



# FOAMGLAS®

## Pre-coated FOAMGLAS® insulation installed live on hot-oil pipework at 230°C (446°F)

Pittsburgh Corning

Thermal-fluid pipework is a high-temperature application with the inherent danger of wicking fires. Fibrous insulation materials like mineral fibre and solid insulation materials like calcium silicate have been shown to wick oils and give the conditions for spontaneous lagging fires. 100% closed cell FOAMGLAS® cellular glass insulation is uniquely able to eliminate this risk.

### PROJECT PROFILE

The same closed-cell properties which make FOAMGLAS® insulation ideal for thermal-fluid systems also mean that it can be used to prevent water ingress and so prevent corrosion under insulation, CUI. Thermal fluid systems are not immune from CUI and cyclic temperatures have been demonstrated to increase the rate of corrosion when water enters permeable insulation.

**Insulation Contractor**  
RBG Ltd, Aberdeen

**Insulation Fabricator**  
Pittsburgh Corning Europe,  
represented by Pittsburgh  
Corning (UK) Ltd

One of the UK's major gas reception terminals which handles nearly 20% of the UK's gas was recently faced with replacing the insulation on its thermal-fluid pipework. These lines are essential to the ongoing operation of the plant and shutting them down was not an option.

**Period of Construction**  
2011

The site selected FOAMGLAS® cellular glass insulation to be applied to 4.5km (2.8 miles) of live hot-oil lines which meant working with pipework at 230°C. A layer of FOAMGLAS® insulation, factory coated with PC700K reinforced coating, was applied to the trace-heated hot pipes and then a second layer of FOAMGLAS® with Terostat PCFR factory-applied polymer coating was applied to finish the job.

### FOAMGLAS® PC 700K

PC 700K is a two-component inorganic mortar based on specially formulated glass powder and fillers with a modified-silica dispersion. This is factory applied to the FOAMGLAS® with a reinforcing glass scrim cloth. The result is a strong coating which allows the single-layer working temperature range of FOAMGLAS® to be extended. FOAMGLAS® PC 700K has been used on applications from -196°C to +350°C (-321°F to +662°F) and beyond and gives greater integrity for extreme applications including cyclic conditions.





### Hot Oil Applications

FOAMGLAS® insulation is 100% closed-cell glass foam. It cannot wick oils and so cannot be the cause of insulation wicking fires in any application where hot oils are used. For this reason oil and gas operators, pharmaceutical companies and even food companies such as McCain (French fries) use FOAMGLAS® insulation to protect against insulation fires in their thermal fluid processes.



Beakers of oil with insulation materials being used as wicks. Only FOAMGLAS® (left-hand side) prevents wicking fires.

### FOAMGLAS® Terostat PC FR

Terostat PC FR is a factory-applied polymer vapour retarder and weather finish. Pre-application of Terostat PC FR to FOAMGLAS® insulation means that the entire insulation system is prefabricated in the factory with site work minimised and full weather protection achieved as soon as the FOAMGLAS® insulation is on the pipe.

### FOAMGLAS® Innovation

FOAMGLAS® cellular glass insulation systems are constantly being developed to simplify installation and to improve both system performance and system longevity. Factory preassembly and pre-coating of complex forms ensures that the installed quality is maximised and installation time minimised.

# FOAMGLAS

Pittsburgh Corning USA  
(Corporate Headquarters)  
800 Presque Isle Drive  
Pittsburgh, PA 15239  
Telephone: 724-327-6100  
Fax: 724-387-3807

Pittsburgh Corning Europe  
(Head office for Europe, Africa  
& Middle East)  
Albertkade 1  
B-3980 Tessenderlo - Belgium  
Telephone: +32-(0)13-66-17-21  
Fax: +32-(0)13-351-854

Pittsburgh Corning Corporation Asia  
(Asia Headquarters)  
Pittsburgh Corning Corporation  
PARK LUXE HONGO 1001  
19-4, Hongo 2-Chome, Bunkyo-Ku  
Tokyo 113-0033 JAPAN  
Telephone and Fax: +81 50  
7554.0248

[www.foamglas.com](http://www.foamglas.com)