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PRODUCT DATA SHEET



MTTF Series Furnaces



Standard Tube Furnaces

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



Optional Gas Connection



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

- Specifically engineered for absolute 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 Length Options [mm]	Software Options
MTTF	1100 °C, 1200 °C, 1250 °C, 1300 °C	20	250	B2, E4, U8, S16
		38	450	
		50	300, 450, 600	
		75	450, 600, 800	
		100	500, 800	

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.

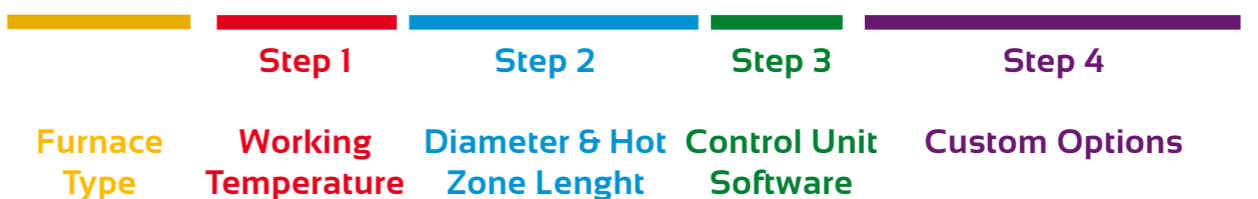
STEP 7

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@magnatherm.com for quotation.

Sample MagmaTherm Furnace Product/Order Code

MTTF-1200-50-600-S16-GS-OTL-PC



STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature										
1100°C										
STEP 2 Choose Your Volume										
	20-250	38-450	50-300	50-450	50-600	75-450	75-600	75-800	100-500	100-800
Tube Inner Diameter [mm]	20	38	50	50	50	75	75	75	100	100
Hot Zone Length [mm]	250	450	300	450	600	450	600	800	500	800
± 10°C Homogeneous Hot Zone Length [mm]	84	150	100	150	200	150	200	267	167	267
Tube Length [mm]	420	660	510	660	810	660	810	1010	710	1010
Product Outer Dimensions [mm] WxDxH	W 424 D 315 H 420	W 634 D 369 H 464	W 484 D 384 H 476	W 634 D 384 H 476	W 784 D 384 H 476	W 644 D 449 H 529	W 794 D 449 H 529	W 944 H 449 D 529	W 694 D 497 H 568	W 994 D 497 H 568
Net Weight [rg]	14	27	23	29	35	38	46	57	48	67
Gross Dimensions [mm] WxLxD	W 470 D 361 H 579	W 675 D 415 H 623	W 525 D 430 H 635	W 675 D 430 H 635	W 825 D 430 H 635	W 685 D 495 H 688	W 835 D 495 H 688	W 985 D 495 H 688	W 735 D 543 H 727	W 1035 D 543 H 727
Gross Weight [rg]	20	35	30	37	44	47	56	68	58	79
Tube Length With GS [mm]	530	770	620	770	920	770	920	1120	820	1120
Product Outer Dimensions With GS [mm] WxDxH	W 604 D 315 H 420	W 824 D 369 H 464	W 674 D 384 H 476	W 824 D 384 H 476	W 974 D 384 H 476	W 844 D 449 H 529	W 994 D 449 H 529	W 1144 D 449 H 529	W 894 D 497 H 568	W 1194 D 497 H 568
Net Weight With GS [rg]	19	33	29	35	42	46	54	65	57	77
Gross Dimensions With GS [mm] WxLxD	W 650 D 361 H 579	W 865 D 415 H 623	W 715 D 430 H 635	W 865 D 430 H 635	W 1015 D 430 H 635	W 885 D 495 H 688	W 1035 D 495 H 688	W 1185 D 495 H 688	W 935 D 543 H 727	W 1235 D 543 H 727
Gross Weight With GS [rg]	26	41	37	43	51	56	64	77	68	90
Power [W]	1.100	1.350	1.350	1.500	1.700	2.000	2.500	2.800	3.000	3.500
Max. Current [A]	5	7	7	7	8	10	12	13	14	16
Heating Element	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al
Thermocouple Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type
Inner Insulation Material	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	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	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating

With Gas Connection

STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature										
1200°C										
STEP 2 Choose Your Volume										
	20-250	38-450	50-300	50-450	50-600	75-450	75-600	75-800	100-500	100-800
Tube Inner Diameter [mm]	20	38	50	50	50	75	75	75	100	100
Hot Zone Length [mm]	250	450	300	450	600	450	600	800	500	800
± 10°C Homogeneous Hot Zone Length [mm]	84	150	100	150	200	150	200	267	167	267
Tube Length [mm]	420	660	510	660	810	660	810	1010	710	1010
Product Outer Dimensions [mm] WxDxH	W 424 D 315 H 420	W 634 D 369 H 464	W 484 D 384 H 476	W 634 D 384 H 476	W 784 D 384 H 476	W 644 D 449 H 529	W 794 D 449 H 529	W 944 H 449 D 529	W 694 D 497 H 568	W 994 D 497 H 568
Net Weight [rg]	14	27	23	29	35	38	46	57	48	67
Gross Dimensions [mm] WxLxD	W 470 D 361 H 579	W 675 D 415 H 623	W 525 D 430 H 635	W 675 D 430 H 635	W 825 D 430 H 635	W 685 D 495 H 688	W 835 D 495 H 688	W 985 D 495 H 688	W 735 D 543 H 727	W 1035 D 543 H 727
Gross Weight [rg]	20	35	30	37	44	47	56	68	58	79
Tube Length With GS [mm]	530	770	620	770	920	770	920	1120	820	1120
Product Outer Dimensions With GS [mm] WxDxH	W 604 D 315 H 420	W 824 D 369 H 464	W 674 D 384 H 476	W 824 D 384 H 476	W 974 D 384 H 476	W 844 D 449 H 529	W 994 D 449 H 529	W 1144 D 449 H 529	W 894 D 497 H 568	W 1194 D 497 H 568
Net Weight With GS [rg]	19	33	29	35	42	46	54	65	57	77
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Gross Weight With GS [rg]	26	41	37	43	51	56	64	77	68	90
Power [W]	1.100	1.350	1.350	1.500	1.700	2.000	2.500	2.800	3.000	3.500
Max. Current [A]	5	7	7	7	8	10	12	13	14	16
Heating Element	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al
Thermocouple Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type
Inner Insulation Material	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	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	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating

With Gas Connection

STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature										
1250°C										
STEP 2 Choose Your Volume										
	20-250	38-450	50-300	50-450	50-600	75-450	75-600	75-800	100-500	100-800
Tube Inner Diameter [mm]	20	38	50	50	50	75	75	75	100	100
Hot Zone Length [mm]	250	450	300	450	600	450	600	800	500	800
± 10°C Homogeneous Hot Zone Length [mm]	84	150	100	150	200	150	200	267	167	267
Tube Length [mm]	420	660	510	660	810	660	810	1010	710	1010
Product Outer Dimensions [mm] WxDxH	W 424 D 315 H 420	W 634 D 369 H 464	W 484 D 384 H 476	W 634 D 384 H 476	W 784 D 384 H 476	W 644 D 449 H 529	W 794 D 449 H 529	W 944 H 449 D 529	W 694 D 497 H 568	W 994 D 497 H 568
Net Weight [rg]	14	27	23	29	35	38	46	57	48	67
Gross Dimensions [mm] WxLxD	W 470 D 361 H 579	W 675 D 415 H 623	W 525 D 430 H 635	W 675 D 430 H 635	W 825 D 430 H 635	W 685 D 495 H 688	W 835 D 495 H 688	W 985 D 495 H 688	W 735 D 543 H 727	W 1035 D 543 H 727
Gross Weight [rg]	20	35	30	37	44	47	56	68	58	79
Tube Length With GS [mm]	530	770	620	770	920	770	920	1120	820	1120
Product Outer Dimensions With GS [mm] WxDxH	W 604 D 315 H 420	W 824 D 369 H 464	W 674 D 384 H 476	W 824 D 384 H 476	W 974 D 384 H 476	W 844 D 449 H 529	W 994 D 449 H 529	W 1144 D 449 H 529	W 894 D 497 H 568	W 1194 D 497 H 568
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Gross Dimensions With GS [mm] WxLxD	W 650 D 361 H 579	W 865 D 415 H 623	W 715 D 430 H 635	W 865 D 430 H 635	W 1015 D 430 H 635	W 885 D 495 H 688	W 1035 D 495 H 688	W 1185 D 495 H 688	W 935 D 543 H 727	W 1235 D 543 H 727
Gross Weight With GS [rg]	26	41	37	43	51	56	64	77	68	90
Power [W]	1.100	1.350	1.350	1.500	1.700	2.000	2.500	2.800	3.000	3.500
Max. Current [A]	5	7	7	7	8	10	12	13	14	16
Heating Element	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al
Thermocouple Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type
Inner Insulation Material	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	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	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating

With Gas Connection

STEP 1 & STEP 2



STEP 1 Choose Your Maximum/Continuous Working Temperature										
1300°C										
STEP 2 Choose Your Volume										
	20-250	38-450	50-300	50-450	50-600	75-450	75-600	75-800	100-500	100-800
Tube Inner Diameter [mm]	20	38	50	50	50	75	75	75	100	100
Hot Zone Length [mm]	250	450	300	450	600	450	600	800	500	800
± 10°C Homogeneous Hot Zone Length [mm]	84	150	100	150	200	150	200	267	167	267
Tube Length [mm]	420	660	510	660	810	660	810	1010	710	1010
Product Outer Dimensions [mm] WxDxH	W 424 D 315 H 420	W 634 D 369 H 464	W 484 D 384 H 476	W 634 D 384 H 476	W 784 D 384 H 476	W 644 D 449 H 529	W 794 D 449 H 529	W 944 H 449 D 529	W 694 D 497 H 568	W 994 D 497 H 568
Net Weight [rg]	14	27	23	29	35	38	46	57	48	67
Gross Dimensions [mm] WxLxD	W 470 D 361 H 579	W 675 D 415 H 623	W 525 D 430 H 635	W 675 D 430 H 635	W 825 D 430 H 635	W 685 D 495 H 688	W 835 D 495 H 688	W 985 D 495 H 688	W 735 D 543 H 727	W 1035 D 543 H 727
Gross Weight [rg]	20	35	30	37	44	47	56	68	58	79
Tube Length With GS [mm]	530	770	620	770	920	770	920	1120	820	1120
Product Outer Dimensions With GS [mm] WxDxH	W 604 D 315 H 420	W 824 D 369 H 464	W 674 D 384 H 476	W 824 D 384 H 476	W 974 D 384 H 476	W 844 D 449 H 529	W 994 D 449 H 529	W 1144 D 449 H 529	W 894 D 497 H 568	W 1194 D 497 H 568
Net Weight With GS [rg]	19	33	29	35	42	46	54	65	57	77
Gross Dimensions With GS [mm] WxLxD	W 650 D 361 H 579	W 865 D 415 H 623	W 715 D 430 H 635	W 865 D 430 H 635	W 1015 D 430 H 635	W 885 D 495 H 688	W 1035 D 495 H 688	W 1185 D 495 H 688	W 935 D 543 H 727	W 1235 D 543 H 727
Gross Weight With GS [rg]	26	41	37	43	51	56	64	77	68	90
Power [W]	1.100	1.350	1.350	1.500	1.700	2.000	2.500	2.800	3.000	3.500
Max. Current [A]	5	7	7	7	8	10	12	13	14	16
Heating Element	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al	Fe-Cr-Al
Thermocouple Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type	K Type
Inner Insulation Material	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket	Ceramic Fibre Blanket
Housing Material	Steel Sheet	Steel Sheet	Steel Sheet	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	Epoxy powder coating	Epoxy powder coating	Epoxy powder coating

With Gas Connection

STEP 3



STEP 3

Choose CU Software	BASIC B2	EXTENDED E4	ULTIMATE U8	SCIENTIFIC S16
Software Based PID Control	YES	YES	YES	YES
Display	4x20 LCD	4x20 LCD	4x20 LCD	4x20 LCD
Heating Program with	2 steps	4 steps	8 steps	16 steps*
Custom Preset Program	2	4	6	5
Heating Rate °C/min.	3-20	3-20	3-20	3-20**
Date & Time	YES	YES	YES	YES
Auto Start at Certain Date	NO	YES	YES	YES
Show Remaining Waiting Time	NO	YES	YES	YES
Skip the Waiting Step	NO	YES	YES	YES
Temperature Calibration via Menu (±10°C)	NO	YES	YES	YES
Sound Warnings at Step Changes	YES	YES	YES	YES
Sound Warning at the End of the Program	YES	YES	YES	YES
Total Working Hour Counter	YES	YES	YES	YES
Calculator for Average Working Temperature	YES	YES	YES	YES
Instantaneous Energy Consumption Indicator	YES	YES	YES	YES
Current and Target Temperature Display	YES	YES	YES	YES
Step Indicator	YES	YES	YES	YES
Burst Heating Mode	YES	YES	YES	YES
Descriptive Error Indicator	YES	YES	YES	YES
Temperature Control Accuracy***	±1°C	±1°C	±1°C	±1°C
Measurement Accuracy	±1°C	±1°C	±1°C	±1°C
Inner Volume Temperature Homogeneity	±10°C	±10°C	±10°C	±10°C
Control Unit Overheating Sensor	YES	YES	YES	YES
Over Heating Cut Off	YES	YES	YES	YES
Open Door Sensor	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
PC Connection Kit	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Warranty Period	2 Years	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
Description	Easy to replace, Pre-programmed	Easy to replace	4x20 LCD display

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



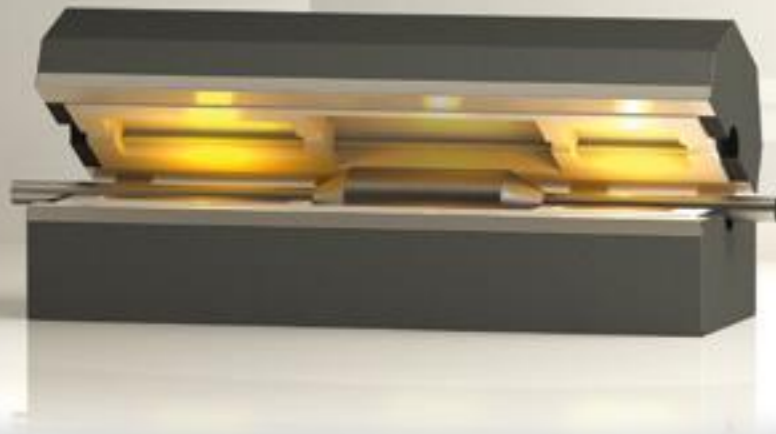
Tube Furnaces									
Product Group	Working Temperature	Tube Inner Diameter [mm]	Hot Zone Length Options [mm]					Software Options	
			250	300	450	500	600		800
MTTF	1100°C, 1200°C, 1250°C	20	■						B2, E4, U8, S16
		38			■				
		50		■	■		■		
		75			■		■	■	
MTTFSiC	1400°C, 1500°C, 1550°C	50		■	■		■	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



Coming Soon...

Split Tube Laboratory Furnaces

We will be adding Split Tube furnaces to our catalogue in year 2017. Please contact us for detailed information.



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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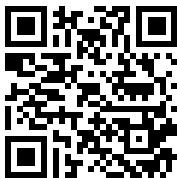


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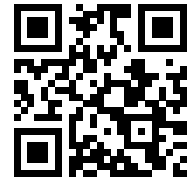
E-mail magma@magmatherm.com
Web Site: www.magmatherm.com



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