

**EXPLOSAFE™**  
**EXPLOSION/ARC SUPPRESSION BLANKET**

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The image shows a close-up of a yellow explosion/arc suppression blanket. The blanket has a textured, woven appearance. Several red straps are attached to the blanket, some with buckles. The word "EXPLOSAFE" is printed in large, bold, black capital letters across the center. A lightning bolt graphic is integrated into the letter "O". The background is black.

# EXPLOSAFE™

## Your protection solution

The risk of serious injury or death is something workers face everyday while functioning in a high voltage or explosion-prone environment. In addition to the risk to human life, the potential damage that can be caused by an explosion in such an environment is massive and not always adequately considered. EXPLOSAFE™ Explosion/Arc Suppression Blankets have been specifically designed and tested to protect workers and equipment in environments where the threat of an explosion or electrical arc in a confined space or adjacent to energized cables, circuits or switches is possible.

With decades of experience in developing technical protection solutions for workers, Pacific Safety Products (PSP) conducted extensive research into the relevant industry hazards and following extensive testing, developed the EXPLOSAFE™ blanket for the electrical utilities market. No other blanket protection system has undergone the rigorous testing that EXPLOSAFE™ has!

## The need for protection

When working on cables in a high voltage underground chamber or close to energized cables, circuits and switches, workers may be at risk of exposure to dielectric and mechanical explosions. The dangerous conditions workers may be exposed to in this type of explosion include:

- Concussion from the blast;
- Heat from fire which may measure well over 1,000° C;
- Airborne molten materials such as cables and mechanical parts; and
- Intense smoke and gas emissions.

The intensity of each threat is determined by the amount of energy in energized cables, circuits and switches.

## EXPLOSAFE™ - superior protection

There are two standard models of EXPLOSAFE™ blankets which have been designed and tested to the following specifications:

- EXPLOSAFE™ I: Protects from fault currents up to 10kA and 6 cycles, commonly found in man holes.
- EXPLOSAFE™ II: Protects from 6 cycle fault currents of 25kA to 40kA for work situations closer to the power source or transformers.

The Company has worked closely with a number of test labs to develop and optimize the EXPLOSAFE™ blast protection:

- IREQ - Hydro Quebec's Research Institute;
- Powertech Laboratories in British Columbia; and
- KEMA-Powertest, Inc. in Chalfonte, Pennsylvania.

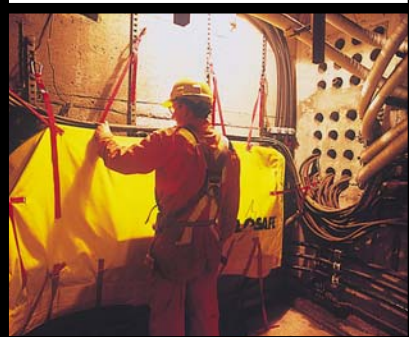
At these test facilities, simulating actual work situations illustrated the value of the EXPLOSAFE™ blanket. A mannequin with sensors to measure heat exposure and blast pressure were used in an actual manhole environment with the EXPLOSAFE™ blanket during testing. At each level of testing (10kA, 25kA, and 40kA), the mannequin sensors did not register damaging pressure from the blast and there were no significant burns.



AEGIS EXPLOSAFE™ is effective protection for electrical utility employees working in man-holes or other confined spaces . . .



. . . or electrical stations with transformer boxes nearby.



AEGIS EXPLOSAFE™ protects workers from hazards created by explosions or blasts.



AEGIS EXPLOSAFE™ manhole blast/arc simulation testing.

# EXPLOSION/ARC SUPPRESSION BLANKET

## EXPLOSAFE™ - advanced design

EXPLOSAFE™ blankets are designed to maximize maneuverability in limited work spaces.

Features of the EXPLOSAFE™ I standard blanket include:

- Protection from fault currents of 10kA;
- Weight of approximately 10lbs and 5'x8' in size;
- A durable and versatile carabiner fastening system that allows quick and easy installation and removal by a single operator;
- A fastening system attached to the blanket with high strength webbing that allows for permanent or temporary installation;
- A blanket shell constructed of NOMEX® flame resistant ripstop fabric;
- A protective carrier and storage bag is included making it easier for the worker to transport and protect the blanket as while not in use; and
- The blanket interior is made from layers of aramid materials such as KEVLAR® and TWARON® that absorb and dissipate the energy from the explosion or arc and trap resulting airborne debris.

## Worker safety

PSP is constantly working to identify innovative materials and designs to provide on-the-job protection for workers in high-risk environments. Over the years, the weight of the EXPLOSAFE™ blanket has been significantly reduced, flexibility has improved and installation has been made easier. Not only do we continue to test for stronger explosion and arc suppression solutions, but through testing in body armor, bomb suit and fire resistant clothing markets, we are able to match technologies and utilize data from other areas of research to continue providing superior quality and protection in our products.

All EXPLOSAFE™ blankets comply with the applicable O.S.H.A. regulation, utility work part 1910. 269, requiring thermal protective equipment in confined or enclosed spaces.

## Installation

Understanding the environment that EXPLOSAFE™ blankets are used in and then determining the proper blanket configuration and installation method is critical to ensure the worker is properly protected. Installing a blanket barrier incorrectly can have dire consequences. Each blanket comes with installation instructions for standard use and PSP technical consultants will work with you on defining your own installation procedures that are outside of standard use.

## Use, care and warranty

Each EXPLOSAFE™ blanket is labelled with an individual serial # and date for quality control and tracking purposes. The label also contains detailed instructions on handling, storage and cleaning. The EXPLOSAFE™ blanket warranty is valid for five (5) years from the date of manufacture.



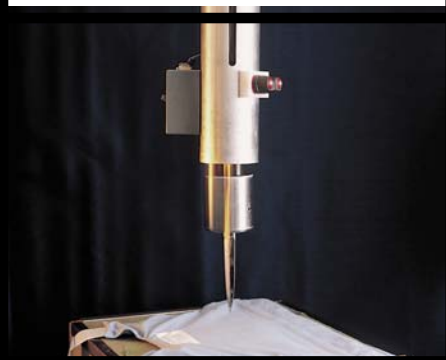
# SPECIALISTS IN PROTECTION



PSP's Kelowna, British Columbia, head office and manufacturing plant.



PSP's ballistic and fragmentation research lab, one of the most advanced in North America.



Stab/puncture testing at PSP's research laboratory.



Flame resistance testing on PSP's FIREWALL™ Rainwear used by workers in the utility and petrochemical industries.

## Standard or Custom Solutions

Standard EXPLOSAFE™ blankets are versatile and modular. If the standard blanket does not meet your specific application, PSP will work with you to custom design an EXPLOSAFE™ blanket protection system that will satisfy your demanding requirements. One such customer was a utility company requiring protection for workers from the failure of oil switches. In addition to blast concussion, heat and gases, oil switch failures can generate airborne debris and direct exposure to flammable oil. A custom blanket was designed to address their specific requirement. The Company has also designed protection systems for water and air pressurized pipes and glass insulators. PSP can design an EXPLOSAFE™ blanket protection systems for any other applications where the need for blast and arc suppression and protection is required.

## PSP's experience

PSP has decades of experience in the public safety industry designing and manufacturing product lines that include Pacific Emergency Products®, PROTECTED by PSP™ body armor and FIREWALL™.

PSP's research and development experts have a clear understanding of the safety requirements and ergonomic applications that are integral to the protective products industry and have applied those skills to the ongoing development of the EXPLOSAFE™ blanket.

In developing the EXPLOSAFE™ blanket, the Company has worked with a number of industry leaders in identifying and addressing their specific protection requirements. These leaders include:

- Consolidated Edison of New York Inc.
- NSTAR Electric Company (Boston Edison), Massachusetts
- Florida Light & Power
- Ontario Hydro, Canada
- Quebec Hydro, Canada

At Pacific Safety Products Inc. (PSP) our mission is to **bring everyday heroes home safely™**. We are an established industry leader in the production, distribution and sales of high-performance safety products such as: ballistic, stab and fragment protection vests; bomb and land mine retrieval suits; tactical clothing; emergency medical kits and rescue equipment; and flame resistant and industrial clothing. The Company strives to provide effective protection solutions for its customers by seeking out the latest technologies to serve their needs.

PSP has grown to include three Canadian production facilities in Kelowna, British Columbia; Brampton, Ontario; and Arnprior, Ontario. These facilities are equipped with complete design, production and research capabilities. In addition, the Kelowna facility has one of the most advanced ballistic research labs in North America.

**PSP** ... we bring everyday heroes home safely.™

**Pacific Safety Products Inc.**

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