

FIREXPRESS[®]

First Strike Fire Fighting

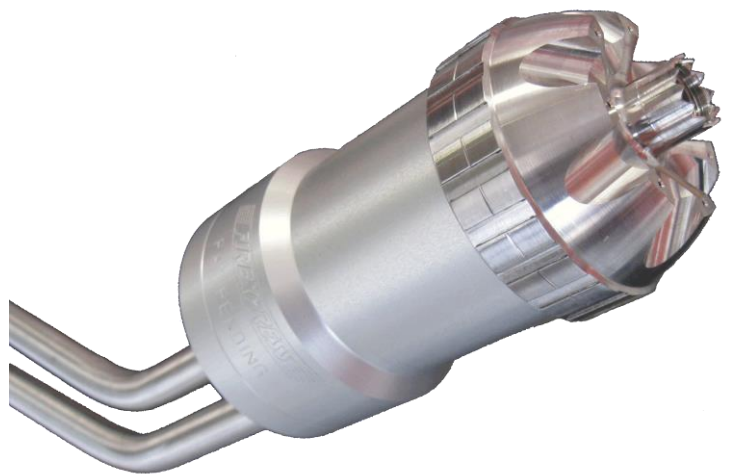


Mobile and More Effective
Than Ever Before

Welcome to Firexpress

At Firexpress we produce what we believe to be the best first response fire fighting equipment in the world. Back in 1998, Firexpress became the pioneer of converting the standard water mist sprinkling system traditionally installed in buildings into a mobile system, utilising the advantage of extinguishing fires with micro-drops.

Firexpress' patented dual nozzle produces extremely small water drops delivered in a precise narrow stream. The micro-drops create an enlarged surface resulting in app. 40 times more cooling as compared to conventional water spray. Fighting a fire with Firexpress micro-drops utilize the heat absorbing and steam generating capability of water to effectively displace Oxygen from the fire, hereby reducing the required amount of water dramatically. The unique construction of the Firexpress dual lance combining micro-drops and foam provides a First Strike Firefighting concept, designed to give an immediate first strike capability on a wide range of types of fires, from deep-seated Class A fires to difficult class B fires in polar solvent fuels and electrical fires class E.



The patented Firexpress dual nozzle



A firefighter can easily break a window with the Firexpress lance.

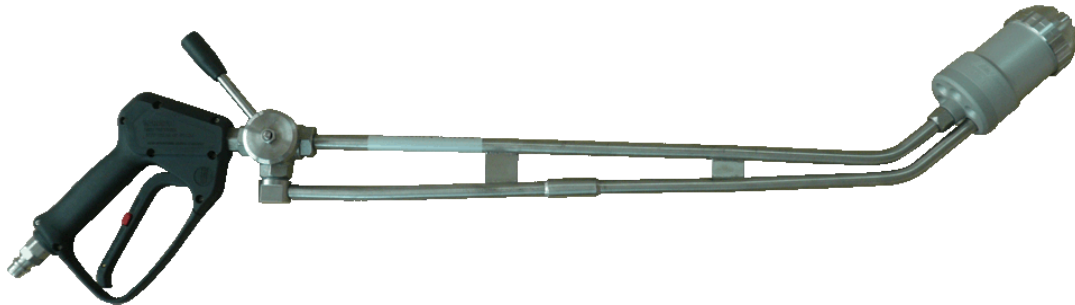
Since the start Firexpress has developed into a global company with distributors all over the world and production facilities in Europe and Asia.

We have in our product portfolio a range of systems able to satisfy any need for mobile and stationary fire fighting equipment. We are constantly improving these systems and developing new ones whenever a customer has a special requirement.

Welcome to the world of Firexpress, we are quite sure that you will be just as impressed with our products as our many customers already are.

The Lance with the Dual Nozzle

Micro-drops ↔ Foam jet



The Firexpress lance with its dual nozzle makes it possible to use two different methods of extinguishing fires. One, by spraying the fire with water micro-drops to absorb the heat, and effectively displace the oxygen from the proximity of the fire, two, by spraying a concentrated jet of foam to extinguish embers in fibrous materials and to seal burning liquids. By operating the selector handle, the firefighter can immediately change between spraying micro-drops and a concentrated jet of foam. The dual nozzle has been designed so a cavity spear to be inserted into the nozzle, providing the firefighter the ability to extinguish fires which are difficult to access directly like for example deep seated fires in the forest floor.



With the selector handle in the forward position, a concentrated jet of foam (compressed air foam) is produced. The foam adhering to the flammable material cool the burning material and creates an effective separation layer that shields the flammable material from the ambient air and improves the safety against back-burning. The foam which is highly effective on embers in fibrous materials and fires in flammable liquids.



With the selector handle in the backward position, a long-range cloud of micro-drops is produced. The micro-drops are highly efficient on most classes of fires with its high protection from radiant heat, superior cooling effect and displacement of oxygen from the proximity of the fire.

Firefighting with micro-drops immediate removes two of the three legs in the fire triangle (heat and oxygen), prevents re-ignition, use less water and conserves the environment.

Pump Driven Units

Firexpress has several standard systems with pump driven units. The pump driven units have separate water and foam tanks for optimal use of water and foam, which enables refilling during operations. The units are able to suck water from external water sources for continued firefighting or filling of the water tank.

Pump Driven Unit

The stand-alone pump driven unit consists of a self priming membrane pump driven by either an engine (petrol or diesel), an electric motor (230 or 380 volt) or a hydraulic pump and has an integrated foam dosing system with a 12 litre foam container. Water is supplied from a separate tank, e.g., the water tank in a fire engine. It is connected to the Firexpress dual lance via a discharge hose, which can be up to 100 metres long. A secondary foam dosing system can be connected to the unit, enabling switching between different foam types.



Tank Unit

The stand-alone pump driven unit can be integrated with a 300 or 600 (depicted) litre water tank. The unit can be mounted with bracket so that it easily can be moved, for instance inside a factory building by a forklift. The unit is also suitable for placing in the bed of a pick-up truck. It can be fitted with a suction system for sucking up water from external water sources up to 25 meter away such as lakes, rivers, or the sea. Various types of couplings for fire hoses, e.g. BS 336 and Storz can be mounted on the water tank for fast filling.



ATV / UTV

The Firexpress ATV/UTV is fitted with a pump driven unit and 50 metre discharge hose supplying the Firexpress dual lance for firefighting with micro-drop or wet CAFS. Separate water and foam tanks are incorporated into the back of the ATV. It is fitted with a suction system for sucking up water from external water sources such as lakes, rivers, or the sea. The Firexpress firefighting ATV (depicted) carry 140 litre of water and is suitable for one person whereas the UTV carry 300 litre water and is suitable for three persons



CAFS Fire Extinguishing Units

Firexpress has three standard units featuring CAFS technology. These units have tanks for premixed water and foam, which is pressurized by compressed air. The designs allow high water to weight ratios and are noise and pollution free. Operating the units is very uncomplicated due to their simplicity.

Fire Fighting Motorcycle

Firexpress Firefighting Motorcycles is equipped with two interconnected 25 litre tanks which with the Firexpress dual lance' ability to combine Micro-drops and CAFS and 30 metre discharge hose, makes it a true ultra-fast first response unit. The motorcycle is ideal for use in congested cities or on highways where different type of fires demands rapid intervention. The BMW F750/850 GS and R1250 RT motorcycles has been tested for structural integrity and riding stability.



CAFS Mobile Unit

The CAFS Mobile unit with the Firexpress dual lance and 50 litre tank can be mounted in rapid intervention vehicles or be used for stationary fire protection for medium sized fires in industrial buildings, warehouses or similar. The CAFS Mobile unit combines micro-drops and CAFS for more than 2 minutes of uninterrupted firefighting. The 30 metre hose provides the firefighter optimal conditions for extinguishing the fire from different positions. The unit can be equipped with wheels for easy transport over long distance



CAFS Backpack

The backpack is a powerful and compact unit which makes firefighting truly mobile. The ability to combine CAFS and micro-drops combined with the ability access confined spaces provide the fire fighter optimal fire fighting capacity and personal protection. The lance is a short version of the normal Firexpress dual lance, but with almost all the same features and benefits. The shorter lance makes movement easier in confined spaces. The Backpack is prepared for a second air bottle for usage with a breathing apparatus.



Firexpress CAFS Fire Extinguishing System

The Firexpress CAFS fire extinguishing units are immediately ready for use, powerful and highly effective in firefighting. Compressed air foam's large surface area secures an optimal cooling of the burning material and an efficient displacement of the Oxygen in the proximity of the fire. Further the compressed air foam reduces the surface tension and ensure a deeper penetration of the water into the flammable material leading to a high degree of safety against back-burning. The compressed air foam's good adhesion to both horizontal and vertical surfaces secures optimal efficiency not only for direct firefighting but also in preventive protection of objects at risk of fire. The excellent throw ranges of 12 to 16 m are achieved with compressed air foam, allow the fire fighter to keep a safe distance from the burning object, even in inaccessible places



A house fire in Sweden

Unique Advantages of the Firexpress Systems

The Firexpress systems offer a number of unique advantages that no other system can match



- Dual lance combines micro-drops and foam
- Fast temperature knock down
- Personal protection
- Approved for Class A, B and E fires
- Breaking windows
- Maximum utilization of water and foam
- Minimum use of water and foam
- 15-18 m range for micro-drops and foam
- Protecting the Environment
- Minimum water damage

Customized Solutions

Fireexpress' engineering team specialise in adapting the technology to meet customer's demands for customised firefighting products. Both the pump driven units and the CAFS fire extinguishing units are modular and can be configured to fit any need for fire fighting equipment installed under special conditions whether it is fixed installation or mounting on a vehicle, e.g. a purpose-built vehicle.

The water tank for a pump driven unit can be made to any size and with any dimensions. At the same time does the pump driven unit does not need to be immediately adjacent to the water tank as the pump is powerful enough to suck water over 25 metres either for refilling the water tank or direct firefighting. The ability to suck water from external water sources makes the pump driven unit very versatile and flexible. The water tank for a CAFS fire extinguishing unit can be made in many sizes and designed to meet the customer's requirement.



Royal Thai Police, Thailand

A 100 litre CAFS system with 50 meter hose skid mounted in a Ford Everest for use when escorting the Royal family.



Södertörn Fire Brigade, Sweden

A petrol version of the Pump Driven Unit installed in a traditional fire engine using the main water tank of the vehicle for its water supply.



Industrial warehouse

A wheeled 150 litre trolley with petrol version of the pump driven unit and 50 meter hose. The unit is ready for immediate operation



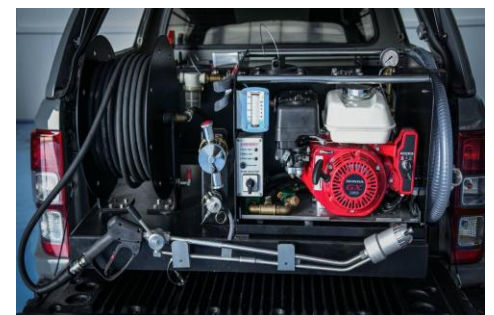
Aalborg Fire Brigade, Denmark

A fire and rescue UTV with a pump driven unit and 300 litre water tank installed in a Ranger UTV. A foldable rescue stretcher can be used for rescue purpose.



Ministry of Defence, UK

A diesel version of the pump driven unit with a noise reduction cover, protection roof and a 300 litre tank mounted in a trailer pulled by a Land Rover.



Royal Thai Palace, Thailand

A petrol version of the pump driven unit with 300 litre water tank installed in a Ford Raptor. It is mounted on a retractable skid for easy operation and refilling of the unit.



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