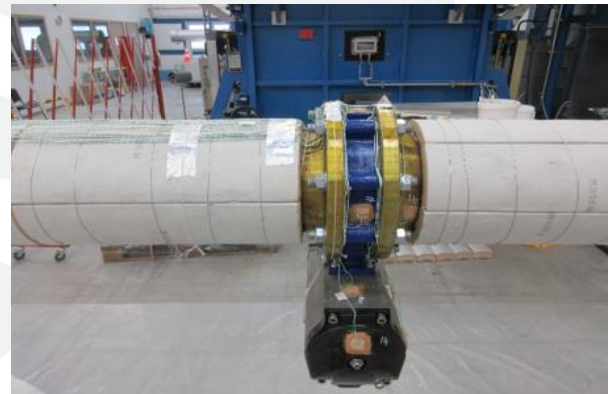
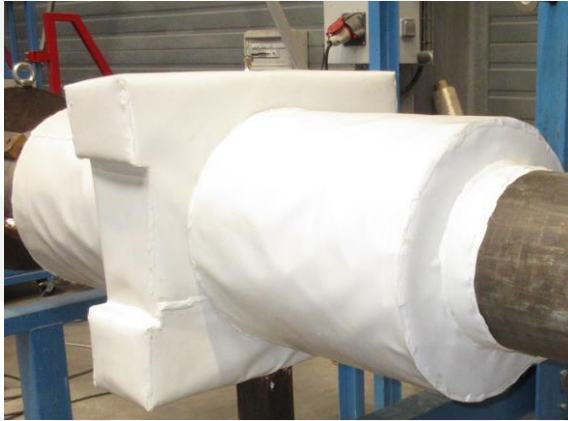


NuFP 51xx Passive Fire Protection



NuFP 51xx is a flexible fire protection system, adapted for the protection of piping and in-line equipment.

The protection is composed of several layers of different materials for high thermal insulation and fire protection properties.

The NuFP 51xx system adapts to the needs and requirements of the client with its adjustable thicknesses.

It allows many combinations, possible solution to obtain a low temperature under the protection.

Benefits

- System flexible, easily adaptable to all configurations on site, all diameter of pipes and kind of equipment.
- Compressible, the system can fit inside small spaces.
- Compatible with all other Nuvia passive protection products.

Applications

- Nuclear Power Plant or installations
- Industries

References

- ITER

Technical Data

- PMUC (Product Usable in Power Plant)
- Thickness : depending on performances sought
- Weight : depending on performances sought
- Flexible
- Decontaminable
- Waterproof,
- Resistant to humidity
- Movement, displacement allowable
- Removable / Repair
- Halogen free
- Not contain oil or grease
- Not contain absorbent materials
- Not contain expanded plastics
- Incombustible
- No corrosion.
- No dust

Standards and Regulatory Requirements & Performances

The NuFP51xx solution has been subject to various tests and analyzes based on specific standards.

PERFORMANCE	QUALIFICATION	DATA	STANDARDS
< 100°C under the protection	Fire tested in an accredited laboratory (ISO 17025)	2h	ISO 834 Curve - Standard EN 1363-1 – « Fire resistance tests – General requirements” - Figure 1
Decontaminable	Evaluated following the standard	Sc is ≤ 20 % P is ≥ 85%	NF T 30-901
Seismic resistance	Seismic test by a multi-frequency test on a bi or triaxial table	SL2 SL3	IEEE 344 / NF EN 60529
No combustibility	Fire propagation and no combustibility	FSI Less than 50	ASTM E84 / ASTM E136
Not contain Halogen	Spectrocolorimetry / Ion chromatography / Ionometry	< 20 ppm < 5 ppm	N.C.
Not contain Oil & grease	Analytic technics		N.C.
Not contain Absorbant materials	Analytic technics		N.C.
Not contain Expanded plastic	Analytic technics		N.C.
Displacement	Displacement tested in an approved laboratory	20mm	N.C.
Spraying / Humidity resistance	Spraying tested in an approved laboratory	12.5 L/min	Standard IEC 60529 – “Degrees of protection provided by enclosures (IP Code)”
Ageing	14 Cycles tests	16h	NF T 30-903 / IEC 60068 -2-14 High Temperature +55°C Low Temperature -25°C Relative Humidity 95%
LOCA	Thermal shock Test	10h	NF T 30-900 / NF T 30-903 Maximum room temperature: 145°C Maximum room humidity: 100% Maximum room pressure: 0.6 Barg

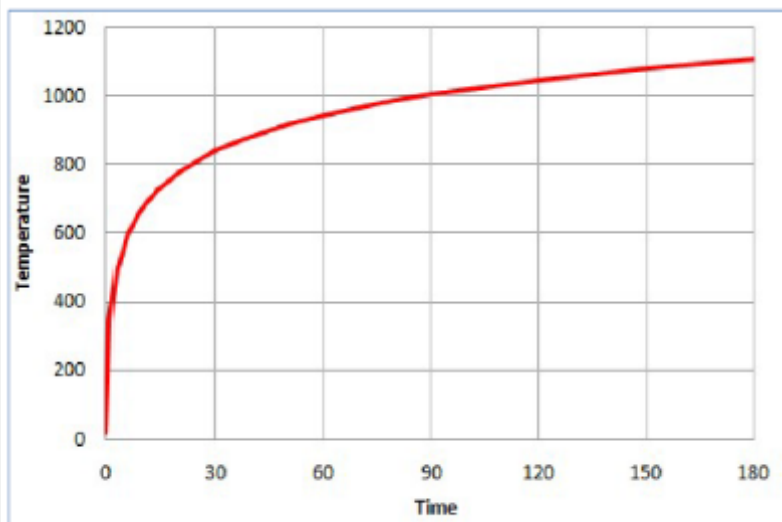


Figure 1: ISO-834 nominal time-temperature curve over 2 hrs

