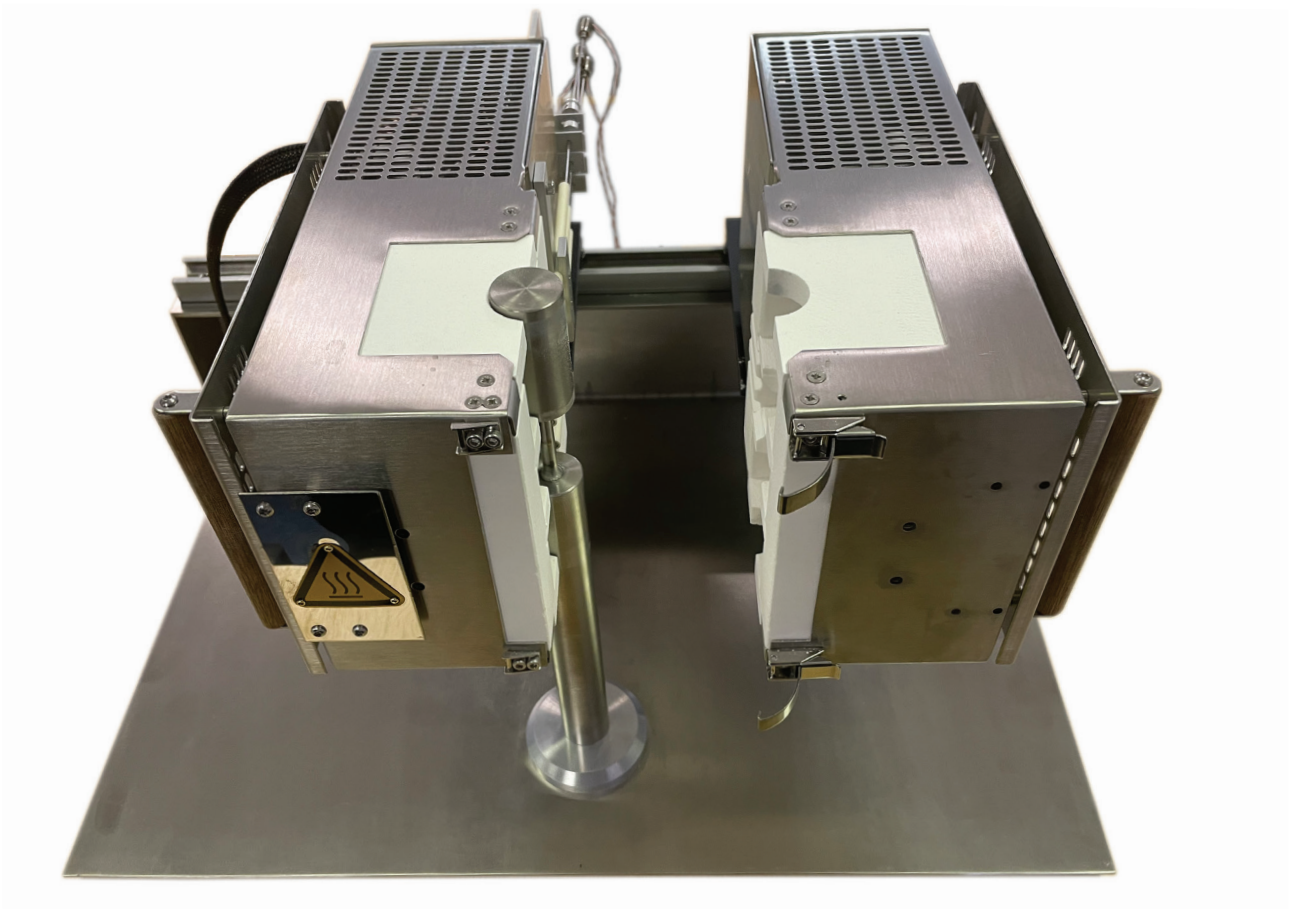


Compact Split Furnace

1200°C or 1400°C

Compact short test zone with three temperature control sensors



- Efficiently localises the heating and temperature control of short tensile test specimens.
- Enables shorter load trains in support of accurate alignment.
- Heating rates can be as high as 40-50°C per minute (load train dependent)
- Insulation pack options available to accommodate clip on extensometer insertion and use.



Outline Specification

The furnace is a split type configuration, with height of 135mm and internal hot zone height of 110mm. The furnace is heated by Silicon Carbide elements, providing relatively fast** and precise temperature control. The unit features high efficiency ceramic fiber insulation in support of accurate temperature management and safe working. This is enclosed by a stainless-steel case with ventilated terminal covers for the heating elements. Optimal removable insulation packs are available to suit specific specimen geometry (interchangeable) and contact extensometer arm access.

Temperature control is achieved by three type “N” 1.5mm diameter by 350mm long thermocouple sensors, sprung loaded to contact with the test specimen. And an additional type “N” thermocouple sensor for over temperature protection. This thermocouple is located close to the heating elements within a thermowell. Closing of the furnace around the test specimen and load train is achieved using the toggle clamps on the side of the furnace.



Optional temperature control from test settings within the Tinius Olsen Horizon materials testing software can be added to improve test efficiency.

Specifications

Part#	Contact sales	
Up to maximum furnace temperature:	1200°C with type N t/c's	1400°C with type S t/c's *
Minimum specimen temperature:	100°C	
Temperature stability:	±2°C or better	
Overall furnace height:	135mm	
Hot zone height:	110mm	
Overall furnace depth (along split line):	250mm	
Hot zone depth (along split line):	50mm	
Overall furnace width:	175mm (Excluding handles)	
Hot zone width (across split line):	50mm	
Top/bottom port dimensions:	Engineered to meet client need	
Control thermocouples:	Type N	
Extensometer slot size:	Engineered to meet client need	
Distance from extensometer slot face to load string centre line:	60mm	
Nominal power:	3kW (approximate)	
Supply:	230V, Single phase	
Weight:	40Kg	
Manufactured:	UK	
Typical ROI	10 months when integrated into a Tinius Olsen MTM	
Component defect warranty	12 months	
Heating elements to be connected in series for each heating zone.		
Temperature control system and furnace support brackets are available to suit.		

Notes:

* Maximum test temperature achieved is dependent on the load train material and size, the test specimen and insulation pack configuration.

** Time to achieve the desired test temperature is dependent on the target temperature, load train material and size, the test specimen and insulation pack configuration.

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