



# Furnace Engineering

*Leaders in Heat Processing Solutions*

## Carbon Fibre Carbonisation Furnace Simulator



### World First!

A Laboratory Benchtop Carbon Fibre (CF) Carbonisation furnace that replicates real time processing on short lengths of fibre.

- This new CF Simulation furnace provides an opportunity to carbonise fibres under varying test conditions.
- The test facility is able to heat single filaments or tows.
- Heat up rates in excess of 1200°C in 15 seconds can be achieved, exceeding that of production lines.
- Temperatures of 1800°C can be achieved.
- Excellent exclusion of oxygen can be achieved.
- Precise tension, temperature control and adjustment is possible per filament to an extent not possible on a normal line.
- It is possible to replicate the rapid heat up, residence times and cool down rates of production lines.
- The first heat of the day can be carried out within 5 minutes. There is no thermal shock to components.



**Carbon Fibre Carbonisation Furnace Simulator**

Patent Pending No.

- Test cycles can be of the order of every five minutes.
- Small sample lengths and number of filaments can be processed.

***Furnace Engineering designs draw on 40 years experiences as a leader in turn-key high-temperature continuous atmosphere controlled furnaces. Our customers are world leaders in their fields. Our teams supports installations around the world.***



Quality  
ISO 9001  
SAI GLOBAL

#### Melbourne

50 Howleys Road  
Notting Hill VIC 3168 Australia  
Private Bag 11 Mt Waverley VIC 3149  
Tel: +61 3 9544 2922  
Fax: +61 3 9544 2723



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[www.furnace.com.au](http://www.furnace.com.au)

Email: [info@furnace.com.au](mailto:info@furnace.com.au)