



# LABORATORY FURNACES

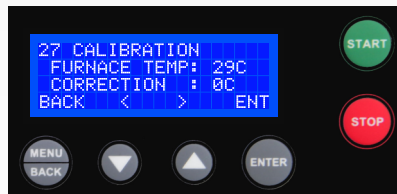


**LABORATORY TESTS**

**HEAT TREATMENT**

**ASHING**

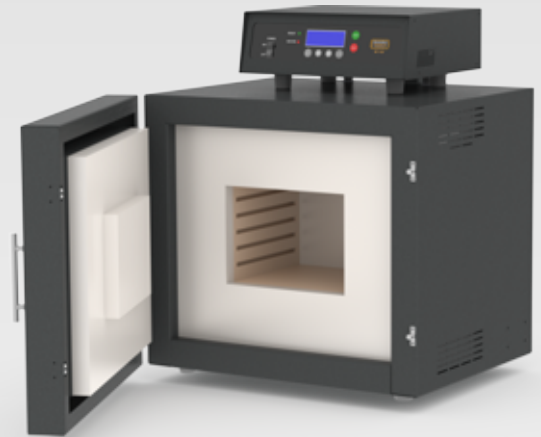
**DRYING**



We offer a wide range of chamber furnaces in working temperatures, inner dimensions and software alternatives.

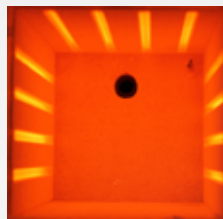
Even if you need a simple choice for ashing or have to follow a complicated receipt in your experimentations, **we have certainly an appropriate offer for you.**

Our furnaces can be used in quality control tests, ashing, heat treatment, preheating, melting, metallurgical research and sample production etc. applications.



## FEATURES AND HIGHLIGHTS

Magmatherm furnaces are high quality products. They have been produced for heavy duty conditions. Unique mechanical design provides long life and unique PID Control Unit provides reliability and ergonomics.



Modular inner body



### Chamber, Insulation Layers and Chasis

- Chamber walls made up of insulating fire bricks against mechanical abrasion and thermal aging and deformation.
- Half buried heaters at two sides and top in quartz tubes.
- Tight door insulating thanks to spring mechanism.
- Modular inner body; replacement and fully renewing the furnace in 30 minutes.
- Homogeneous temperature gradient in the chamber thanks to similar heat loss in every directions.
- Maximized the optimum insulation thickness to reduce the temperature of the outer surface .
- Contactless outer shell for low surface temperature.
- Ergonomical PID control unit placement. Operating without leaning.
- Standart chimney with fan.
- Adjustable foot screw.

# CHAMBER FURNACES

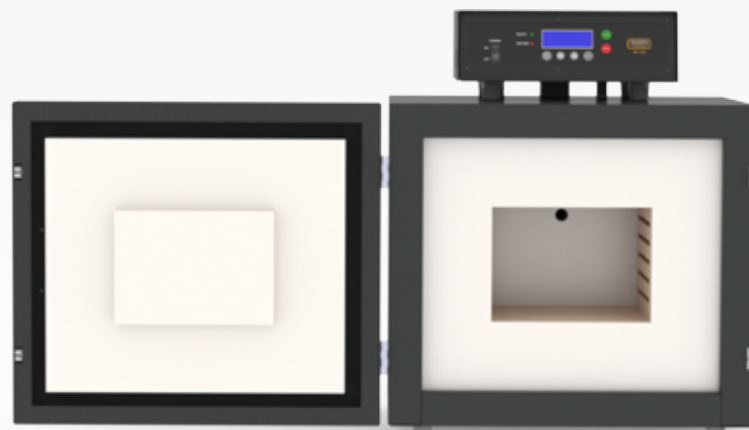


MT Series Chamber Furnaces



Primary Series Chamber Furnaces

PRODUCT CODE	T <sub>max</sub> [°C]	T <sub>con</sub> [°C]	V [Lt]	Chamber Dim. [cm]	Overall Dim. [cm]	Power [W]	I <sub>max</sub> [A]	Voltage [V]	Freq. [Hz]	Control Unit Model Options
P9503	950	950	3,1	13x10,5x23	36x48x54	1450	6,6	220	50	P,Px
P9505	950	950	5,2	15x15x23	36x48x54	1450	6,6	220	50	P,Px
MT1105	1100	1075	5,2	15x15x23	48x64x64	2200	10	220	50	B2, E4, U8, S16
MT1205	1200	1175	5,2	15x15x23	48x64x64	2000	9,1	220	50	B2, E4, U8, S16
MT1305	1300	1275	5,2	15x15x23	48x64x64	2300	10	220	50	B2, E4, U8, S16
MT1107	1100	1075	7,4	20x16x23	58x65x65	3000	13,7	220	50	B2, E4, U8, S16
MT1207	1200	1175	7,4	20x16x23	58x65x65	3000	13,7	220	50	B2, E4, U8, S16
MT1307	1300	1275	7,4	20x16x23	58x65x65	2200	10	220	50	B2, E4, U8, S16
MT1110	1100	1075	10,4	25x18x23	58x65x66	3000	13,7	220	50	B2, E4, U8, S16
MT1210	1200	1175	10,4	25x18x23	58x65x66	3000	13,7	220	50	B2, E4, U8, S16
MT1310	1300	1275	10,4	25x18x23	58x65x66	3600	16,4	220	50	B2, E4, U8, S16
MT1115	1100	1075	15,0	25x20x30	58x72x75	3600	16,4	220	50	B2, E4, U8, S16
MT1215	1200	1175	15,0	25x20x30	58x72x75	3600	16,4	220	50	B2, E4, U8, S16
MT1315	1300	1275	15,0	25x20x30	58x72x75	4000	18,2	220	50	B2, E4, U8, S16
MT1120	1100	1075	20,0	25x20x40	58x72x80	4000	18,2	220	50	B2, E4, U8, S16
MT1220	1200	1175	20,0	25x20x40	58x72x80	4000	18,2	220	50	B2, E4, U8, S16
MT1320	1300	1275	20,0	25x20x40	58x72x80	4200	19,1	220	50	B2, E4, U8, S16





## MTTF SERIES TUBE FURNACES

Our new design is the new tube furnace. Not only the unique hexagonal body design differs the Magmatherm tube furnaces from his competitors but also the sharp "PID Control Algorithms" make the researcher carefree and provides power to control their procedure.

The robust chasis and durable resistors let the furnace work like a workhorse.

If controlled atmosphere vacuum is required, tube furnaces are an economical and technical suitable option for the researchers.

### HIGHLIGHTS

- Unique design
- Reliability and long life
- Accurate temperature control
- Ergonomics
- Optimum insulation
- Energy saving



PRODUCT CODE	T <sub>max</sub> [°C]	T <sub>con</sub> [°C]	Tube Dim. [mm]	Heated Length. [mm]	Power [W]	I <sub>max</sub> [A]	Voltage [V]	Freq. [Hz]	Control Unit Model Options
MTTF13/20/250	1300	1250	20x500	250	1,0	5	220	50	B2, E4, U8, S16
MTTF13 /20/400	1300	1250	20x750	400	1,0	5	220	50	B2, E4, U8, S16
MTTF13/50/250	1300	1250	50x500	250	1,5	7	220	50	B2, E4, U8, S16
MTTF13/50/450	1300	1250	50x750	450	1,5	7	220	50	B2, E4, U8, S16
MTTF13/75/600	1300	1250	75x750	600	3,5	16	220	50	B2, E4, U8, S16
MTTF13/75/800	1300	1250	75x1000	800	3,5	16	220	50	B2, E4, U8, S16

Notes:

## PID CONTROL UNITS

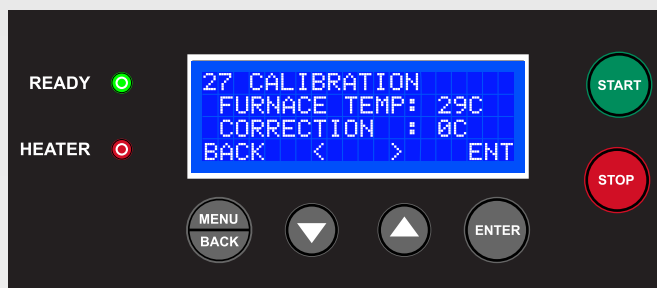
PID control units are the most unique parts of our products. Mainly two different concepts are in service for the researchers and laboratory technicians according to application characteristics.

For advanced applications the "MT Series PID Control Unit" offers user friendly menu and user interface with 4-line wide screen display. They bring many advantages, compared to other control units.

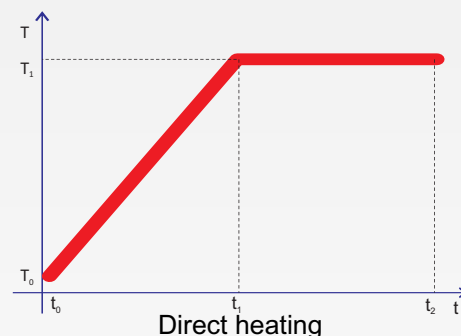
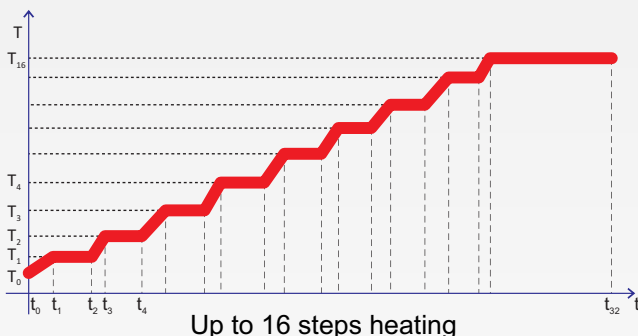
For simple applications like burning, melting, heating or preheating, the "Primary Control Unit" guaranty accuracy, reliability and saving time and money.

### MT SERIES PID CONTROL UNIT

- User friendly menu
- 4 line wide display
- 2 - 6 program memories
- Direct or 2-16 step heating procedure
- Heating rate: 3-20 °C/min
- Individual heating rate setting for each step
- $\pm 1^\circ\text{C}$  accuracy in temperature measurement and temperature control
- Temperature calibration via menu
- Indicating the remaining time during the waiting step and possibility to skip the waiting
- Autostart at the preset date and time
- Sound warning at the step transitions and in case of errors
- Automatic heating cut off system, in case of overheated chamber or control unit
- Digital total heating time counter
- Average working temperature indicator

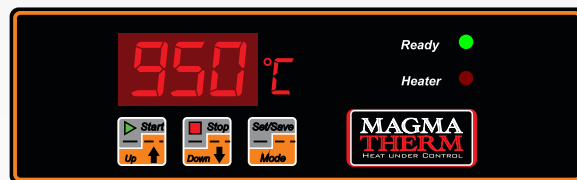


MT Series Keypad

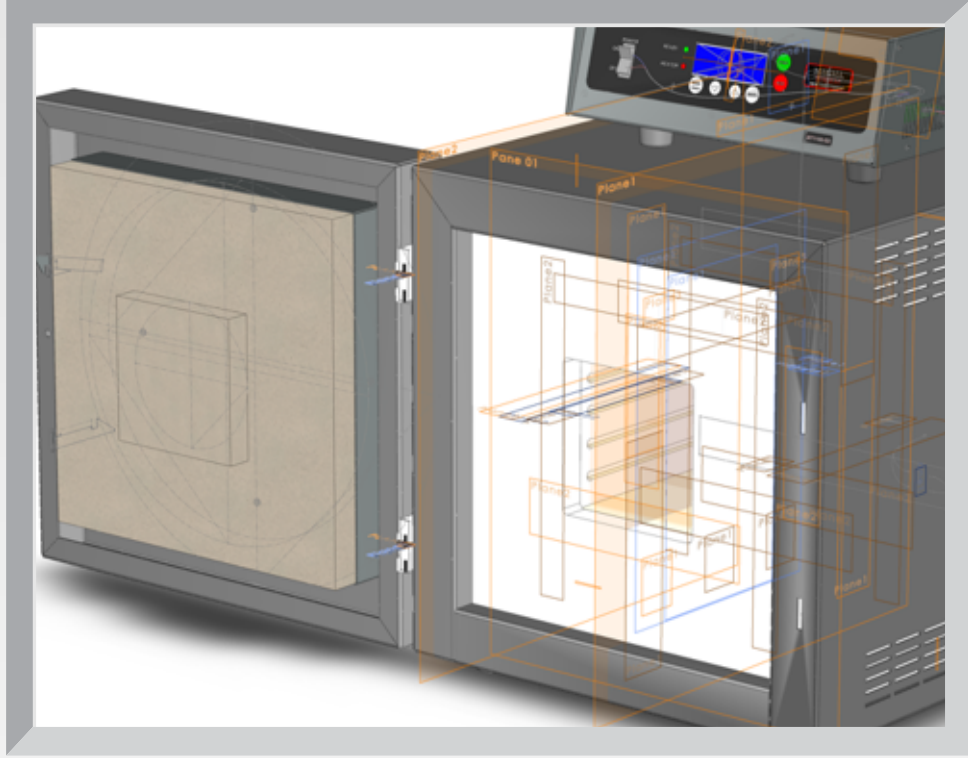


### PRIMARY SERIES CONTROL UNIT

- Easy programming
- One touch start/stop
- 7-Segment display
- 1-2 program memories
- Direct or 2 step heating procedure
- Heating rate: 5-25 °C/min
- $\pm 1^\circ\text{C}$  accuracy in temperature measurement and temperature control
- Sound warning at the step transitions and in case of errors
- Automatic heating cut off system, in case of overheated chamber or control unit
- Digital total heating time counter



Primary Series Keypad



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