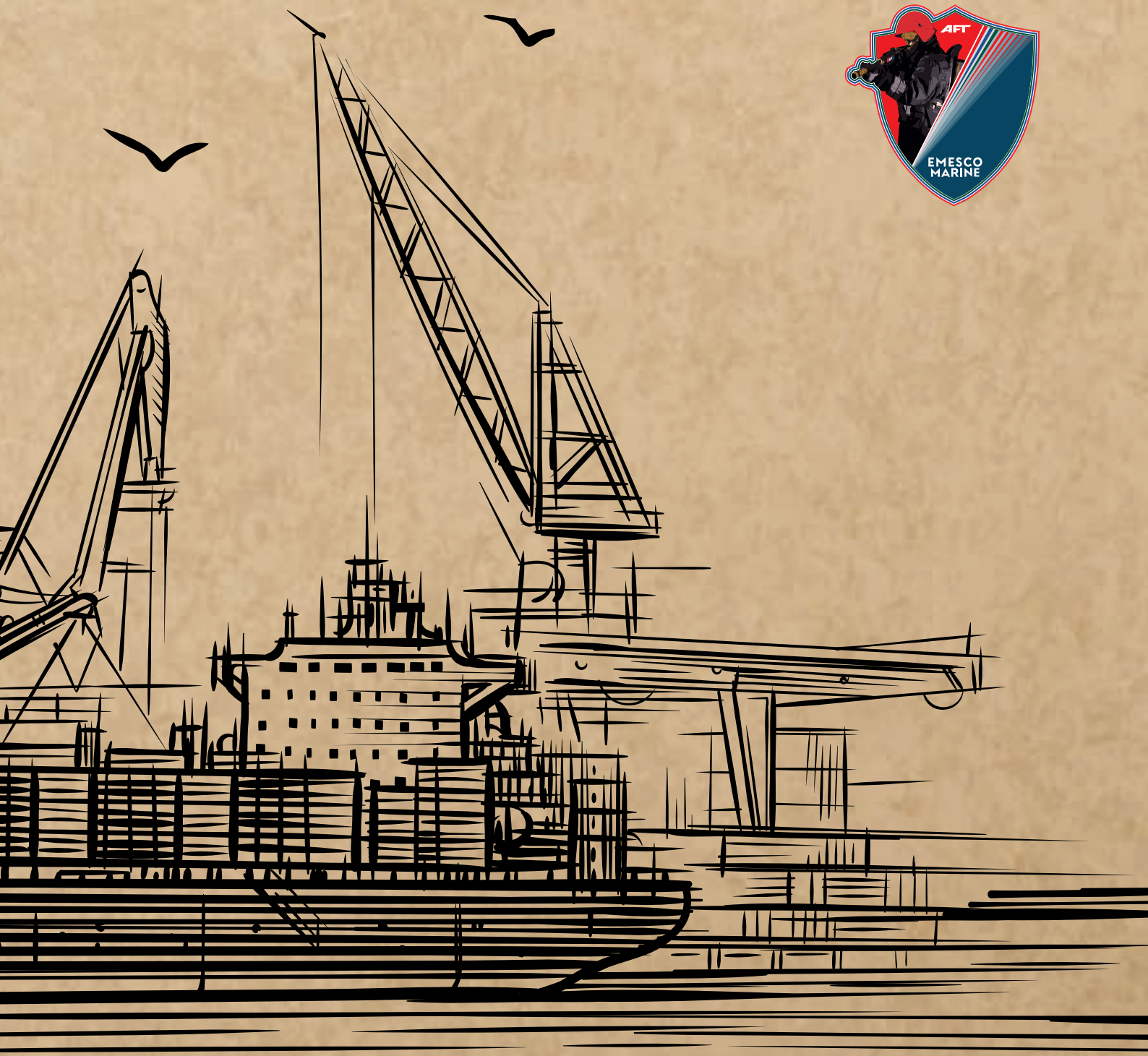


EMESCO MARINE

DESIGN ENGINEERING JOINT STOCK COMPANY

by EMESCO



LOOK AT OUR PRODUCT

ADVANCED FIREFIGHTING TECHNOLOGY

AFT was founded in 2001 in Germany. Its headquarters are in the city of Bohmte in the Osnabrück region of Lower Saxony, Germany.

With a commitment to excellence, AFT pioneers in delivering superior extinguishing performance while maintaining an impressively low water consumption rate through our innovative patented water mist technology.

AFT products embody cutting-edge technology in efficient firefighting. Drawing on advanced aerodynamic principles from flow engineering applications involving liquid and gas mixtures, AFT has crafted water mist firefighting systems that set a new standard in fire suppression.

Our portable and mobile water mist CAFS (Compressed Air Foam Systems) are designed to reduce response times, maximize efficiency, and control fire hazards at their earliest stage. Equipped with a specially engineered atomization nozzle, these systems produce ideal droplet sizes for superior heat absorption and extended reach.

Our product range, including backpack, trolley, and mobile systems, has garnered recognition as the finest low-pressure water mist suppression solutions available in the market today. What truly sets AFT apart from our competitors are our unwavering dedication to quality, exceptional transportation efficiency, cutting-edge technology, and a diverse array of product offerings.

AFT extinguishing systems are built to operate with either water or high-performance foam agents, available in sizes ranging from 6.8 to 1000 liters to suit diverse firefighting needs. Every extinguisher is meticulously developed and manufactured with high-quality precision parts, reflecting German engineering expertise at its finest.

Outstanding key features:

- Provides safe and superior extinguishing performance in different fire situations with water mist, foam, and compressed air foam (CAFS).
- Allows for repeated fire interventions with a single personnel and can be quickly refilled (recharged) in a very short time. There is no need to take the cylinders outside of the facility to refill them.
- No maintenance costs. An annual general inspection by your own personnel is sufficient.
- Provides superior extinguishing performance by intervening with a single product in different types of fires (fuel, oil, electric vehicles, chemicals, etc.)
- Offers efficient fire suppression with minimal water usage, making them an eco-friendly alternative to traditional fire extinguishing methods. Unlike conventional systems that rely on cylinders or bottles that require regular maintenance and refilling, our water mist systems eliminate the need to remove empty bottles from the facility. This results in significant savings in fuel and reduces emissions that would otherwise be generated by transporting these bottles back and forth for servicing.



← DEMO VIDEO



AFT HANDHELD SYSTEMS 6,8/01

The AFT new range of portable fire extinguishers is designed for versatile, all-purpose use, incorporating advanced patented technology. Our patented mixing system generates ultra-fine water mist droplets, ensuring rapid cooling through maximum heat absorption. This effectively suppresses fires while reducing oxygen levels in the affected area.

Flexible and efficient, the extinguishers can function as a water mist system or be transformed into a compressed air foam system by adding the recommended foaming agent, making them ideal for diverse firefighting scenarios.



PRODUCT	AFT 6,8/01
Filling capacity as per EN	6,8 L
Working Pressure	5,1 Bar
Operating time spray nozzle	28 Sec
Operating time jet nozzle	14 Sec
Operating temperature	Tmin +5°C; Tmax + 60°C
Lancing distance (approx)	15 m jet / 10 m spray/ S
Class A, B and F*	34A 183B 25F
Fire class A with water mist	8A
Approximate empty weight (without air bottle)	6 Kg
Dimensions (LxWxH) ca.	242 x 162 x 512 mm
Standards	DIN EN 3, TÜV, ISO 9001 (manufacturer)**

** Country and sector specific regulation have higher priority. If you have any questions, please contact Emesco



DEMO VIDEO



AFT BACKPACK SYSTEMS 10/02



The Backpack system is a portable unit designed to significantly reduce response time and enhance accessibility for firefighters. By generating fine water mist droplets, it effectively blocks radiant heat, allowing firefighters to approach fires more safely.

The AFT 10/02 Backpack is equipped with an optional second bottle holder, designed for use alongside a breathing apparatus, providing additional functionality for the safety and efficiency of firefighters.



PRODUCT	AFT 10/02
Filling Capacity as per EN	10 L
Material	Stainless Steel
Working Pressure	8.5 Bar
Operational Time (approx)	25 Seconds
Flow Rate	24 Liters/Min
Operating temperature	Tmin +5 °C – Tmax 60 °C
Lancing Distance (approx)	16-18 m jet 6-7 M spray
Electrical Fires	1000 V/3 Meters
Class A and B*	55A 233 B (EN3) IIB (EN1866)
Approximate empty weight (without air bottle)	8,5 Kg
Dimensions (LxWxH) ca.	180 x 340 x 700 mm
Standards	DIN, EN 3, GS, TÜV ISO 9001 (manufacturer)**
Special E Nozzle Ratings	Electrical 1000V/1meters Class A & B: 43A, 233B lancing distance: 12m

Advantages of the system:

- Water Mist/CAFS Extinguishing System
- Low Working Pressure
- Low Overall Carrying Weight
- Smoke Scrubbing
- Portable & Mobile
- Easy to Fill
- High Efficiency
- Jet and Spray Mode
- High Extinguishing Rating
- Stainless Steel Container
- Low Maintenance Costs

** Country and sector specific regulation have higher priority. If you have any questions, please contact Emesco

*** Available with the option of using a special gun for electrical fire (with different ratings) Electrical fire Tests conducted on 35Kv.

**** Universal bottle holder gives the flexibility of using compressed air bottles of sizes 2/4.7/6.8 lts with 200 bars & 300 bars.

***** Breathing apparatus can also be attached to the AFT Backpack Systems.



← DEMO VIDEO



AFT BACKPACK SYSTEMS 12/01

The AFT 12/01 stands out as an exceptionally effective backpack system for global fire rescue services due to the integration of advanced water mist and CAFS (Compressed Air Foam System) extinguishing technology, coupled with the use of an ultralight Carbon fiber cylinder. This combination positions the AFT 12/01 as a top-performing solution.

Thanks to its lightweight construction, enhanced accessibility, and efficient firefighting capabilities, the AFT 12/01 facilitates significant reductions in response time. This, in turn, aids in effectively managing small to medium fires. Notably, the system's unique design allows seamless compatibility with various breathing apparatus systems, adding to its versatility and adaptability for firefighting operations worldwide.



PRODUCT	AFT 12/01
Filling Capacity as per EN	12 liters
Material	Ultra light carbon & aramid fibre
Working Pressure	8.5 Bar
Operational Time (approx)	30-32 seconds
Flow Rate	24 liters/min
Operating temperature	Tmin +5 °C – Tmax 60 °C
Lancing Distance (approx)	14-16 m jet 6-7 m spray
Electrical Fires	1000 V/3 Meters
Class A and B*	55A (as per EN 3) 233 B (EN3), IIB (EN1866)
Approximate empty weight (without air bottle)	10 kg
Dimensions (LxWxH) ca.	245 x 360 x 630 mm
Standards	DIN, EN 3, GS, TÜV, ISO 9001
Special E Nozzle Ratings	Electrical 1000V/1meters - Class A & B: 43A, 233B lancing distance: 12m

Advantages of the system:

- Water Mist/CAFS Extinguishing System
- Low Working Pressure
- Low Overall Carrying Weight
- Smoke Scrubbing
- Portable & Mobile
- Easy to Fill
- High Efficiency
- Jet and Spray Mode
- High Extinguishing Rating
- Ultra light carbon and aramid fibre
- Low Maintenance Costs



DEMO VIDEO →



AFT TROLLEY SYSTEMS 50/01

The 50/01 extinguisher from AFT's innovative range combines patented technology with exceptional versatility for all-around fire protection. Mounted on a sturdy and maneuverable trolley, it is designed for ease of transport and deployment, making it ideal for larger or more challenging areas.



Its advanced mixing system creates ultra-fine water mist droplets, delivering rapid cooling through efficient heat absorption. This dual action suppresses fires effectively while reducing oxygen levels in the affected area. The 50/01 can be used as a water mist system or upgraded to a compressed air foam system by incorporating the recommended foaming agent, ensuring optimal performance in diverse firefighting scenarios.



PRODUCT	AFT 50/01
Filling capacity as per EN	50 L
Working Pressure	8.5 bar
Operating time spray nozzle	221 sec
Operating time jet nozzle	103 sec
Operating temperature	Tmin +5°C; Tmax + 60°C
Trolley Frame	Double powder coated steel frame
Lancing distance (approx) W	15 m jet / 10 m spray
Hose Length	5 m
Class A, B and F*	IVB (as per EN 1866)
Approximate empty weight (without air bottle)	44 kg
Dimensions (LxWxH) ca.	800 x 410 x 1100 mm
Standards	DIN EN1866, TÜV, ISO 9001 (manufacturer)**

** Country and sector specific regulation have higher priority. If you have any questions, please contact Emesco

*** Air bottle recommended for Trolley system is 6/6.8 lt



← DEMO VIDEO



AFT 50/02 & 50/02-E TROLLEY SYSTEMS

AFT trolley emerges as the safest and optimal solution for managing medium-sized fires, thanks to the integration of the advanced AFT Gun and a trolley supply system. Specifically designed for environments like warehouses, workshops, and construction sites, AFT trolleys stand out as ideal firefighting solutions, and they can also be mounted on fire trucks.



The AFT 50/02 water mist / CAFS system generates optimal droplets, significantly increasing the surface area for the efficient absorption of heat. This sophisticated technology enhances the overall effectiveness of firefighting efforts.

Advantages of the system:

- Wet & Dry Compressed Air Foam
- Low Working Pressure
- Low Overall Carrying Weight
- Smoke Scrubbing
- Portable & Mobile
- Easy to Fill
- High Efficiency
- Jet and Spray Mode
- High Extinguishing Rating
- Stainless Steel Container
- Low Maintenance Costs



PRODUCT	AFT 50/02	AFT 50/02 E
Filling Capacity as per EN	50 liters	50 liters
Material	Stainless Steel	Stainless Steel
Working Pressure	8.5 bar	8.5 bar
Operational Time (approx)	125 seconds	125 seconds
Flow Rate	24 liters/min	24 liters/min
Operating temperature	Tmin +5 °C – Tmax 60 °C	Tmin +5 °C – Tmax 60 °C
Double powder coated steel frame	Double powder coated steel frame	
Lancing Distance (approx)	16-18 m jet 6-7 m spray	12 m
Hose Lengths	5m, 10m, 15m	5m, 10m, 15m

** Country and sector specific regulation have higher priority. If you have any questions, please contact Emesco

*** Air bottle recommended for Trolley system is 6/6.8 lt



DEMO VIDEO



AFT APM SYSTEMS 100/200

The AFT APM CAFS is equipped with the advanced AFT Gun and a convenient trolley supply system, making it the ideal choice for tackling medium-sized fires. Engineered for safety and efficiency, it is specifically designed for use in environments such as warehouses, workshops, and construction sites. For added adaptability, the APM CAFS can also be mounted on a variety of ATVs, enhancing mobility in challenging terrains.

AFT CAFS skid units are available in multiple configurations, offering the flexibility to meet diverse operational requirements. These units can be fully customized, ensuring a tailored firefighting solution for any application.



Advantages of the system:

- Wet & Dry Compressed Air Foam
- Low Working Pressure
- Low Overall Carrying Weight
- Smoke Scrubbing
- Portable & Mobile
- Easy to Fill
- High Efficiency
- Jet and Spray Mode
- High Extinguishing Rating
- Stainless Steel Container
- Low Maintenance Costs

PRODUCT	AFT APM 100	AFT APM 200
Filling Capacity as per EN	100 liters	200 liters
Material	Stainless Steel	Stainless Steel
Working Pressure	10 bar	10 bar
Operational Time (approx)	250 seconds	500 seconds
Flow Rate	24 liters/min	24 liters/min
Operating temperature	Tmin +5 °C – Tmax 60 °C	Tmin +5 °C – Tmax 60 °C
Trolley frame	Double powder coated steel frame	
Lancing Distance (approx)	18-20 m jet 6-7 m spray	18-20 m jet 6-7 m spray
Hose Lengths	Up to 28 m	10m, 15m, 20m
Electrical Fires	Up to 1000 V/3 meters distance	Up to 1000 V/3 meters distance
Weight empty	Not more than 135 kg	162 kg
Dimensions (LxWxH) ca.	Depending on the model ordered	App. 1100 x 546 x 786 mm
Standards	CE, ISO 9001 *	CE, ISO 9001*

* Country and sector specific regulation have higher priority. If you have any questions, please contact Emesco

** Air Bottle recommended for Trolley System is 2 x 12 l

*** Weight including 20m hose, 2 x 12 l air cylinder and wheel



← DEMO VIDEO



AFT MPM CAFS 01

AFT MPM CAFS 01 is powered by patented water mist technology, offering exceptional firefighting efficiency with minimal water consumption. Featuring an integrated digital foam injection system, it enables variable foam dosage for adaptability in diverse fire scenarios.

Designed for versatility, the MPM 05 is compact and specifically engineered for installation on pickups, small trucks, or trailers. Its streamlined design makes it an excellent choice for rapid response vehicles and custom solutions, particularly in challenging environments such as forests and mountainous regions.

For added flexibility, the MPM 05 is also available in a compact version, delivering firefighting power equivalent to that of a full-sized fire truck. This ensures reliable performance across a wide range of applications.

PRODUCT	MPM – CAFS/01	Advantages of the system:
Filling capacity water tank	400-650 liters	<ul style="list-style-type: none"> • Engine-Driven CAFS/Water Mist • 2-Phase System without Pressure Cylinders • Wet/Dry Foam • Low Working Pressure • High Efficiency • Especially For Trucks • Suitable for Many Vehicle Types • Jet and Spray Mode • Easy to Operate
Filling capacity foam tank	22 liters	
Filling capacity fuel tank	8 liters	
Flow rate gun	24 liters/min	
Flow rate air	From 0 -1600 liters/min	
Working pressure	15 bar	
Operating Temperature	Tmin +1 °C – Tmax 60 °C	
Lancing distance (approx.)	20m jet, 12 m spray	
Water mist size (approx.)	100-150 microns	
Petrol engine	2 cylinder,4 stroke petrol engine with electrical coil starter, 23 HP	
Water pump	Selfpriming side channel water pump	
Foam mixing system	Manual mixing injectr system up to 3%	
Operating time (400/650) (approx)	15/22 min till water tank is empty	
Display	Working hour meter, Revolutioncounter, Manometer (water)	
Operating controls	Air regulation on the gun,foam regulation, choke throttle ignition and start button (engine)	
Weight empty (approx)	400l tank :470 kg 650l tank: 500 kg	
Dimensions (L x W x H) (approx)	1400 x 1010 x 1150 (650 l tank)	



DEMO VIDEO



TAILOR MADE PRODUCTS



At Emesco, we understand that every operation has unique needs when it comes to fire safety and emergency preparedness. With over 20 years of experience in developing and designing firefighting systems, our dedicated team of engineers takes very seriously all our customers' individual wishes.

That's why our AFT Mobile Fire Fighting Equipment is designed with flexibility and customization in mind. Depending on customer demands, we strive to tailor our technology while ensuring that all systems are manufactured to meet the highest quality benchmarks.

Our tailor-made solutions ensure that your team has the right tools, perfectly adapted to the specific challenges and requirements of your operations. Whether you need modifications to existing designs or entirely bespoke systems, our engineering expertise and commitment to excellence guarantee products that deliver performance, reliability, and safety.

Let us create the ideal solution for your needs—because every detail matters.



← DEMO VIDEO



TAILOR MADE PRODUCTS



FIRE TRUCK



CERN



PICKUP FIRE FIGHTING



DUBAI WORLD TRADE CENTRE



MOTOR BIKE FIRE FIGHTING SYSTEM



GOLF CART FIRE FIGHTING



SAUDI CIVIL DEFENSE



CERN



DEMO VIDEO →



ALKIN – HIGH PRESSURE COMPRESSORS

A high-pressure air compressor with a capacity ranging from 110 liters to 145 liters of compressed air at a maximum pressure of 350 bars is offered to users with options of electric, gasoline, and diesel engine drives. Designed to meet the EN 12021 standards for breathing air and high-pressure air requirements, the technical specifications of the compressor are outlined below.



HIGH PRESSURE COMPRESSORS

MODEL	W31 – MARINER	
PURPOSE OF USAGE	Compressed Air / Breathing Air	
FILTER SYSTEM	P21	
WORKING PRESSURE	225 bar (3260 psi)	310 bar (4500 psi)
MAX WORKING PRESSURE	350 bar	
CAPACITY	100 lt/min (3,5 Cfm)	140 lt/min (4,9 Cfm)
MOTOR POWER	2,2 kW (3 Hp)	3 kW (4 Hp)
COMPRESSOR SPEED	1050 r/min	1050 r/min
1.ST PRESSURE RATE	3.5 – 4.5 Bar	
2.ST PRESSURE RATE	30 – 40 Bar	
3.ST PRESSURE RATE	Output pressure	
NUMBER OF STAGE	3	
NUMBER OF CYLINDER	3	
LUBRICATION SYSTEM	Impact lubrication	
POWE TRANSMISSION	Belt-pulley	
WORKING TEMPERATURE	0.....+50 °C	
DIMENSIONS (W X L X H)	440x850x520 mm	
WEIGHT	64 kg	

STANDART EQUIPMENT

P21 Purifier and Refillable Cartridge
 Air Quality Compliant with EN 12021:2014 Standard
 Water Seperator
 Inter and After Cooler
 Priority Valve, Check Valve
 Safety Valve at Each Stage
 Oil Indicator Glass
 Vibration Mounts
 Manuel Start – Stop – Discharge
 Thermal Overload Protection for Electric Motor
 1 Piece Filling Hose Complete (Yoke, Sleeve Valve, Manometer, DIN Adapter)
 Electrostatic Painted Portable Chassis



OPTIONAL EQUIPMENT

Automatic Start – Stop – Discharge
 Double Pressure System 225–310 Bar / 3260–4500 Psi
 Gasoline/Diesel Engine Option
 Replaceable (Disposable) Cartridge



← LOOK AT OUR PRODUCT



VLITEX – TEXTILE FIRE PROTECTION WITH FIRE BLANKETS & FIRE HOODS



INDUSTRIAL TRUCKS

VLITEX PREMIUM or SUPERIOR fire blankets are used for industrial trucks. To make it easier to cover the vehicles, the blankets are fitted with eyelets and equipped with telescopic rods.



(E-) CARS, E-BIKES, E-SCOOTER ETC.

VLITEX fire blankets in STANDARD, PREMIUM or SUPERIOR quality are suitable for containing fires involving (electric) cars, e-bikes or e-scooters.



SMALL BATTERY - POWERED APPLIANCES

For cordless screwdrivers, cordless saws, battery powered vacuum cleaners or even laptops, VLITEX STANDARD quality fire blankets are sufficient to minimize the effects of a battery fire. We offer special storage bags for laptops, smartphones and small batteries.



BATTERY MODULES

Fires in open or closed battery modules can reach temperatures of up to 1,800°C – which requires particularly temperature-resistant material. Closed battery modules are best protected with the VLITEX SUPERIOR PRO fire protection blanket, while open battery modules require ULTIMATE quality.



MESH BOXES

VLITEX fire blankets are also available as practical hoods to protect dangerous goods in pallet cages.



DEMO VIDEO →



VLITEX – TEXTILE FIRE PROTECTION WITH FIRE BLANKETS & FIRE HOODS

Lithium-ion batteries have become an integral part of our world. However, the risk posed by batteries is often overlooked. Batteries can catch fire – due to production errors, improper handling, thermal influences such as extreme heat or physical overload due to impact or deformation. The consequences of a fire can be catastrophic. In addition to the immediate threat to life and property, business operations can be disrupted and cause considerable financial losses for the company.



EFFECTIVENESS TESTED & CONFIRMED



KIWA confirms: PREMIUM fulfills test requirements according to **DIN SPEC 91489**



Technische Hochschule Hof confirms low electrical conductivity for STANDARD/ PREMIUM qualities (DIN 54345-1)



MPA Dresden confirms fire protection class A1 according to DIN EN 13501-1



STFI confirms that the VLITEX PREMIUM fire blanket can still be handled after constant temperatures of 750°C for 30 minutes without breaking during buckling.



Magna Steyr confirms that the VLITEX PREMIUM fire blanket can withstand a car battery fire with temperatures of up to 1,300°C

STFI confirms resistance to cuts with sharp objects in accordance with DIN ISO 13997:1999-08 for PREMIUM and SUPERIOR qualities



ADAC confirms that an electric vehicle can burn down safely under the VLITEX car service set



Eurofins confirms burst protection according to DIN EN ISO 13938-2



← DEMO VIDEO



REFERENCES



LOOK AT OUR PRODUCT

