

PYROPROOF®

FLEXIBLE PASSIVE FIRE PROTECTIONS



INDUSTRIES

Marine

Offshore
Platforms

Petrochemical
Plants

Refineries

NEW COMPONENT
textile solutions for heat treatment

WHAT'S PYROPROOF®?

The purpose of Passive Fire Protection (PFP) systems is **to protect critical flow, process and safety equipments** against fire damage and **to allow safe** controlled plant shutdown in the event of a fire.

This means that critical equipment, controls and instrumentation **must be able to operate throughout a specified protection period.**



New Composit PFP consists in flexible jackets to be directly installed on valves or actuators and any kind of equipment that need to be protected from fire for safety reasons.

Our products are installed to ensure that in case of fire all the protected equipment would work safely for a period of time that would guarantee all the operations to make the system safe again.

We know there are environments where the risk of fire is higher and impossible to be eliminated, and **this is why it is necessary acting in order to prevent possible disasters.**

WHERE?

- Marine industry
- Offshore Platforms
- Petrochemical plants
- Refineries



CERTIFICATES

Specifications for PFP usually demand that *"equipment shall be protected against a 'fire type' for a period of 'x' minutes"*.

This means that the equipment **must be protected appropriately** with a PFP system to remain below its failure temperature during the specified period.

We can offer a range of different solutions according to technical specifications required by the customer and based on certifications by the most important certification bodies.



New Composit was the first Italian Company to get PFP certifications with flexible jackets in 2006.

Following the success of this first test we decided to invest much more time, knowledge and money **to study and improve our product till now.**

We believe in a safer working environment and this is why we put all our efforts to develop Pyroproof® for all the possible fire scenarios:

POOL FIRE
JET FIRE
BLAST



HYDROCARBON POOL FIRE

UL 1709 / ISO 1363-2 / BS476 PT 20

This product is the real “workhorse” of New Composit.

It was tested for the first time in 2006 in the USA and last time in 2021 in France.

This system got **many certifications** based on different thickness of the insulation materials used.

CERTIFICATES

Lloyd's Register

Type Approvals on valves and actuators till 120 minutes

FEW VERY IMPORTANT THINGS TO REMEMBER

Actuator fail temperatures are usually between 70°C and 110°C depending on the seals and controls; whilst valves are usually around 200°C depending on process temperatures.

For pipe work and vessels a fail temperature of 400°C is often used, again depending on the process.

HYDROCARBON JET FIRE

ISO 22899-1

The PFP system was installed onto a tubular test specimen supplied and instrumented by a Centre based in UK.

The test specimen was subjected to a propane jet fire with an average mass flow rate of 0.300 kg.s⁻¹, for a period of 7200 seconds and the performance of the PFP system was investigated in the jet fire test rig facility at the Test Site.

CERTIFICATES

Bureau Veritas Marine

Type Approval on metal structures till 120 minutes

CHARACTERISTICS

Pyroproof® is a **FLEXIBLE** fire protection...so it means it is a multilayer of fabrics and insulation blankets. The product nevertheless is absolutely hard-wearing.

The main characteristics of our system:

- May fit to any shape
- Easy to be installed (and removed if necessary)
- No need to shut-down the equipment or the line during maintenance
- Weatherproof, resistant to UV rays and salty environment
- Lighter and easier to be handled than metal PFP boxes
- It is a thermal insulation too
- It is an insulation against noise too
- It can be supplied with heating system for cold environments

BLAST TEST

CERTIFICATES

Bureau Veritas Marine
Type Approval with test
pressure peak of 1,85 bar



An experiment has been conducted in the **explosion chamber** inside a UK Test Site to demonstrate the ability of a fire protective jacket to withstand the affect of a gas explosion generating an overpressure in excess of 1.62 bar.

It is necessary to demonstrate that materials used for the fire protection are **not degraded** by exposure to the effects of a vapour cloud explosion without degrading their ability to provide the required level of fire protection.

The **Pyroproof®** system was subjected to a gas explosion generated by igniting a natural gas/air mixture.

DESIGN

New Composit has more than **35 years experience** in the world of technical fabrics and any material related to heat and fire.

We've been studying passive fireproofing systems since 2005 thanks to **a qualified team of engineers always involved into find the best solution** to meet the customer needs.

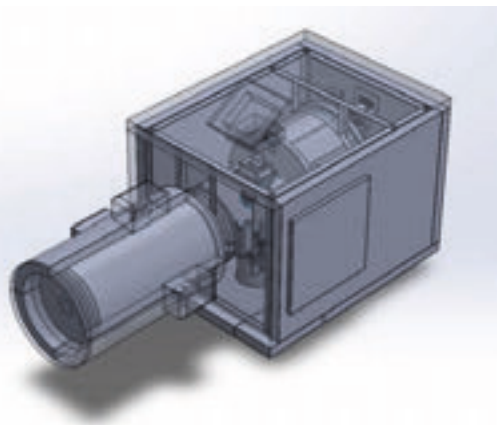
Research & development of the product is the key point of our success in this field.



Pyroproof® jackets are tailor-made products, **customized on the clients requirements**; our engineers design all the protections thanks to the best **3D and 2D cad drawings** programs.

We are used to attend **refresher courses** every year to guarantee a **full support** to customers.

CompoLab is our **programme to simulate and study** alternatives to be later approved and certified by certification bodies. .



WHEREVER THERE ARE HIGH TEMPERATURES TO MANAGE, WE ARE THERE.

SAFETY FIRST-ALL

How many times we hear about disasters due to explosions in a petrochemical plant or in a refinery?

Safety first-all!

How to help those plants and their workers to be safer was the first aim of New Composit since we decided to enter this field.

We want to help fighting workplace accidents even with our protections.

To eliminate injuries and deaths can't be only a problem of the individual plant; it is a problem concerning all those who work in the oil&gas field.

Ours is a choice of safety and quality

An extra guarantee for those who work with us

- **ISO9001:2015**
Quality System
- **ISO14001:2015**
Environmental Management System
- **ISO45001:2018**
Systems for Health and Safety Management of Workers



WE KNOW HOW **TO PROTECT YOU**

Pyroproof®



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