

Barrier Qualification and Test Services



Virtual image of Barrier Qualification and Test Chamber at the National Decommissioning Centre (NDC), Newburgh

2000+ wells to be decommissioned
in the UKCS over the next ten years.

The Barrier Qualification and Test Services is the only industry-led **portable** onshore test facility for oil and gas **well plugging** and **abandonment** in the **UK**. Led by the NDC and due to be delivered in **Q4 2023** the design allows for the testing of alternative or existing barrier materials, such as **bismuth alloys, thermite-based** and **resin** technologies, under high pressure and high temperature conditions which replicate well environments. As a result it allows for **de-risking** and analysis in the development and refinement of **cost-effective** P&A technologies.

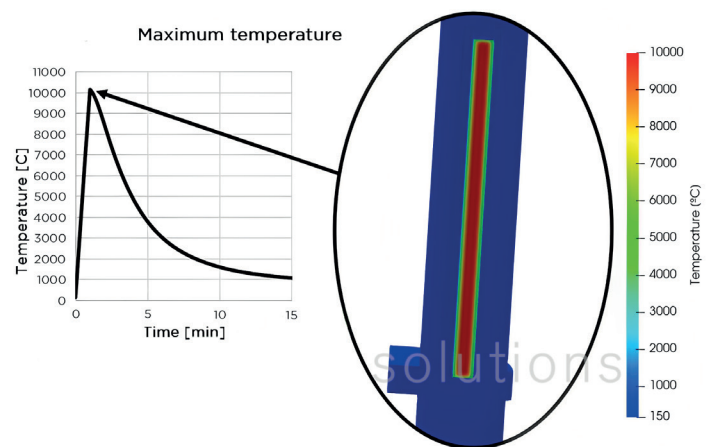
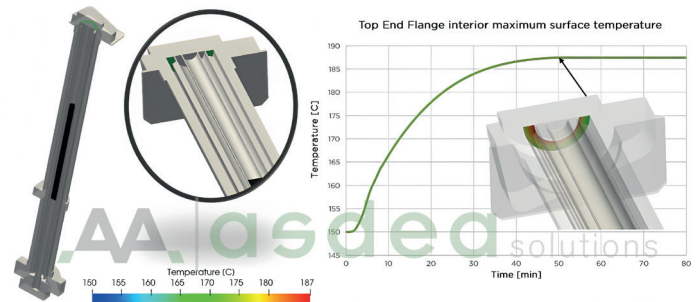
Features

- Service media is water and Nitrogen
- Testing orientation from 0 to 90 deg
- 5-off penetrations into the vessel for pressure applications
- Upper and lower removable closures
- Closure seal type – Metallic Gasket style.
- Gas booster pump / Hydrostatic pump / high flow pump
- Gas micro metering valve to allow accurate controlled vent down
- Integrated flow and temperature sensors to monitor outbound and inbound fluids
- 9/16” isolation valves for pressure control (five valves in total).

Specifications

- Max. working pressure 10,500 psi
- Max. working temperature 200°C
- Internal Diameter 20”
- Internal Length 8m
- Hyperbaric testing
- Gas testing
- Cyclic testing
- Rock to rock testing
- Qualification to ISO14310 - V0
- Heat Source – External heat bands enclosed in an insulation jacket.


Thermal Analysis (Thermite)



Designed and built by SengS, Ellon, Aberdeenshire.

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