

# PRE-CAST FIRE PROTECTION SYSTEM

## Removable Epoxy Intumescent Fire Protection System

**Pre-cast Epoxy Fire Protection System**



**Jet Fire and Blast Tested Protection**



*The Solution Provider*



Quick access, achieved with the minimum of operator skill & ensuring integrity upon completion, allows for routine periodic inspections of the valves, actuators, welds or wall thickness.



Cast epoxy systems have been tested in both the large scale jet fires at Spadeadem and to the new OTI 634 95 standard, is proven to resist the erosive forces and high -temperatures encountered in a Hydrocarbon Jet Fire



The cast epoxy systems are manufactured using a moulding technique base on information taken from CAD models or site survey. The pre-formed components are then simply bolted in place on the risers, valves or actuators, sealing all joints against water ingress

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## Tested to Meet the Latest Fire and Blast Standards

Blast over pressure testing was carried out at the Building Research Establishment's fire and blast testing facility housed within the massive airship hangers at Cardington, England.



A series of explosions, witnessed by Lloyds, were carried out on a single set of test specimens mounted with the test rig openings.

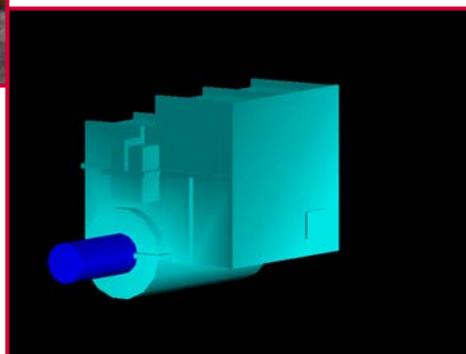
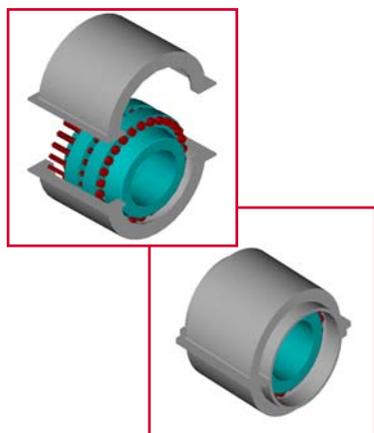


These explosions produced overpressures of 0.8, 1.25 & 1.46 bar, demonstrating the system's ability to withstand repeated exposure to blast and drag forces.



Using the latest 3D solid modeling software allow us to fully design and visualize the installation ensuring accuracy and ease of fitting.

Utilising the proven technology of Epoxy resins the system is designed and proven to meet the harshest environmental conditions.



Pre-cast insulation to sub-sea pipework - ready for installation by divers in 110m of water.



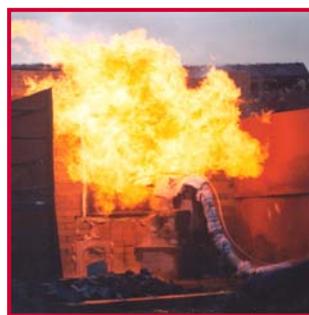
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## Epoxy Insulation Systems - for Process & Under PFP Insulation

The development of Epoxy Insulation resins opened up a whole new range of opportunities in epoxy fire protection for use on hot surfaces that previously exceeded the capabilities of the intumescent materials. The first priority was to ensure that the composite system performed in the most arduous fire hazards.



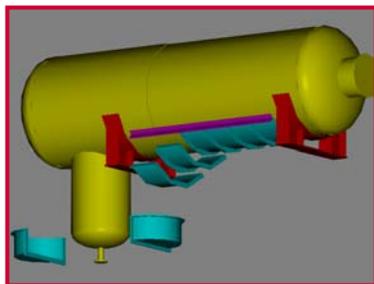
Preparing the  
Insulant and  
Intumescent  
test piece.



Jet Fire Test  
to the latest  
OTI 95 634  
standard



Once the material performance had been proven it was possible to start using the system to provide fire protection to hot operating process vessels, risers and ESD valves.



CAD design for a  
removable PFP system  
on a process vessel



Castings manufactured  
onshore using the  
latest CAD/CAM  
technology



Three years on & the  
installed PFP system is  
performing well offshore