

TECHNICAL SPECIFICATION

Temporary Refuge (TR) Integrity Testing

Winners of the UK Oil & Gas Industry Safety Award 'Innovation in Safety 2013' for an industry first and newly established Temporary Refuge Testing City & Guilds Qualification in conjunction with bSolutions / Banff & Buchan College.

Industry First C & G Accreditation

In 2011, Stork approached bSolutions, the commercial training arm of Banff & Buchan College, with a view to designing a training course which would provide an industry standard for temporary refuge (TR) testing in the offshore Oil & Gas industry, instilling confidence in our existing and potential clients.

Stork HVACR and bSolutions began to collate the required information over an 18 month period, combining extensive industry knowledge and expertise, to develop a comprehensive TR testing course that has been successfully launched and is accredited by the internationally recognised City & Guilds Association; a global first for the Oil & Gas industry in this specialised subject.

Benefits and Results

- Client assurance that all TR testing is being completed by Engineers trained to a internationally recognised standard
- A full and comprehensive report which includes details of all findings and recommendations
- Copy of all TR Integrity test sheets, drawings and design data collected during the visit which will provide history of testing carried out and improvements achieved
- Compliance with PFEER Regulations and HSE TR Testing guidelines



Where is TR Integrity Testing performed?

TR integrity testing is a legal requirement that must be carried out on board all offshore installations at a recommended frequency of no more than 3 years and preferably every 2 years. This is stated in HSE Information Sheet No. 1/2006 (revised and reissued January 2007) – Testing Regime for Offshore TR-HVAC fire dampers & TR pressurisation requirements.

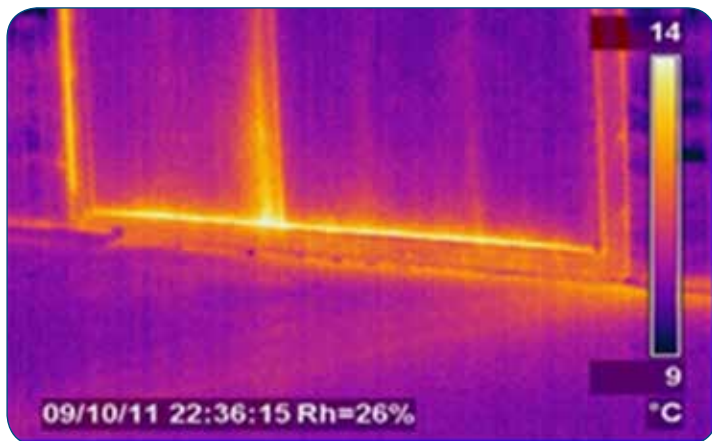
What is Temporary Refuge (TR) Integrity Testing?

Regulation 18 of the Offshore Installations (Prevention of Fire, Explosion and Emergency Response) Regulations 1995 places a duty on installation operators and owners in respect of construction, suitability and maintenance of certain plant on the installation provided for the purpose of PFEER.

The HSE (Health & Safety Executive) state that “the hazard from failure of HVAC dampers to close on demand is defined as a loss of TR habitat via gas/ smoke ingress”. Even with the dampers in the ‘closed’ position there is still an airflow leakage both into and out of the module. Therefore the level of the TR integrity can only be established by measuring the airflow.

HSE / PFEER Guidelines

- HSE Information Sheet No. 1/2006 (revised and reissued January 2007) – Testing Regime for Offshore TR-HVAC fire dampers & TR pressurisation requirements
- Regulation 18 of the Offshore Installations (Prevention of Fire, Explosion and Emergency Response) Regulations 1995



Aim/Objective:

- To survey and supply a Client with a specific TR Integrity Test Procedure, identifying all equipment relevant to the TR's integrity and provide the client with a step by step method statement of pre-test inspections and test methods that are to be carried out
- Working with clients both onshore / offshore to ensure platform specific procedure, test times and durations are carried out in a controlled and safe manner, as safety critical HVAC systems must be shut down for testing purposes
- Leakage rate through the fabric measured & compared to agreed acceptance criteria within the Platform Safety Case and performance standards
- Recording actual leakage rates for comparison to agreed acceptance criteria
- Identification of leakage areas using thermal imaging for quick results and minimising the use of smoke testing
- Supply clients with suitable recommendations for issues identified during test conditions
- Achieve the workscope within an agreed budget
- Work with platform operations to minimise disruption to personnel
- Carry out any remedial / repair works required as the result of the test
- Providing quick turn round of critical equipment
- Provide flexible working at short notice with multi-skilled teams