection,
- training of staff who will operate the stationary extinguishing plant (to be appointed by the client),
- certificate of acceptance of the plant by the client.



### MINI STABLE SYSTEM

# Self-activated, effective and easy to use for extinguishing fires in kitchens or smaller flammable risky areas.

»We can adjust mini stable system to the client needs on manner that we protect specific devices, places or any other worktop...« "Mini" stable system is suitable for extinguishing fires of classes A, B, F and it has great effect at extinguishing with a low amount of Bonpet liquid.

#### Advantages:

- No false alarms, system only activates when the temperature rises.
- Does not causes any damages during the fire extinguishing and its remaining components are easily cleaned.
- Environmentally friendly.
- Slovenian product.
- Unlimited product life expectancy with 1-year warranty.
- Maintenance is bounded only on switching the Bonpet's liquid.
- Extinguishing without sealing a premises (in comparison when extinguishing with CO<sub>2</sub>).
- The extinguishing is not subject to prior evacuation of staff.
- It creates a layer on surface to prevent another ignition.
- Maintenance is not technically difficult.
- Unlimited options for detecting and consequently extinguishing a fire in the early stages.
- Easy to install the flexible pipes for detecting the fire; the fire can be detected on all the locations with high stage of fire hazard, like on inaccessible locations.
- No outside factor can trigger the detector (like vibration, shock, high concentration of oil, fat or dust).
- Source and voltage cannot trigger the detector..

#### Technical characteristics

Capacity of extinguishing medium: from 6 to 12 L

Capacity of propellant: from 1 to 4 L

Working pressure: max 16 bar

Time of activity: from 20 to 30 seconds (depend upon settings of system)

Extinguishing effect/zone: block of 8 m<sup>2</sup> or 10 m<sup>2</sup> surface

Number of extinguishing nozzles: up to max 9

#### **Function**

It functions as a special pipe that acts like a heat detector. The pipe is flexible and elastic and it can be installed everywhere. On one end the pipe is connected to a special valve with a trap, on the other end to a manual trigger. The pipe is under the pressure of 18 bars, diameter is 6 mm. The pipe transforms and activates at the temperature of 160-180°C. In case of a fire high temperature and flames cause the explosion of the pipe which leads to a drop of a pressure in the pipe causing self- activation and extinguishing a fire.

#### Option of manual activation

It can be triggered by pressing on an activation button at the end of the flexible pipe. A component of the activation button is a manometer that measures the pressure in the pipe.

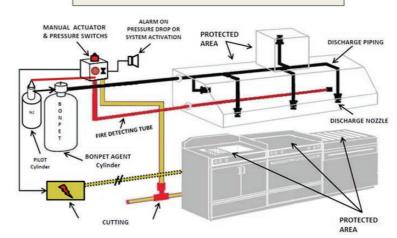
#### Pipeline

Behind the tank is a vent DN15 and behind of that vent, is a pipeline made of copper or galvanized iron or stainless steel, depending if it is installed indoor or outdoor. Pipes must be tested with a pressure test of 20 bars.

#### Different applications

We can adjust mini stable system to the client needs on manner that we protect specific devices, places or any other worktop.

### BONPET FIRE TRACING LS-FT1 RESTAURANT FIRE SUPPRESSION SYSTEMS



Reservoir must be under constant pressure of 16 bars (at the temperature of 20°C).

Working temperature of the system is from 0°C to 60°C.

Propellant is nitrogen (N<sub>2</sub>).

Piping and nozzles must be installed above a kitchen block and in the catch drain canals.

Piping, dimension and location have to be certified by registered engineer.



### FIRE EXTINGUISHING TRAILER

# For extinguishing all types of fire, even on places that are unreachable for firefighting vehicles.

»...because of its size and mobility ideal for extinguishing fires of classes A, B and F, outdoor or indoor, in industry (chemical, automobile, oil), docks, airports ...« Fire extinguishing trailer is because of its size and mobility ideal for extinguishing fires of classes A, B and F, outdoor or indoor, in industry (chemical, automobile, oil), docks, airports (extinguishing aircraft tires), all kinds of warehouses, varnishing chambers, electrical substation, gas stations and for extinguishing all means of transport, plastics, cellulose, tires, etc.

#### Advantages:

- At least 10-years product life expectancy and 2-years warranty.
- Environment and human friendly.
- Slovenian product.
- Maintenance is bounded only on Bonpet liquid replacement.

#### Available in three versions:

BONPET 500, BONPET 750, BONPET 1000

Fire extinguishing trailer	BONPET 500	BONPET 750	BONPET 1000
Dimensions	3760 × 1760 × 1080 mm	3760 × 1760 × 1080 mm	dvoosna
Weight	1300 kg	1550 kg	2200 kg
Volume of Bonpet liquid	500 L	750 L	1000 L
Length of pipes	25–30 m	25–30 m	25–30 m
Length of spurt	30 m	30 m	30 m
Drive	Petrol	Petrol	Diesel

Comment: Delivered on demand.

### BONPET DEMO CENTER

Purpose of Demo Center is to show the Bonpet way of firefighting, mostly to our partners but also to everyone Interested in demonstration of various type of media and different situations such as, for example:

- Extinguishing with automatic fire extinguishing ampoule.
- Extinguishing by throwing a grenade or ampoule.
- Extinguishing with a mixture of Bonpet liquid from the ampoule with water. (all four demonstrations are shown in Bonpet house size 8 m³)
- Extinguishing flammable liquids with fire extinguisher, automatic fire extinguisher with a sprinkler nozzle and with a stable system.
- Extinguishing car tires.
- Extinguishing waste with a fire extinguisher.
- Extinguishing in an electric box with an automatic fire extinguisher ampoule.
- Extinguishing cooking oil with spray.
- Extinguishing gas cylinder with UNP (propane butane).
- Extinguishing various materials after pre-aranged agreement.





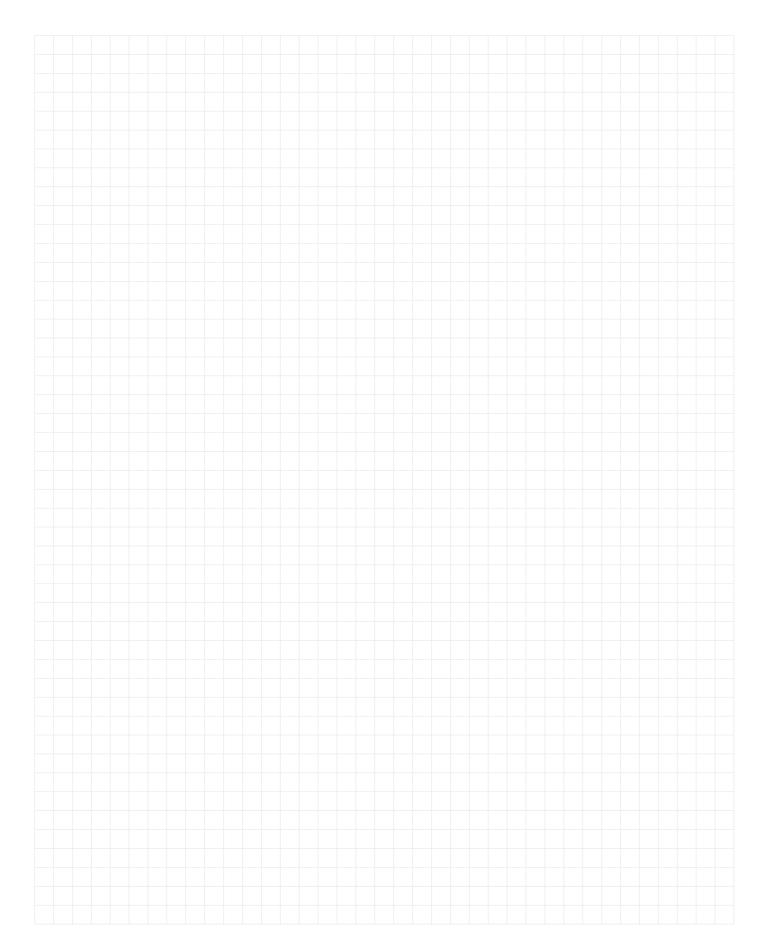


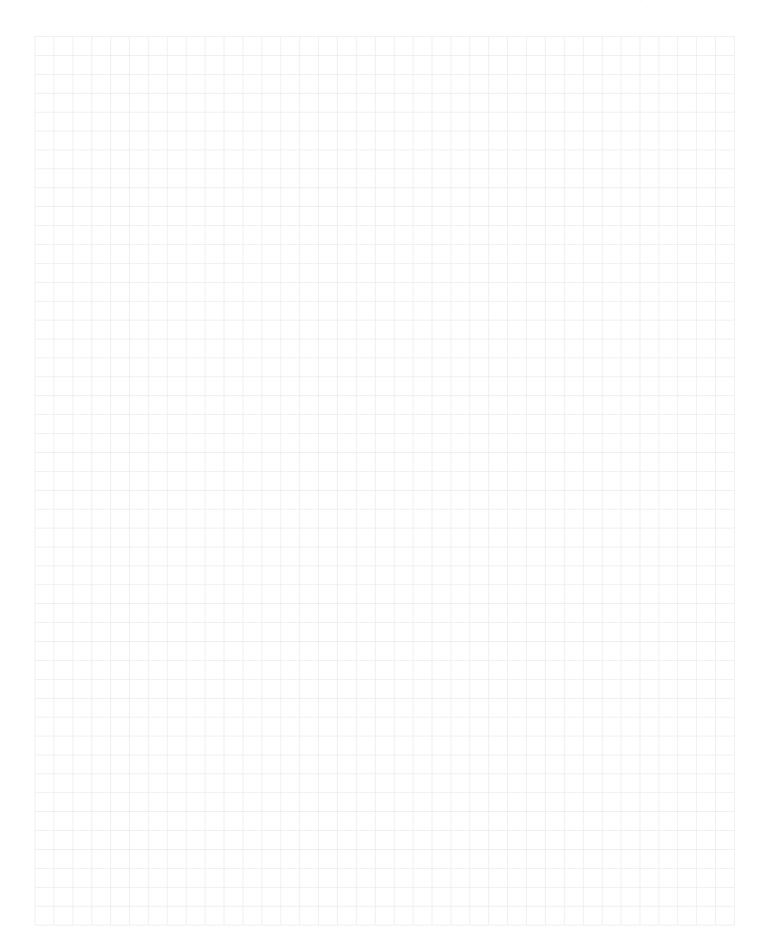




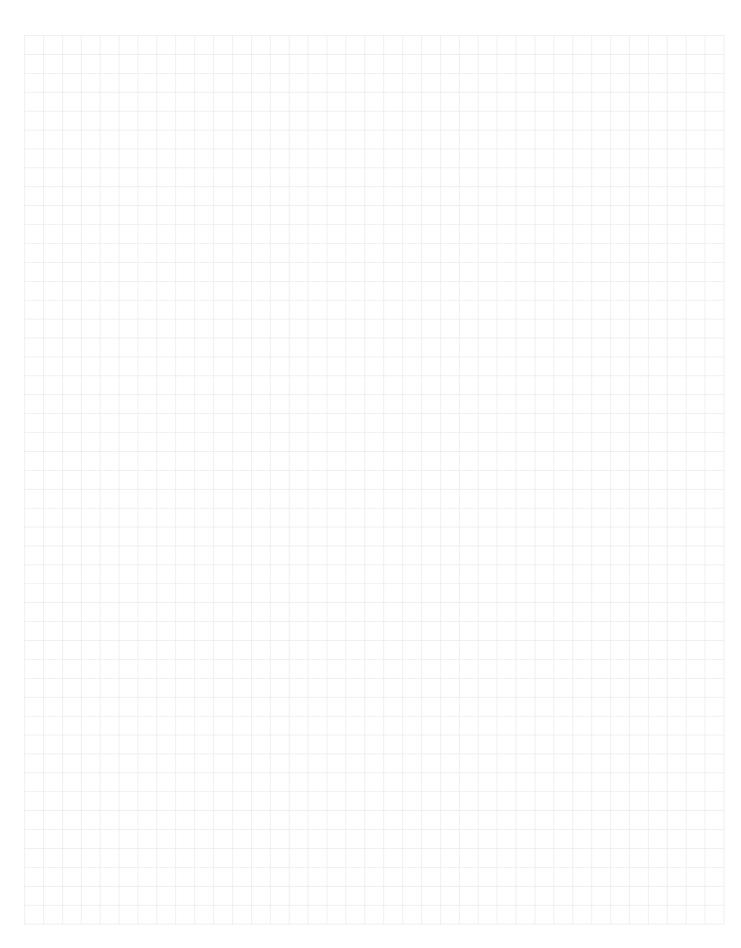












# SUCCESSFUL FIRE EXTINGUISHING WITH BONPET SOLUTIONS

Fire in mansard. Health care institute in Maribor

Overheating in boiler room, Kmečka zadruga Sevnica

The fire in armoire at trafo station, Aquafill Ljubljana (Yulon)

Fire in the premises of the company, Petrol energetika d.o.o

Fire in power transformer cell station, Petrol energetika d.o.o

Fire in private house (kitchen), Maribor

Fire in a private car Prebolo

Fire at the self-service gas station. Komel Hoč

Fire in a candle factory, Mozirje

Fire on a fishing boat, Norway

Fire on the bus, Sarajevo

### www.armour.gr

### **BONPET WORLDWIDE**



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