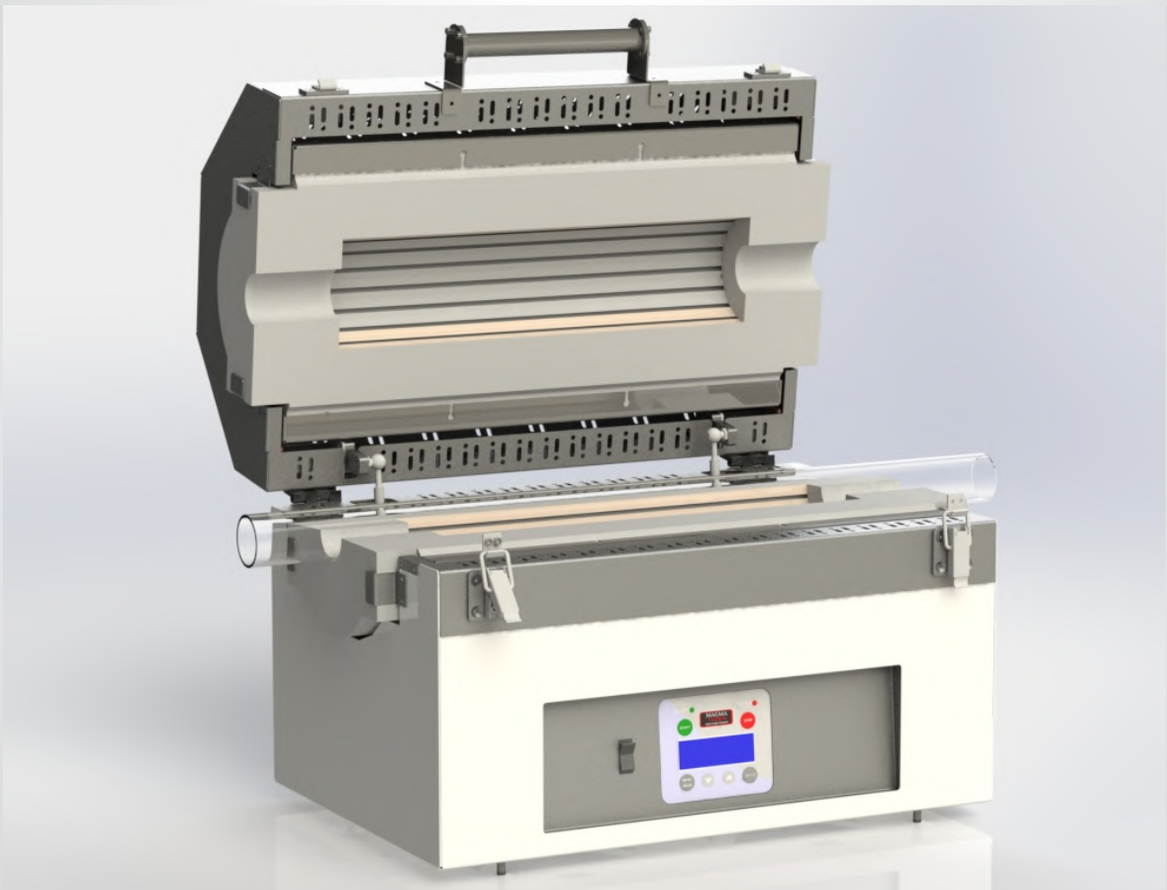
www.magmatherm.com

PRODUCT DATA SHEET



MTSTF Series
Furnaces

MAGMA THERM
HEAT UNDER CONTROL

Split Tube Furnaces

Data Sheet & Order Manual 1100°C-1300°C

4 Line Dlisplay

In need of homogeneous temperature distribution or reliable gas protective atmosphere tube furnaces are the best solution.

- *Specifically enginerred for abosulute accuracy of temperature measurement.*
- *Optional gas inlet and purge systems for protective gas atmosphere.*
- *Thermal shock resistant tubes.*
- *Precise temperature control for a wide range of working temperature.*
- *±1 °C control accuracy*

Product Group	Working Temperature	Tube Inner Diameter [mm]	Hot Zone Lenghts Options [mm]	Software Options
MTSTF	1100 °C 1200 °C 1300 °C	50, 100, 150	1x450	E4, U8, S16

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 enough space in your furnace.

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@magmatherm.com* for quotation.

Sample MagmaTherm Furnace Product/Order Code

MTSTF-1200-150-450-S16-GS-OTL-PC

	Step 1	Step 2	Step 3	Step 4
Furnace Type	Working Temperature	Diameter & Hot Zone Lenght	Control Unit Software	Custom Options

STEP 1 & STEP 2

STEP 1 **Choose Your Maximum/Continuous Working Temperature**	
1100°C - 1200°C	
STEP 2 **Choose Your Volume**	
Voluma Model	**50 450**
Tube Inner Diameter [mm]	46
Tube Outer Diameter [mm]	50
Hot Zone Length [mm]	450
± 10°C Homogeneous Hot Zone Lenght [mm]	150
Tube Lenght[mm]	650
Tube Material Description	Quartz Glass
Product Outer Dimensions [mm] WxDxH	W 630 D 390 H 520
Net Weight [kg]	45
Gross Dimensions [mm] WxLxD	W 750 D 540 H 670
Gross Weight [kg]	55
Tube Lenght With GS [mm]	850
Product Outer Dimensions With GS [mm] WxDxH	W 630 D 390 H 520
Net Weight With GS [kg]	47
Gross Dimensions With GS [mm] WxLxD	W 950 D 540 H 670
Gross Weight With GS [kg]	57
Power [W]	2200
Max. Current [A]	10
HeatingElement	FECrAl Resistance Wire
Thermocouple Type	N Type
Available Software Versions	E4, U8, S16
Control Unit	Standard MT Control Unit
Inner Insulation Material	Ceramic Fibre Blanket
Housing Material	Steel Sheet
HousingCoating	Epoxy powder coating

With Gas Connection

STEP 1 & STEP 2

STEP 1 **Choose Your Maximum/Continuous Working Temperature**	
1100°C - 1200°C	
STEP 2 **Choose Your Volume**	
Voluma Model	**100-450**
Tube Inner Diameter [mm]	90
Tube Outer Diameter [mm]	100
Hot Zone Length [mm]	450
± 10°C Homogeneous Hot Zone Lenght [mm]	150
Tube Lenght[mm]	650
Tube Material Description	Quartz Glass
Product Outer Dimensions [mm] WxDxH	W 630 D 440 H 570
Net Weight [kg]	56
Gross Dimensions [mm] WxLxD	W 750 D 590 H 710
Gross Weight [kg]	67
Tube Lenght With GS [mm]	850
Product Outer Dimensions With GS [mm] WxDxH	W 630 D 440 H 570
Net Weight With GS [kg]	58
Gross Dimensions With GS [mm] WxLxD	W 950 D 590 H 720
Gross Weight With GS [kg]	68
Power [W]	2600
Max. Current [A]	12
HeatingElement	FECrAl Resistance Wire
Thermocouple Type	N Type
Available Software Versions	E4, U8, S16
Control Unit	Standard MT Control Unit
Inner Insulation Material	Ceramic Fibre Blanket
Housing Material	Steel Sheet
HousingCoating	Epoxy powder coating

With Gas Connection

STEP 1 & STEP 2

STEP 1 **Choose Your Maximum/Continuous Working Temperature**	
1100°C - 1200°C	
STEP 2 **Choose Your Volume**	
Voluma Model	**150 450**
Tube Inner Diameter [mm]	150
Tube Outer Diameter [mm]	160
Hot Zone Length [mm]	450
± 10°C Homogeneous Hot Zone Lenght [mm]	150
Tube Lenght[mm]	650
Tube Material Description	Quartz Glass
Product Outer Dimensions [mm] WxDxH	W 630 D 490 H 620
Net Weight [kg]	60
Gross Dimensions [mm] WxLxD	W 750 D 640 H 770
Gross Weight [kg]	70
With Gas Connection	
Tube Lenght With GS [mm]	850
Product Outer Dimensions With GS [mm] WxDxH	W 630 D 490 H 620
Net Weight With GS [kg]	62
Gross Dimensions With GS [mm] WxLxD	W 950 D 640 H 770
Gross Weight With GS [kg]	74
Power [W]	3500
Max. Current [A]	15
HeatingElement	FECrAl Resistance Wire
Thermocouple Type	N Type
Available Software Versions	E4, U8, S16
Control Unit	Standard MT Control Unit
Inner Insulation Material	Ceramic Fibre Blanket
Housing Material	Steel Sheet
HousingCoating	Epoxy powder coating

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 Homogenity	±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	GS	TC2	PC	PS
Code Stands for	Over Temperature Limiter	Gas Supply Connection	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	With gas supply you can either supply more air to burn better or achieve a protective atmosphere.	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					

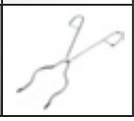
STEP 5

Choose Spare Parts	Control Card	Power Card	Display	Tube
Description	Easy to replace, Pre-programmed	Easy to replace	4x20 LCD display	Type C799 (DIN VDE 0335) Al2O3 content 99,7%

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

Tube Furnaces Overview

Product Group	Working Temperature	Tube Inner Diameter [mm]	Hot Zone Length Options [mm]							Software Options
			200	250	300	450	500	600	800	
MTTF, MTSTF	1100°C,1200 °C, 1250°C	20		■						B2, E4, U8, S16
		38				■				
		50			■	■		■		
		75				■		■	■	
		100					■		■	
MTTFSiC	1400°C, 1500°C, 1550°C	50			■	■		■		E4, U8, S16
		75				■		■	■	
		100					■		■	
MTTFMo	1600°C,1700 °C, 1750°C	50	■		■	■		■		E4, U8, S16
		75				■		■	■	
		100					■		■	

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
Kazakhistan
Turkmenistan
China
Malaysia
Thailand
Indonesia
South Korea

Japan
India
Pakistan
Philippines

...and growing

www.magmatherm.com

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MAGMA THERM
HEAT UNDER CONTROL

TETRA
ISI SISTEMLERI

PDF Catalogue (5MB)

Web Site Address