

LABORATORY FURNACES

LABORATORY TESTS

HEAT TREATMENT

ASHING

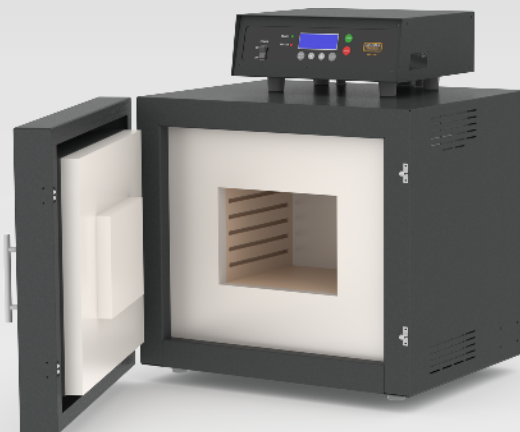
DRYING



Tetra ISI offers a wide range of chamber and tube furnaces with a choice temperatures, chamber dimensions and software.

Whether you only need a simple instrument or a more versatile model to match your requirements, you are sure to find a suitable model in our range.

MagmaTherm furnaces cover an extensive variety of applications including quality control, ashing, heat treatment, preheating, melting, metallurgical research and sample production and many more.



MT Series Chamber Furnaces
PID Control Unit on the top

FEATURES AND HIGHLIGHTS

MagmaTherm furnaces are high quality products. They have been designed for heavy duty operation. Unique mechanical design provides long life and advanced PID control ensure reliability and ergonomomy.













MT Series Chamber Furnaces
PID Control Unit at the bottom



Modular inner body



Customer Benefits

-  **Homogeneous Temperature:** Heating elements and insulation positioned for ideal heat distribution.
-  **Durable Design:** Heating resistors protected by quartz tubes for long life.
-  **Robust Structure:** Chamber walls made of refractory bricks, resisting mechanical abrasion, thermal ageing and deformation.
-  **Safe Operation:** Contactless outer shell for low surface temperature; safe to touch.
-  **Ergonomic Control:** The control unit is conveniently placed above the body: easy to see and reach.
-  **Economical to Use:** Maximized insulation to ensure minimum energy consumption.
-  **Ease of Use:** Tight door sealing with spring mechanism that offers excellent insulation.
-  **Simple to Renew:** Replacement of modular body parts for easy renewal in under 30 minutes.
-  **Precise Installation:** Adjustable foot for horizontal adjustment; important for tests with melting.
-  **Efficient drying:** Chimney with fan as standard.



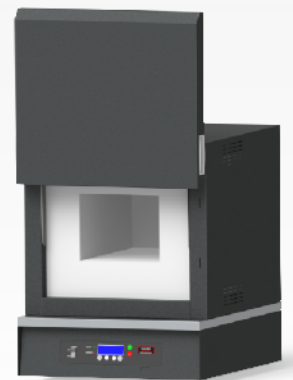
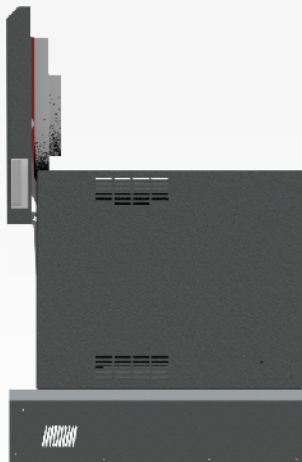
MT Series Chamber Furnaces
Side Door



Primary Series
Chamber Furnaces

TECHNICAL SPECIFICATIONS

PRODUCT CODE	T _{max} °C	T _{set} °C	Vol L	Chamber Dim. (W x H x D) cm	Overall Dim. (W x H x D) cm	Power Watt	I _{max} 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
P9507	950	950	7.4	20x16x23	48x64x64	1450	6.6	220	50	P,Px
MT1105	1100	1075	5.2	15x15x23	48x64x64	2000	9.1	220	50	B2, E4, U8, S16
MT1205	1200	1175	5.2	15x15x23	48x64x64	2000	9.1	220	50	B2, E4, U8, S16
MT1305	1300	1250	5.2	15x15x23	48x64x64	2250	10.2	220	50	B2, E4, U8, S16
MT1107	1100	1075	7.4	20x16x23	58x65x65	2500	11.4	220	50	B2, E4, U8, S16
MT1207	1200	1175	7.4	20x16x23	58x65x65	2500	11.4	220	50	B2, E4, U8, S16
MT1307	1300	1250	7.4	20x16x23	58x65x65	3600	16.4	220	50	B2, E4, U8, S16
MT1110	1100	1075	10.4	25x18x23	58x65x66	2800	12.7	220	50	B2, E4, U8, S16
MT1210	1200	1175	10.4	25x18x23	58x65x66	2800	12.7	220	50	B2, E4, U8, S16
MT1310	1300	1250	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	1250	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	1250	20.0	25x20x40	58x72x80	4500	20.5	220	50	B2, E4, U8, S16



MT Series Chamber Furnaces
Lift up Door

CHAMBER FURNACES

Control Unit Specifications

	PRIMARY P	PRIMARY Px	BASIC B2	EXTENDED E4	ULTIMATE U8	SUPERIOR S16
Heating Rate	5-25°C/min.	5-25°C/min.	3-20°C/min.	3-20°C/min.	3-20°C/min.	3-20°C/min.
Individual Heating Rate For Each Step	NO	NO	NO	NO	NO	YES
Display Type	7 segment	7 segment	4 lines	4 lines	4 lines	4 lines
Heating Programs	Direct	2 steps	2 steps	4 steps	8 steps	8 steps / 5th memory 16 step
Memories	1	2	2	4	6	5
Programmable Automatic Start	NO	NO	NO	YES	YES	YES
Follow up; residual time during waiting step	NO	NO	NO	YES	YES	YES
Skip the waiting step	NO	NO	NO	YES	YES	YES
Temperature calibration via MENU	NO	NO	NO	YES	YES	YES
Door Switch	Optional	Optional	Optional	Optional	Optional	Optional
Warranty Period						
RESISTANCE WIRE	2 YEARS	2 YEARS	2 YEARS	2 YEARS	2 YEARS	2 YEARS
CONTROL UNIT	2 YEARS	2 YEARS	2 YEARS	3 YEARS	3 YEARS	3 YEARS

MTTF SERIES TUBE FURNACES

Tube furnaces are our latest products. Not only does the hexagonal body design distinguish the MagmaTherm tube furnaces from the competitors, but the advanced MagmaTherm PID Control Algorithms ensure precise temperature control, enabling researchers to concentrate on other important work.

The robust chassis and durable resistors make the MagmaTherm MTTF series true workhorses.

MagmaTherm tube furnaces are the ideal choice when controlled atmosphere and technical performance are combined in an economical response.

HIGHLIGHTS

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



PRODUCT CODE	T _{max} °C	T _{set} °C	Tube Dim. mm	Heated Length mm	Power Watt	I _{max} A	Voltage V	Freq. Hz	Control Unit Model Options
MTTF11/20/250	1100	T _{max} - 25°C	20x500	250	800	4	220	50	B2,E4
MTTF11/50/250	1100	T _{max} - 25°C	50x500	250	1000	5	220	50	B2,E4
MTTF12*/20/250	1200	T _{max} - 50°C	20x500	250	1000	5	220	50	B2, E4, U8, S16
MTTF12*/20/400	1200	T _{max} - 50°C	20x750	400	1000	5	220	50	B2, E4, U8, S16
MTTF12*/50/250	1200	T _{max} - 50°C	50x500	250	1500	7	220	50	B2, E4, U8, S16
MTTF12*/50/450	1200	T _{max} - 50°C	50x750	450	1500	7	220	50	B2, E4, U8, S16
MTTF12*/75/600	1200	T _{max} - 50°C	75x750	600	3500	16	220	50	B2, E4, U8, S16
MTTF12*/75/800	1200	T _{max} - 50°C	75x1000	800	3500	16	220	50	B2, E4, U8, S16

* * T_{max} =1300°C models are also available for the same dimensions..

PID CONTROL UNITS

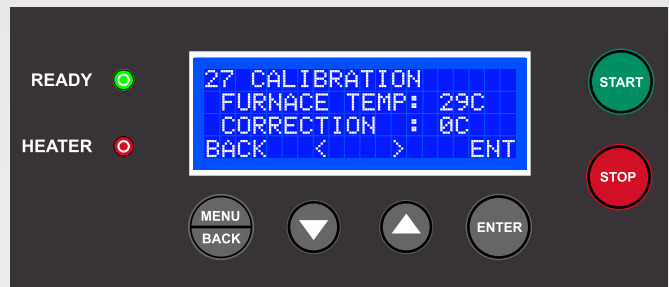
PID control units are the most outstanding elements of our products. Two different concepts are in service for the researchers and laboratory technicians according to application characteristics.

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

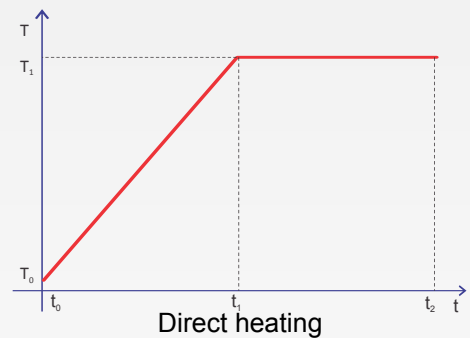
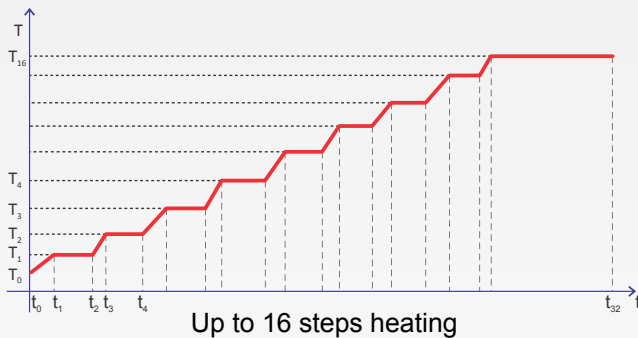
For simple applications like burning, melting, heating or preheating, the "Primary Control Unit" guarantees accuracy, reliability and saves time and money.

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
- 🔧 ±1°C accuracy in temperature measurement and temperature control
- 🔧 Temperature calibration via menu
- 🔧 Indication of the remaining time during the waiting step and possibility to skip the waiting
- 🔧 Auto-start 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

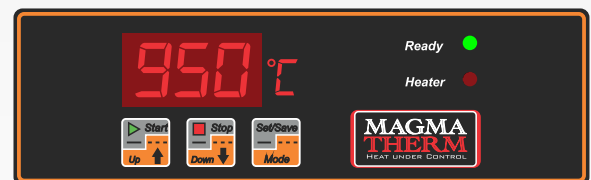


MT Series Keypad

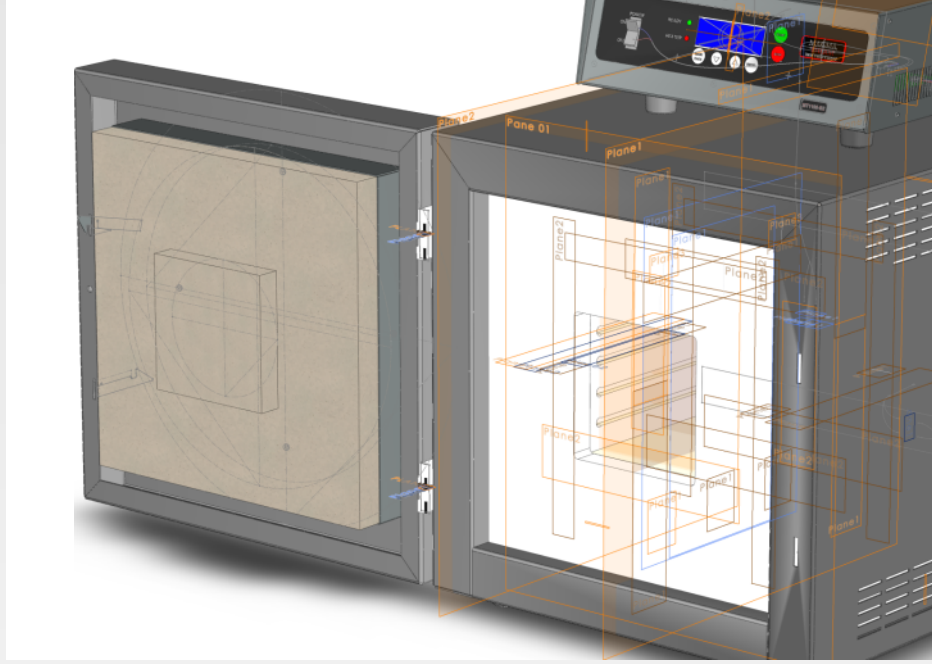


PRIMARY SERIES CONTROL UNIT

- 🔧 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
- 🔧 ±1°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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