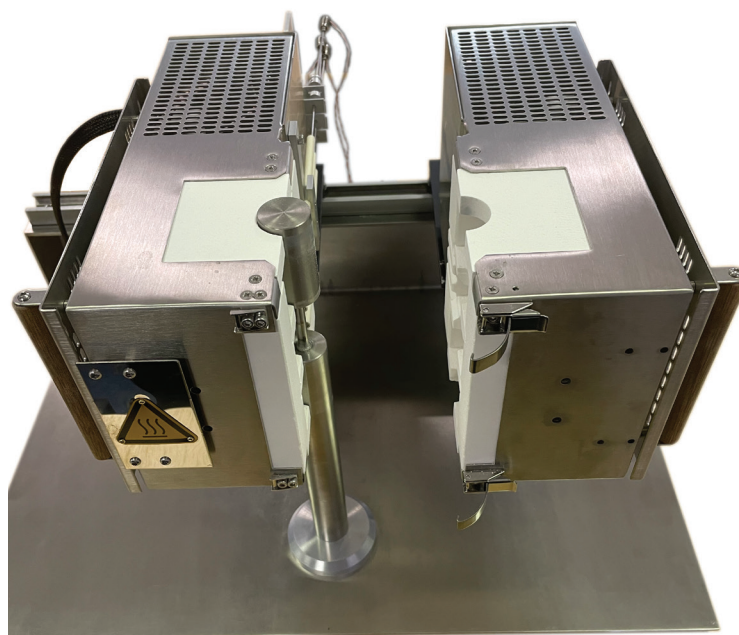


Compact split furnace

Furnace

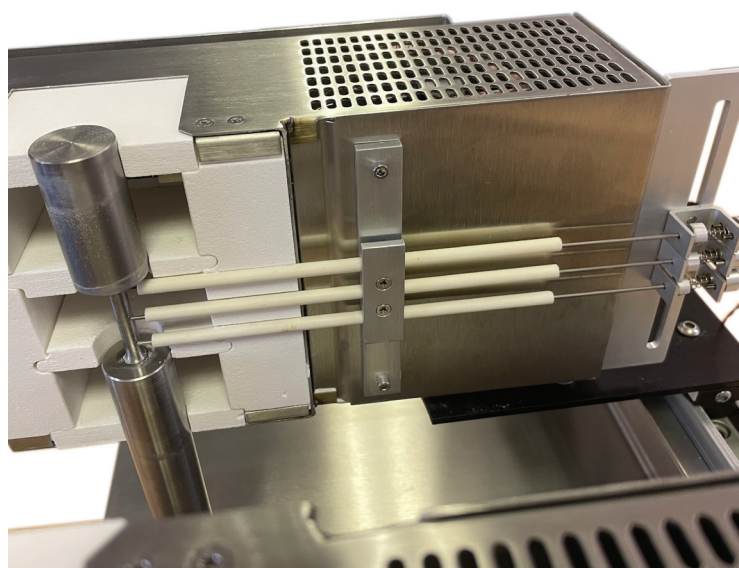
1200°C or 1400°C
Compact short test
zone with three
temperature control
sensors



Compatible with
Tinius Olsen ST and SL
series of materials testing
systems

Type

- + 1200°C with type N thermocouples
- + 1400°C with type S thermocouples



- + 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.

Compact split furnace

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.

TO order numbers

Contact sales

Compact split furnace

Specifications

Up to maximum furnace temperature	+ 1200°C with type N thermocouple + 1400°C with type S thermocouple *
Minimum specimen temperature	100°C / 212°F
Temperature stability	±2°C or better
Overall furnace height	135mm / 5.3in
Hot zone height	110mm / 4.3in
Overall furnace depth (along split line)	250mm / 9.8in
Hot zone depth (along split line)	50mm / 2.0in
Overall furnace width	175mm / 6.9in (excluding handles)
Hot zone width (across split line)	50mm / 2.0in
Top/bottom port dimensions	Engineered to meet client needs
Control thermocouples	Type N
Extensometer slot size	Engineered to meet client needs
Distance from extensometer slot face to load string centre line	60mm / 2.4in
Nominal power	3kW (approximately)

Specifications

Supply	230V, single phase
Weight	40kg / 88lbs
Manufactured	In UK
Typical ROI	10 months, when integrated into a Tinius Olsen System
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.

* 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.