



# 900°C, 1000°C & 1200°C Single Zone Tube Furnaces



MTF 10/25/130/301  
MTF 12/38/250/301

CTF 12/65/550/301  
MTF 12/38/400/301

## General Features

- Eleven standard size wire-wound tube furnaces.
- Maximum operating temperatures of 900°C, 1000°C & 1200°C.
- Rapid heat-up to operating temperature.
- Select from multiple work tube diameters ranging from 5/8" (15 mm) to 4" (100 mm).
- Seven heated length choices from 5" (130 mm) to 36" (900 mm) provide for multiple working and uniformity requirements.
- Integral ceramic work tube with external element winding creates furnace chamber.
- Integral work tube is convenient and suitable for processing in air.
- Easily slide a separate tube through work tube for processing under atmosphere.
- Furnace incorporates low thermal mass ceramic fiber insulation for improved response times.
- Furnaces are normally mounted horizontally on a support base or cabinet.
- Thermocouple is located in a protection tube between the chamber work tube and heating element.
- All wire-wound tube furnaces can be provided for optional vertical operation. (See page 44)
- Safety outer mesh guard provides low temperature external surface.
- Furnace controls are built into the supporting base or cabinet, providing convenient observation and access to all power and temperature controls.
- Choice of Model 301 control or programmers.
- Choice of multiple accessories and options, including process tubes, gas tight end seals, insulating plugs, radiation shields, etc. (See pages 43-46)

## 900°C, 1000°C & 1200°C Single Zone Wire-Wound Tube Furnaces

Furnace Model	Max. Temp. (°C)	Work Tube Inside Dia. Inches (mm)	Heated Length Inches (mm)	Overall Furnace Length Inches (mm)	TC Type	Max. Power (kW)	Furnace Voltage	External Dimensions Inches (mm)			Shipping Weight (lb.)
								Height	Length	Depth	
MTF 9/15/130	900	0.6 (15)	5.00 (130)	7.00 (180)	K	.25	120	7.00 (180)	7.00 (180)	3.50 (90)	14
MTF 10/15/130	1000	0.6 (15)	5.00 (130)	6.00 (150)	K	.40	120	10.50 (265)	8.00 (200)	6.75 (175)	22
◆ MTF 10/25/130	1000	1.00 (25)	5.00 (130)	6.00 (150)	K	.40	120	10.50 (265)	8.00 (200)	6.75 (175)	22
MTF 12/25/250	1200	1.00 (25)	10.00 (250)	12.00 (300)	N	.70	120	14.75 (375)	14.50 (370)	14.75 (375)	38
◆ MTF 12/38/250	1200	1.50 (38)	10.00 (250)	12.00 (300)	N	1.0	120	17.00 (430)	14.50 (370)	14.75 (375)	38
MTF 12/25/400	1200	1.00 (25)	15.75 (400)	17.75 (450)	N	1.0	120	14.75 (375)	17.75 (450)	14.75 (375)	44
◆ MTF 12/38/400	1200	1.50 (38)	15.75 (400)	17.75 (450)	N	1.5	120	17.00 (430)	17.75 (450)	14.75 (375)	44
MTF 12/38/850	1200	1.50 (38)	33.50 (850)	35.50 (900)	N	2.8	208/240	17.00 (430)	35.50 (900)	14.75 (375)	104
◆ CTF 12/65/550	1200	2.50 (65)	21.50 (550)	24.50 (625)	N	2.0	208/240	20.75 (525)	24.50 (625)	14.25 (360)	80
CTF 12/75/700	1200	3.00 (75)	27.50 (700)	30.50 (775)	N	3.0	208/240	20.75 (525)	30.50 (775)	14.25 (360)	84
CTF 12/100/900	1200	4.00 (100)	35.50 (900)	38.50 (975)	N	4.5	208/240	20.75 (525)	38.50 (975)	14.25 (360)	104

◆ Stock Products  
Continuous operating temperature is 100°C below maximum temperature.

Note: Stock furnaces are provided with 301 control.

Specify voltage at time of order.  
Furnaces operate on single phase voltage.



## General Features

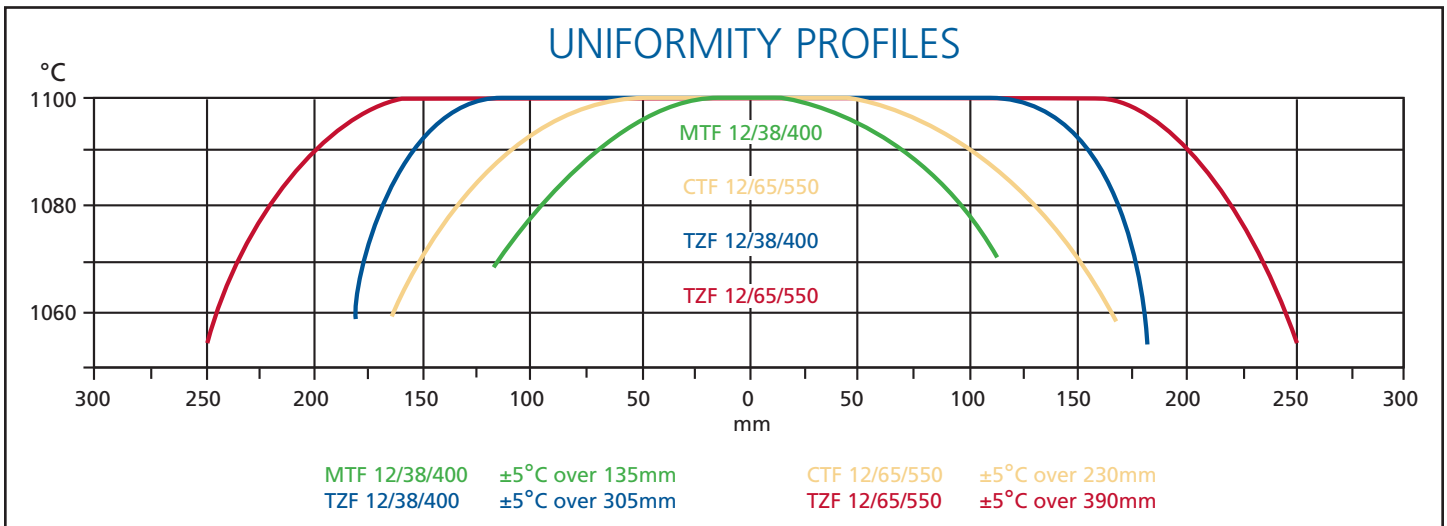
- Design features listed for single zone wire-wound tube furnaces (page 30) also apply to TZF three zone tube furnaces.
- Five standard size three zone wire-wound tube furnaces to choose from.
- Three zone design provides enhanced linear temperature uniformity.
- Maximum operating temperature of 1200°C.
- Three temperature control instruments allow variation of setpoint temperature in each furnace zone. (See page 45)
- End zone controllers may be slaved to center zone or fully independent.
- Select from multiple work tube diameters ranging from 1.5" (38 mm) to 4" (100 mm).
- Five heated length choices from 15.75" (400 mm) to 36" (900 mm).



TZF 12/75/700/3216P1

Each TZF model is derived from a MTF or CTF tube furnace having two additional independently controlled heating zones. TZF three zone tube furnaces are ideal for applications which demand a uniform temperature over an extended length. The end zones are normally wired to maintain an adjustable temperature differential

from the center zone. This design has the advantage that if a programmable control is installed in the center zone, the end zones will follow the same program. Alternatively, when programming is not required, fully independent control of the end zones is available if specified when ordering. See page 45.



## 1200°C Three Zone Wire-Wound Tube Furnaces

Furnace Model	Max. Temp. (°C)	Work Tube Inside Dia. Inches (mm)	Heated Length Inches (mm)	Overall Length Inches (mm)	TC Type	Max. Power (kW)	Furnace Voltage	External Dimensions			Shipping Weight (lb.)
								Height	Inches (mm) Length	Depth	
TZF 12/38/400	1200	1.50 (38)	15.75 (400)	17.75 (450)	N	1.5	120/208/240	17.00 (430)	17.75 (450)	14.75 (375)	71
TZF 12/38/850	1200	1.50 (38)	33.50 (850)	35.50 (900)	N	2.8	208/240	17.00 (430)	35.50 (900)	14.75 (375)	110
TZF 12/65/550	1200	2.50 (65)	21.50 (550)	23.50 (600)	N	2.0	208/240	20.75 (525)	24.50 (625)	14.25 (360)	84
TZF 12/75/700	1200	3.00 (75)	27.50 (700)	29.50 (750)	N	3.0	208/240	20.75 (525)	30.50 (775)	14.25 (360)	102
TZF 12/100/900	1200	4.00 (100)	35.50 (900)	37.50 (950)	N	4.5	208/240	20.75 (525)	38.50 (975)	14.25 (360)	106

Specify voltage at time of order.  
Continuous operating temperature is 100°C below maximum temperature.

Furnaces operate on single phase voltage.