



MTMo Series Furnaces



High Temperature Furnaces with MoSi₂ Heating Elements

Data Sheet & Order Manual 1500°C-1750°C



- User friendly operating menu in 4 line display for easy operation.
- Own unique electronic design and softwares.
- Current limit control for safe operation.
- Durable inside lining made of high quality light insulating

- bricks and seramic fibre boards.
- Accurate temperature measuring and controlling using S or B Type thermocouples.
- Designed for minimal space requirements in the laboratory thanks to highly

- engineered insulation design.
- Dual shell housing for low outer surface temperature.
- Optional protective gas connection, door switch.
- Lift up and Sidewords opening door possibilities.
- ±1 °C control accuracy.

Product Group	Working Temperature	Volume Options	Software Options
MTMo	1500 °C	1, 3, [Liter]	E4, U8, S16
	1600 °C	1, 3, 6, 9, 16, 30, 60 [Liter]	
	1700 °C	3, 6, 9, 16, 30, 60 [Liter]	
	1750 °C	3, 6, 9, 16, 30, 60 [Liter]	

How to Choose/Order Your MagmaTherm Furnace

STEP 1

Choose maximum working temperature:

First step is deciding your purpose of use. Please determine the maximum working temperature you need and go to its data sheet accordingly.

Most of the time it is a wise decision to choose a furnace which works at a higher temperature than you plan to use. Using the furnace below maximum temperature remarkably extends the lifetime of heating elements and saves you money.

STEP 2

Choose volume:

While choosing ideal volume for your furnace keep in mind that your sample should be at least 25mm away from each wall.

STEP 3

Choose control unit and software:

Do you need direct or stepped heating ? How sophisticated programs do you want to setup? Do you want to store frequently used programs?

PID controlled software is the key element for maximising the capability of your furnace.

STEP 4

Choose optional features:

There are many optional features you can add to your MagmaTherm furnaces. You can customize it according to your needs.

STEP 5

Choose spare parts:

You can choose which spare parts you want with your furnace to be able to repair fast on your own. Manuals for easy installation comes with all spare parts.

STEP 6

Choose accessories:

You will most likely need gloves, tongs, crucibles and other accessories.

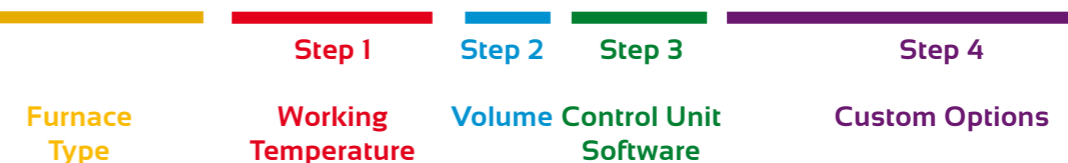
STEP 7

Create your order code and fill out your order form:

Create an order amount and order code for each MagmaTherm furnace. Fill out the order form and send an email to magma@magnatherm.com for quotation.

Sample MagmaTherm Furnace Product/Order Code

MTMo-1750-6-U8-LU-DS-PC



STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature		
1500°C		
STEP 2 Choose Your Volume		
	1 Liter	3 Liter
Inner Chamber Dimensions [mm] WxHxD	100x125x106	115x150x175
Product Outer Dimensions [mm] WxHxD	432x826x530	467x920x634
Net Weight [kg]	73	81
Power [W]	1.900	3.780
Max. Current [A]	9	16
Electrical Connection	1 Phase	1 Phase
Heating Element	MoSi2	MoSi2
Thermocouple Type	S Type	S Type
Heating Element Placement	Vertically aligned next to the side walls	Vertically aligned next to the side walls
Inner Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board
Front Face Insulation Material	Insulating Fire Brick	Insulating Fire Brick
Door Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board
Housing Material	Steel Sheet	Steel Sheet
Housing Coating	Epoxy powder coating	Epoxy powder coating
Chimney	Standard without fan	Standard without fan
Lockable Door Handle	Sideways	Sideways
Gross Dimensions [mm] WxLxD	492x886x690	527x980x794
Gross Weight [kg]	90	101

STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature							
1600°C							
STEP 2 Choose Your Volume							
	1 Liter	3 Liter	6 Liter	9 Liter	16 Liter	30 Liter	60 Liter
Inner Chamber Dimensions [mm] WxHxD	100x125x106	115x150x175	150x185x220	170x205x260	200x255x315	250x310x390	320x420x450
Product Outer Dimensions [mm] WxHxD	432x826x530	467x920x634	502x955x679	522x975x869	532x981x889	582x310x390	652x1146x1024
Net Weight [kg]	73	96	110	136	150	170	185
Power [W]	1.900	3.780	8.200	8.200	8.600	10.700	14.700
Max. Current [A]	16	16	2x20	2x22	3x24	3x30	3x41
Electrical Connection	1 Phase	1 Phase	2 Phase	2 Phase	2 Phase	2 Phase	2 Phase
Heating Element	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2
Thermocouple Type	S Type	S Type	S Type	S Type	S Type	S Type	S Type
Heating Element Placement	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls
Inner Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board
Front Face Insulation Material	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick
Door Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet
Housing Coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating
Chimney	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan
Lockable Door Handle	Sideways	Sideways	Sideways	Sideways	Sideways	Sideways	Sideways
Gross Dimensions [mm] WxLxD	492x886x690	527x980x794	562x1015x839	582x1035x1029	592x1041x1049	642x1096x1049	712x1206x1184
Gross Weight [kg]	90	116	133	162	180	204	224

STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature						
1700°C						
STEP 2 Choose Your Volume						
	3 Liter	6 Liter	9 Liter	16 Liter	30 Liter	60 Liter
Inner Chamber Dimensions [mm] WxHxD	115x150x175	150x185x220	170x205x260	200x255x315	250x310x390	320x420x450
Product Outer Dimensions [mm] WxHxD	467x920x634	502x955x679	522x975x869	552x1025x924	602x1080x999	672x1190x1059
Net Weight [kg]	96	110	136	165	185	195
Power [W]	5.200	8.900	10.000	9.200	14.300	19.500
Max. Current [A]	2x12	2x20	2x23	3x26	3x39	3x54
Electrical Connection	2 Phase	2 Phase	2 Phase	2 Phase	2 Phase	2 Phase
Heating Element	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2
Thermocouple Type	B Type	B Type	B Type	B Type	B Type	B Type
Heating Element Placement	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls
Inner Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board
Front Face Insulation Material	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick
Door Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet
Housing Coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating
Chimney	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan
Lockable Door Handle	Sideways	Sideways	Sideways	Sideways	Sideways	Sideways
Gross Dimensions [mm] WxLxD	527x980x794	562x1015x839	582x1035x1029	612x1085x1084	662x1140x1159	732x1250x1219
Gross Weight [kg]	116	133	162	195	219	234

STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature						
1750°C						
STEP 2 Choose Your Volume						
	3 Liter	6 Liter	9 Liter	16 Liter	30 Liter	60 Liter
Inner Chamber Dimensions [mm] WxHxD	115x150x175	150x185x220	170x205x260	200x255x315	250x310x390	320x420x450
Product Outer Dimensions [mm] WxHxD	467x920x634	502x955x679	522x975x869	552x1025x924	602x1080x999	672x1190x1059
Net Weight [kg]	96	110	136	165	185	195
Power [W]	6.200	10.000	11.000	11.700	14.500	19.900
Max. Current [A]	2x14	2x22	2x25	3x22	3x27	3x37
Electrical Connection	2 Phase	2 Phase	2 Phase	3 Phase	3 Phase	3 Phase
Heating Element	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2	MoSi2
Thermocouple Type	B Type	B Type	B Type	B Type	B Type	B Type
Heating Element Placement	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls	Vertically aligned next to the side walls
Inner Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board
Front Face Insulation Material	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick	Insulating Fire Brick
Door Insulation Material	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board	Ceramic Fibre Board
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet	Steel Sheet
Housing Coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating
Chimney	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan	Standard without fan
Lockable Door Handle	Sideways	Sideways	Sideways	Sideways	Sideways	Sideways
Gross Dimensions [mm] WxLxD	527x980x794	562x1015x839	582x1035x1029	612x1085x1084	662x1140x1159	732x1250x1219
Gross Weight [kg]	116	133	162	195	219	234

STEP 3



STEP 3

Choose CU Software	EXTENDED E4	ULTIMATE U8	SCIENTIFIC S16
Software Based PID Control	YES	YES	YES
Display	4x20 LCD	4x20 LCD	4x20 LCD
Heating Program with	4 steps	8 steps	16 steps*
Custom Preset Program	4	6	5
Heating Rate °C/min.	3-20	3-20	3-20**
Date & Time	YES	YES	YES
Auto Start at Certain Date	YES	YES	YES
Show Remaining Waiting Time	YES	YES	YES
Skip the Waiting Step	YES	YES	YES
Temperature Calibration via Menu (±10°C)	YES	YES	YES
Sound Warnings at Step Changes	YES	YES	YES
Sound Warning at the End of the Program	YES	YES	YES
Total Working Hour Counter	YES	YES	YES
Calculator for Average Working Temperature	YES	YES	YES
Instantaneous Energy Consumption Indicator	YES	YES	YES
Current and Target Temperature Display	YES	YES	YES
Step Indicator	YES	YES	YES
Burst Heating Mode	YES	YES	YES
Descriptive Error Indicator	YES	YES	YES
Temperature Control Accuracy***	±1°C	±1°C	±1°C
Measurement Accuracy	±1°C	±1°C	±1°C
Inner Volume Temperature Homogeneity	±10°C	±10°C	±10°C
Control Unit Overheating Sensor	YES	YES	YES
Over Heating Cut Off	YES	YES	YES
Open Door Sensor	OPTIONAL	OPTIONAL	OPTIONAL
PC Connection Kit	OPTIONAL	OPTIONAL	OPTIONAL
Warranty Period	2 Years	2 Years	2 Years

* Only 5th memory supports 16 levels **Independent for each level ***Can vary at low temperatures



STEP 4 & 5 & 6



STEP 4

Choose Optional Features	OTL	LU	SS	GS	DS	TC2	PC	PS
Code Stands for	Over Temperature Limiter	Lift-up Door	Stainless Steel Body	Gas Supply Connection	Open Door Sensor	Second Thermocouple	PC Connection	110V Power Supply
Description	Over-temperature limiter with manual reset for thermal protection class 2 in accordance with EN 60519-2	Standard furnaces open towards left with a sideward door. Lift-up doors open fully to reach inner chamber easily.	If your laboratory has corrosive or heavy conditions and Stainless steel body will be the ideal choice.	With gas supply you can either supply more air to burn better or achieve a protective atmosphere.	Automatic cut off heating when door is open. Sound warning after 30 seconds. Enable/disable option for door sensor.	Menu accessed 3 selectable functions for TC2: 1) Average temperature calculation with first thermocouple. 2) Thermostat 3) Monitoring	PC connection kit comes with its driver and own software. Can be used as independent data logger, logging data from up to 5 thermocouples.	You can choose 110V power supply.
Image								

STEP 5

Choose Spare Parts	Inner Module	Door Insulation	Control Card	Power Card	Display	Cooling Fan	Chimney Fan
Description	Changing inner module renews your furnace close to a brand new furnace.	With sheet metal holder vessel	Easy to replace, Pre-programmed	Easy to replace	4x20 LCD display	80x80x20 220V Fan	40x40x10 5V Fan

MagmaTherm furnaces are built for easy maintenance. Each part can be replaced by anyone who has basic repair abilities. Modular design and detailed fool proof **video tutorials** helps fast repair in case of need. You can download or watch video tutorials on www.magmatherm.com with your given password.

All of our products are passed through quality control. Therefore Magmatherm Furnaces have **2 year warranty period** except user related damages. For proper use and avoiding such problems it is very important to read user manual and operate your furnace under right circumstances.

STEP 6

Choose Accessories	High Temperature Gloves	Tongs	Alumina Crucibles	Metal Crucibles	Alumina Combustion Boats	Seramic Pipes	Extra Thermocouples
Image							

General Product Overview



Chamber Furnaces																
Product Group	Working Temperature	Volume Options [Liter]													Software Options	
		1	3	5	6	7	8	9	10	16	20	30	40	60		100
MTP	950°C		■													P, Px
	1000°C			■			■				■					
	1100°C			■			■				■					
MT	1100°C			■		■			■		■		■	■	■	B2, E4, U8, S16
	1200°C			■		■			■		■		■	■		
	1250°C			■		■			■		■		■	■		
	1300°C			■		■			■		■		■	■		
MTSIC	1400°C		■		■			■		■		■		■	E4, U8, S16	
	1500°C		■		■			■		■		■		■		
	1550°C		■		■			■		■		■		■		
MTMo	1500°C	■	■												E4, U8, S16	
	1600°C	■	■		■			■		■		■		■		
	1700°C		■		■			■		■		■		■		
	1750°C		■		■			■		■		■		■		

Volume Information				
Volume Name [Liter]	Physical Volume [Liter]	Width [mm]	Height [mm]	Depth [mm]
1	1,3	100	125	106
3 (MTP)	3,1	130	105	230
3 (MTSIC)	3	140	130	165
3 (MTMo)	3,1	115	150	175
5	5,1	150	150	225
6 (MTSIC)	6	175	160	215
6 (MTMo)	6,1	150	185	220
7	7,5	180	160	260
8	7,5	180	160	260
9 (MTSIC)	9	200	170	265
9 (MTMo)	9,3	175	205	260
10	10,8	200	180	300
16 (MTMo)	16	200	255	315
16 (MTSIC)	16	250	200	320
20	19,8	250	200	395
30 (MTMo)	30,2	250	310	390
30 (MTSIC)	29,6	300	250	395
40	40,1	300	300	445
60 (MT)	59,4	400	300	495
60 (MTMo)	60,5	320	420	450
60 (MTSIC)	59,4	400	300	495
100	99,9	460	365	595



Worldwide Sales

MagmaTherm furnaces are used over 30 countries over the world. Your satisfaction motivates us to grow every day.

Turkey
Holland
Germany
England
France
Italy
Poland
Austria
Greece

Spain
Portugal
Morocco
Algeria
Libya
Egypt
Iraq
Saudi Arabia
UAE

Azerbaijan
Georgia
Kazakhstan
Turkmenistan
China
Malaysia
Thailand
Indonesia
South Korea

Japan
India
Pakistan
Philippines

...and growing

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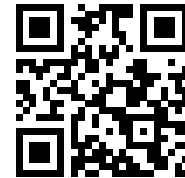
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PDF Catalogue (5MB)



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