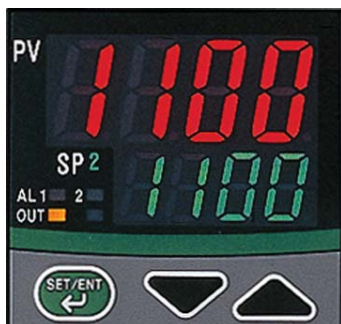


Model STF55346C, Solid Tube, Three-Zone Furnace includes three multiple segment programmable controllers, one for each zone. (Process tube shown, not included).

Applications

- Annealing
- Crystal Growing
- Calibration
- Heat Treating

1100°C Tube Furnaces (Three Zone)



Programmable control. Each zone programmable for variable process requirements.

Three Zone 1100°C Tube Furnaces have new, energy efficient designs incorporating Lindberg/Blue M exclusive Moldatherm® ceramic fiber insulation. Performance attributes include excellent temperature uniformity, fast heat-up and cool-down, and quick recovery with optimum power consumption. The furnace includes three independent, programmable controllers, one for each zone.

Features

- Innovative use of venting and insulating air spaces to create lower exterior surface temperatures
- Accepts an array of tube adapters (see chart)
- One set of (2) tube adapters included; standard, largest size supplied
- Flexible design, may be used for a variety of applications
- Long-life Type "K" thermocouples

Digital Single Program, Multiple Segment Programmable Controller

- Three programmable controllers, one for each zone
- Microprocessor-based self-tuning PID control (proportional, integral, derivative) provides optimum thermal process without overshoot
- Single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control. See page 35 for more information
- Adjustable high limit overtemperature protection
- Simultaneous LED display of actual temperature vs. setpoint
- May be configured to display temperature in either °C or °F

Optional RS485 Digital Communications Port

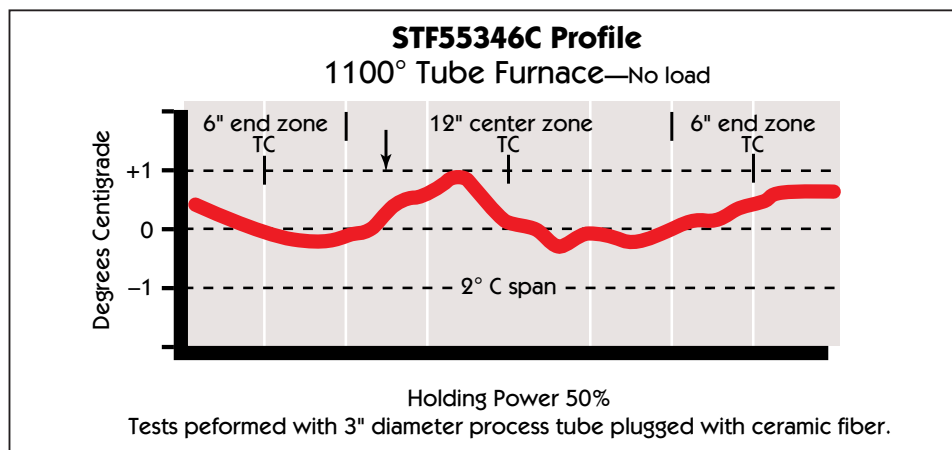
- RS485 Digital communications port available as an option. Allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Please see page 35 for ordering information and additional options

1100°C Solid, Three Zone, Multi Segment Integrated Controller, Temperature Range 100°C to 1100°C

Furnace Model No.	Electrical Volts, Hz, 1Ø	Watts	Exterior Dimensions H x F-B x W in" (mm)	*Process Tube Diameter, in" (mm)	Heated Length in" (mm)	Heated Zone in" (mm)	Ship Weight lbs (kg)
STF55346C	208/240V, 50/60 Hz	3800	21" (533.4) x 17" (431.8) x 35" (889)	1" (25.4) to 3" (76.2)	24" (609.6)	6"/12"/6" (152.4/304.8/152.4)	225 (102)
STF55666C	208/240V, 50/60 Hz	11000	26" (660.4) x 22" (558.8) x 54" (1371.6)	3" (76.2) to 6" (152.4)	36" (914.4)	9"/18"/9" (228.6/457.2/228.6)	255 (115)

***Process Tubes** These furnaces are designed for use with a variety of process tubes including alumina, mullite, quartz and metallic. For information on process tubes contact your process tube supplier or call your Lindberg/Blue M sales representative. One set of (2) Tube Adapters included with furnace; largest specified size supplied. See table for additional options.

Note: Required power cord and hardwiring are not included.



Model STF55346C Uniformity Profile, 1100°C Tube Furnace, No Load



Tube adapters prevent heat loss and improve temperature uniformity within the furnace chamber by insulating the end vestibules. One set (2) of tube adapters provided with each Lindberg/Blue M furnace fits the largest diameter process tube specified for use with that furnace. Interchangeable tube adapters which allow alternative size process tubes are available; see chart.

Moldatherm® Tube Adapters (each sold separately)

Size	Model STF55346C	Model STF55666C
1"	59541	
2"	59543	
3"	59545*	59555
4"		59556
5"		59557
6"		59558*
Blank (Solid)	59549	59559

*One set of (2) included with furnace.

Actual performance may vary depending on load, chamber size, sample placement, ambient temperature and environmental conditions.



The 1100°C Mini-Mite Tube Furnace includes integrated digital control, single setpoint or multiple segment programmable.

Applications

- Pyrolysis
- Thermal Expansion
- Calibration
- Sintering
- Viscosity Testing

Mini-Mite™ 1100°C Tube Furnaces (Single Zone)

Mini-Mite™ 1100°C Tube Furnaces offer a selection of control instrumentation including multiple segment programmable or single setpoint control. All models feature energy efficient Moldatherm® insulation for quick heat-up and cool-down.

Features

- Compact, portable and lightweight design
- Split-hinge design simplifies loading and unloading
- Main power on/off switch on control panel
- Safety switch disconnects power to heating element when furnace is opened
- Long life type "K" thermocouple

Digital, Single Setpoint Controller

- Microprocessor-based self-tuning PID control (proportional, integral, derivative) provides optimum thermal process without overshoot
- Single segment, single setpoint, 1 ramp to setpoint
- Adjustable high limit overtemperature protection
- Simultaneous LED display of actual temperature vs. setpoint
- May be configured to display temperature in either °C or °F

Digital Single Program, Multiple Segment Programmable Controller

- Microprocessor-based self-tuning PID control (proportional, integral, derivative) provides optimum thermal process without overshoot

- Single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control. See page 35 for more information
- Adjustable high limit overtemperature protection
- Simultaneous LED display of actual temperature vs. setpoint
- May be configured to display temperature in either °C or °F

Optional RS485 Digital Communications Port

- RS485 Digital communications port available as an option. Allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Please see page 35 for ordering information and additional options

1100°C Mini-Mite™ Split-Hinge, Single Zone, Integrated Controller, Temperature Range 100 to 1100°C

Furnace Model No.	Electrical Volts, Hz, 1Ø	Watts	Integral Controller	Exterior Dimensions H x F-B x W in" (mm)	*Process Tube Diameter, in" (mm)	Heated Length in" (mm)	Ship Weight lbs (kg)
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Digital, Single Segment Control, 1100°C

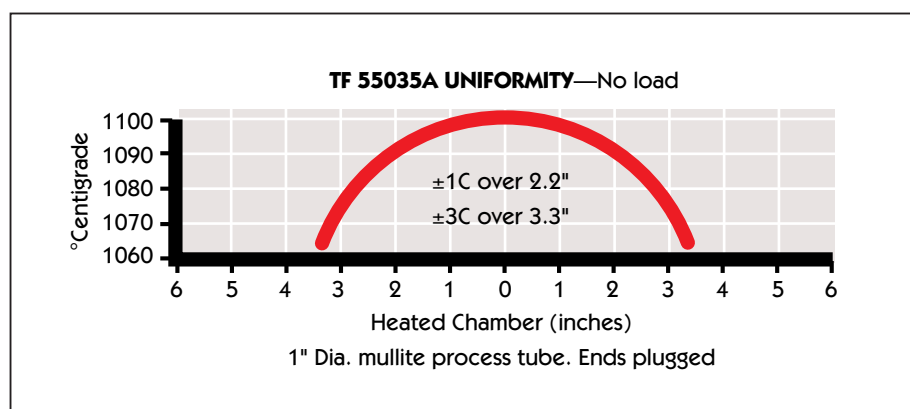
TF55030A	120V, 50/60 Hz	800	1 Segment	15" (381) x 11" (279.4) x 16" (406.4)	1" (25.4)	12" (304.8)	35 (16)
TF55030C	208/240V, 50/60 Hz	800	1 Segment	15" (381) x 11" (279.4) x 16" (406.4)	1" (25.4)	12" (304.8)	35 (16)

Digital, Multi Segment Programmable, 1100°C

TF55035A	120V, 50/60 Hz	800	16 Segment	15" (381) x 11" (279.4) x 16" (406.4)	1" (25.4)	12" (304.8)	35 (16)
TF55035C	208/240V, 50/60 Hz	800	16 Segment	15" (381) x 11" (279.4) x 16" (406.4)	1" (25.4)	12" (304.8)	35 (16)

***Process Tubes** These furnaces are designed for use with a variety of process tubes including alumina, mullite, quartz and metallic. For information on process tubes contact your process tube supplier or call your Lindberg/Blue M sales representative.

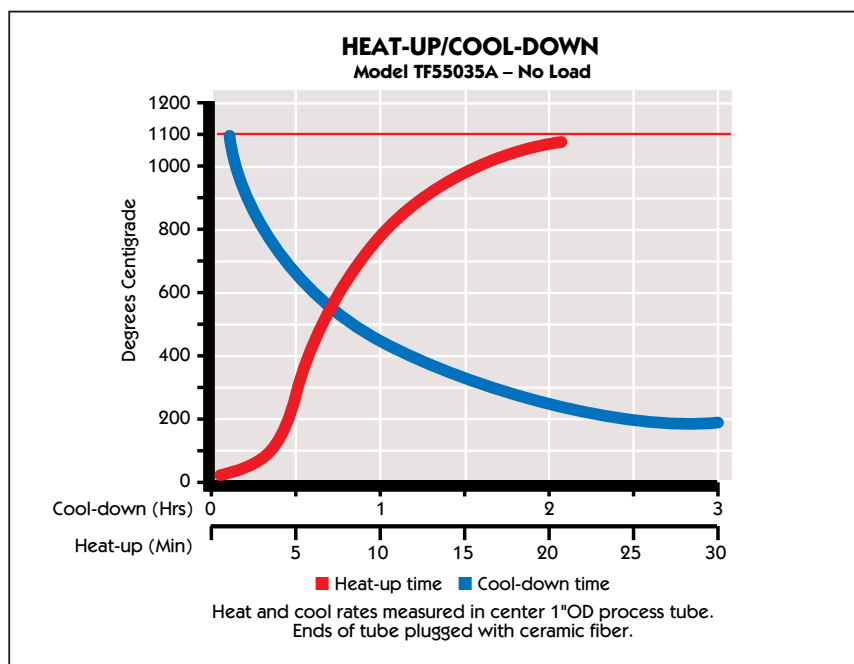
Note: All models include 10' power cord.



Model TF55035A Uniformity Profile, No Load



Model TF55035A Mini-Mite Tube Furnace, 1100°C, shown with digital multiple segment programmable control.



Model TF55035A Heat-Up/Cool-Down

Actual performance may vary depending on load, chamber size, sample placement, ambient temperature and environmental conditions.