

High temperature devices – Maytec configuration

High temperature furnaces up to 900°C, 1000°C, 1100°C and 1200°C

Order number	HTO-08	HTO-08/1	HTO-08/2	HTO-15
Application	e.g. for the determination of the elastic behaviour, tensile strength, and yield point at high temperatures			
Model	Circular kiln, 3 heating zones, air-cooled			
Temperature range	Room temperature up to max. 900°C, heating rate max. 20°C/min	Room temperature up to max. 1000°C, heating rate max. 20°C/min	Room temperature up to max. 1100°C, heating rate max. 20°C/min	Room temperature up to max. 1200°C, heating rate max. 20°C/min
Temperature control	3-zone regulation, accuracy +/- 1...2°C			
Dimensions	Outside: diameter approx. 275 mm; height approx. 405 mm Inside: diameter approx. 100 mm; height approx. 300 mm			Identical to HTO-08, but with outer diameter: 294 mm
Weight	Approx. 30 kg			35 kg
Electrical power	Approx. 1.0 to 1.2 kW per zone			
Delivery	Kiln up to 900°C	Kiln up to 1000°C	Kiln up to 1100°C	Kiln up to 1200°C

Accessory: Temperature control device MSRA (has to be ordered separately)

Order number	MSRA-61...
Application	e.g. for the determination of the elastic behaviour, tensile strength, and yield point at high temperatures
Suitable for	HTO-08, HTO-08/1, and HTO-08/2
Measuring / control range	Room temperature to 900°C, 1000°C, 1100°C
Test temperature	Can be chosen arbitrarily
Temperature / control accuracy	3-zone regulation, accuracy +/- 1...2°C
Electrical power	Approx. 1.0 to 1.2 kW per zone
Dimensions	500 x 600 x 420 mm
Weight	80 kg

Accessory: High temperature extensometer PMA-12... (has to be ordered separately)

Order number	PMA-12...
Suitable for	HTO-08, HTO-08/1, and HTO-08/2

Accessory: TC pull back mechanics PMA-19...(has to be ordered separately)

Order number	PMA-19...
Suitable for	HTO-08, HTO-08/1, and HTO-08/2



High-temperature kiln, series HTO-08...



High-temperature kiln with extensometer installed in a universal testing machine

Accessories High temperature kilns 1000°C and 1200° C - to be ordered separately.

Temperature control MSRA-61/RS for air furnaces HTO-08, HTO-08/1, and HTO-08/2 - to be ordered separately.

Measuring / control range	Room temperature to 1000° C
Test temperature	Can be chosen arbitrarily
Temperature / control accuracy	3-zone regulation, accuracy +/- 1...2°C
Temperature controller	Eurotherm
Electrical power	Approx. 1.0 to 1.2 kW per zone
Dimensions (W x D x H)	600 x 420 x 500 mm
Weight	80 kg
Electrical connection	3P / N / PE / 400 V / 50 Hz, 16CEE

Note! Order device MSRA-61/1/RS for HTO-08/2 (room temperature to 1100°C).

Temperature control device MSRA-621/RS for air furnaces HTO-15 - to be ordered separately.

Measuring / control range	Room temperature to 1200° C
Test temperature	Can be chosen arbitrarily
Temperature / control accuracy	3-zone regulation
Temperature controller	Eurotherm, serial interface RS232 (1 per heating zone) included
Electrical power	Approx. 1.0 to 1.2 kW per zone
Dimensions (W x D x H)	600 x 420 x 500 mm
Weight	80 kg
Electrical connection	3P / N / PE / 400 V / 50 Hz, 16CEE
E-stop	E-stop logic module consisting of 1 E-stop push-button switch, 1 E-stop external input 24VDC and 1 E-stop external output 24VDC included



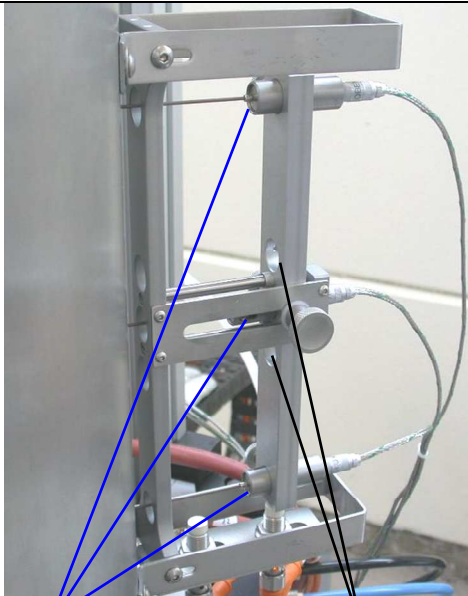
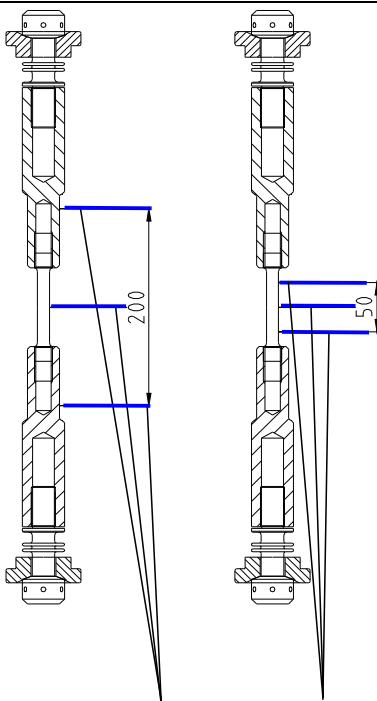
Temperature controller series MSRA-61...

TC pull back mechanics PMA-19 for HTO-08, HTO-08/1, and HTO-08/2 - to be ordered separately.

Order number	PMA-19...
Application	Moving device, to be installed on the kiln, for moving 3 thermocouples to the specimen
PMA-19/2-K-190	Clip on of 3 thermocouples on the middle of the specimen and the pull rods (upper/lower)
PMA-19/3-K-190	Clip on of 3 thermocouples on the specimen top/centre/bottom

TC pull back mechanics PMA-18 for HTO-15 - to be ordered separately.

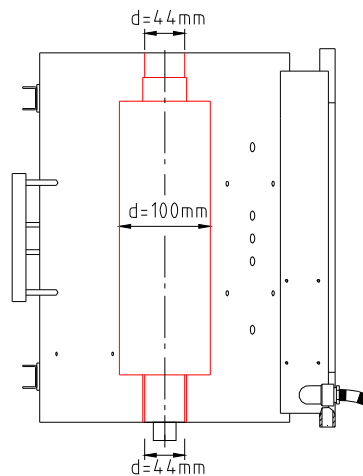
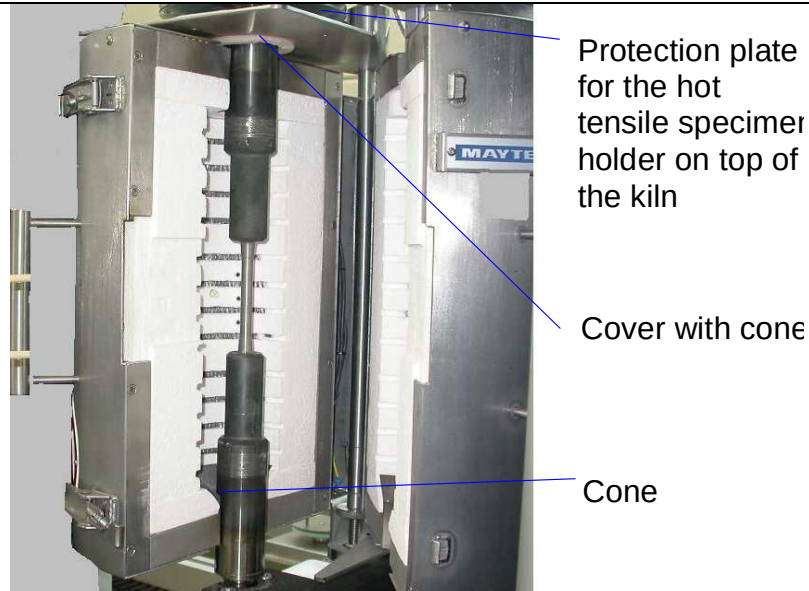
Order number	PMA-19...
Application	Moving device, to be installed on the kiln, for moving 1 thermocouple to the specimen
PMA-18/02-N-190-0	Clip on of 1 thermocouple on the specimen surface (centre)

 3 thermocouples installed with PMA-19/2-K-190 Installation opening for PMA-19/3-K-190	 Thermocouples	
TC pull-back mechanics PMA Clip on of 3 thermocouples on the middle of the specimen and the pull rods (upper/lower)	PMA-19/2-K-190 thermocouples on the middle of the specimen and the pull rods (upper/lower)	PMA-19/3-K-190 thermocouples on the specimen top/centre/bottom

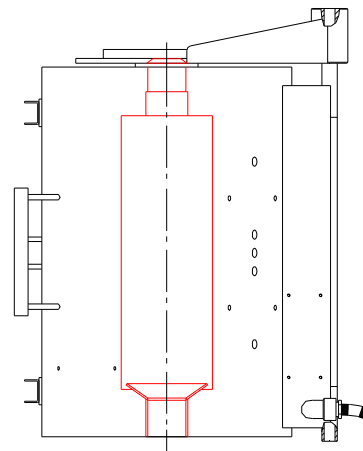
Insertion cone and cover for pull rods feedthrough into the kiln for HTO-08, HTO-08/1, and HTO-08/2 - to be ordered separately.

Order number	HTO-ZSO-9731-0
Application	Insertion cone system for the high temperature kiln HTO-08/1 with cover for the feedthrough of the pull rods through the kiln bottom when the kiln is closed.

Kiln with insertion system



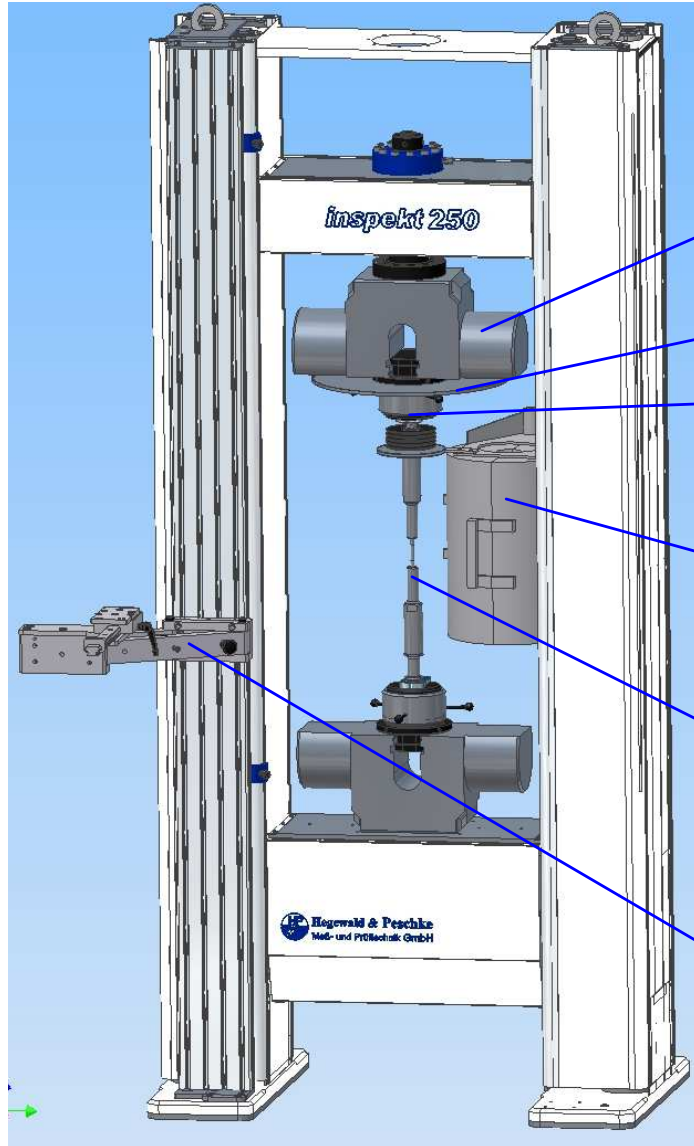
Kiln without insertion system



Kiln with insertion system

Comparison of kilns

Example of a high-temperature kiln with hot tensile specimen holder installed in a universal testing machine



Hydraulic clamp
with adapted
specimen holders
(top and bottom)

Heat reflector

Insertion for ball
nut in specimen
holder

High temperature
kiln

Hot tensile test
specimen holder
with threaded
adapter for hot
tensile specimens

Holder for high
temperature
extensometer