



## Description

A multi-fuel furnace with operation capability up to 1300°C. The furnace supports combustion with hydrogen, natural gas (NG), and hydrogen/NG blends. It is fully instrumented, enabling precise monitoring and data capture.

## Applications and Capability

This furnace supports the transition to low-carbon fuels. It provides a platform to:

- > Test and validate hydrogen and hydrogen/NG blended-fuel combustion
- > Evaluate thermal performance and durability of industrial materials
- > De-risk adoption of alternative fuels
- > Appraise performance of OEM components
- > Generate critical data to inform net-zero investment decisions and process retrofitting strategies

This furnace complements our on-site hydrogen storage and distribution infrastructure, making it a key enabler for industry decarbonisation trials.

## Benefits

- > Delivers high-resolution operational data on temperature profiles, fuel use, and thermal efficiency
- > Assesses the performance of hydrogen and hydrogen/NG blends
- > Enables validation of fuel switching strategies and impact on materials and product quality
- > Supports techno-economic assessments for decarbonisation investment planning
- > Facilitates material behaviour studies under varied combustion atmospheres

## Key Features

- > Maximum capacity: 5 tonnes of material
- > Operating temperature: Up to 1300°C
- > Fuel flexibility: 100% hydrogen, natural gas, and hydrogen / natural gas blends
- > High-performance burners for uniform heat distribution
- > Advanced instrumentation control systems providing real-time sensing
- > High temperature homogeneity
- > Integrated with hydrogen infrastructure for seamless testing

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SCAN QR Code to view  
the Equipment Guide

