



Our Fusing
Furnaces

For glass art applications, Nabertherm offers fusing furnaces in various sizes and designs. All are handcrafted to the highest standard using first class materials at our factory in Lilienthal and proudly carry the “Made in Germany” label. The high quality of the furnace itself is evident, but you really notice this when you are holding the finished product in your hand. Their impressive design, combined with an intuitive color touch screen controller, make Nabertherm fusing furnaces the ideal partner in your studio. We are well aware of how important every firing is for you, so we developed the free MyNabertherm app. This allows you to monitor your firings on mobile devices and track firing progress at all times.

The following equipment applies to all fusing furnaces in this chapter:



Exclusive use of insulation materials without categorization according to EC Regulation No 1272/2008 (CLP). This explicitly means that alumino silicate wool, also known as “refractory ceramic fiber” (RCF), which is classified and possibly carcinogenic, is not used.



Freeware NTEdit for convenient program input via Excel™ for MS Windows™ on the PC



Optimized insulation construction for a perfect balance between the best possible energy consumption and short cycle times



NTLog Basic for Nabertherm controller: recording of firing data with USB-flash drive



Controller can be switched to “Solar Mode” to take advantage of electricity from PV systems with and without battery



Freeware NTGraph for evaluation and documentation of firings using Excel™ for MS Windows™ on the PC



Defined application within the constraints of the operating instructions

“Our fusing furnaces are reliable companions for your creativity.”



Detailed Overview



Large handles



Closely arranged roof heating elements protected in quartz glass tubes



Level table surface with rugged refractory insulation



Adjustable, large quick-release fasteners



Rugged base on castors with shelf



Ergonomic charging height of 860 mm



Heating switches off when the lid is opened



Low noise electronic relays



Closable opening for ventilation



Removable controller with touch operation (see page 58)



Mobile monitoring with the MyNabertherm app



Gas pressure springs



Appealing, dual-shell stainless steel housing

Additional Equipment



Observation window in air inlets to observe the glass



Manual and motorized exhaust air opening in the roof for faster cooling. Operating lever on the right-hand side of the furnace (above the switchgear).



Additional tables to extend the furnace system for GFM models; interchangeable table system to utilize residual heat and reduce cycle times by changing tables while the furnace is still warm



Fusing Furnaces with fixed table

Additional
equipment
see page 43

Nabertherm fusing furnaces in the GF 75 – GF 660 product line were developed for professional use to meet the highest standards. The heating elements, arranged close together and protected in quartz glass tubes, guarantee a remarkably high level of temperature uniformity across the entire surface of the table – perfect for fusing or bending glass.

All models have an appealing, dual-shell stainless steel housing. The level table surface is made from sturdy, durable refractory bricks. The hood opening is supported with gas struts that makes for effortless work. The electric rating of the furnace heating has been optimized to heat up the glass quickly.

Standard equipment

- Heating elements protected in quartz glass tubes
- Controller integrated on the right-hand side of the furnace to save space

Controller

- Controller with touch operation AC590 incl. cone firing assistant, controls description see page 59

Our fusing furnaces combine precision and aesthetics. Experience how our technology enriches your artistic vision!



Fusing furnace GF 75



Fusing furnace GF 240



Heating elements in the roof arranged closely next to each other are protected in quartz glass tubes



Controller with touch operation AC590 (50 programs with each 40 segments)



Rugged base on castors with surface for glass and tools

Model	Tmax °C	Inner dimensions in mm			Floor space in m ²	Outer dimensions ⁴ in mm			Connected load ⁵ kW	Electrical connection*	Weight in kg
		w	d	h		W	D	H ³			
GF 75	900	620	620	310	0.38	1070	950	1370	3.6	1-phase	180
GF 75/R	950	620	620	310	0.38	1070	950	1370	5.5	3-phase ¹	180
GF 190/L	950	1010	620	400	0.62	1460	950	1460	6.0	1-phase ²	210
GF 190	950	1010	620	400	0.62	1460	950	1460	6.4	3-phase ¹	210
GF 240	950	1010	810	400	0.81	1460	1140	1460	11.0	3-phase	275
GF 380	950	1210	1100	400	1.33	1660	1460	1460	15.0	3-phase	450
GF 420	950	1660	950	400	1.57	2110	1310	1460	18.0	3-phase	500
GF 520	950	1210	1160	400	1.40	1660	1520	1460	15.0	3-phase	550
GF 600	950	2010	1010	400	2.03	2460	1370	1460	22.0	3-phase	600

¹Heating only between two phases

²Fuse if connected to 230 V = 32 A

³Including base

⁴External dimensions vary when furnace is equipped with additional equipment. Dimensions on request

⁵The connected load refers to the standard furnace and may increase for a furnace with additional equipment. For furnaces with connection options for multi-range voltages, the connected load applies to the highest permissible connected voltage.

*Please see page 61 for more information about supply voltage

Fusing Furnaces with movable table

Fusing furnaces in the GFM product line were developed especially to complement the proven quality benefits of the GF product line with an option to load the table outside the furnace. The table runs on swivel castors and allows maximum flexibility and mobility.

The scope of delivery includes a flat table, ideal for fusing work, while more tables can be added if required. The innovative interchangeable table system is especially economic in production processes. While material is fired on one table in the furnace, the other can already be prepared outside the furnace. Instead of flat tables, you can also use different tables with different heights. This opens up many options if, for example, the furnace is to be used for higher components. Our fusing furnaces in the GFM product line

combine technology and flexibility. They offer a tailored solution for your individual requirements.

Standard equipment

- Heated hood with fixed frame
- Movable table

Controller

- Controller with touch operation AC590 incl. cone firing assistant, controls description see page 59

Experience how our technology can take your production to a new level!



Additional
equipment
see page 43



Craftsmanship
for Happiness.

Fusing furnace with motorized hood opening



Heating elements in the roof arranged closely next to each other are protected in quartz glass tubes



Controller with touch operation AC590 (50 programs with each 40 segments)



Movable table on swivel castors

Model	Tmax °C	Inner dimensions in mm			Floor space m ²	Outer dimensions ¹ in mm			Connected load ² kW	Electrical connection*	Weight in kg
		w	d	h		W	D	H			
GFM 420	950	1660	950	400	1.57	2230	1390	1460	18	3-phase	630
GFM 520	950	1210	1160	400	1.40	1780	1600	1460	15	3-phase	670
GFM 600	950	2010	1010	400	2.03	2580	1450	1460	22	3-phase	730

¹External dimensions vary when furnace is equipped with additional equipment. Dimensions on request

*Please see page 61 for more information about supply voltage

²The connected load refers to the standard furnace and may increase for a furnace with additional equipment. For furnaces with connection options for multi-range voltages, the connected load applies to the highest permissible connected voltage.

Top Loaders as Fusing Furnaces

Choose the ideal companion for your fusing work – our top loaders as fusing furnaces. With robust refractory insulation and protected heating in the lid, our fusing furnaces in the F 75 – F 220 range with additional side heating provide optimum support.

Standard equipment

- Refractory insulation ensures clean firing results
- Lid with adjustable quick-release lock and padlock
- Adjustable lid suspension
- Durable lid seal (brick on brick)
- Lid interlock safety switch
- Heating elements in the roof, with fusing furnaces F 75 – F 220 also all around the sides
- Low noise electronic relays
- Powerful gas struts support lid opening
- Top loader F 30 as tabletop model without castors

- F 220 with two-zone control (lid and side) as standard

Controller

- Controller with touch operation AC590 incl. cone firing assistant, controls description see page 59

A reliable companion whose performance will delight you!

“I entrust my art to my Nabertherm fusing furnace.”

David Perry
davidperryglassceramics.uk



Additional
equipment
see page 43



Fusing furnace F 30



Sturdy lid design with two lid brackets



Interior with bottom side ring heating on fusing furnaces F 75 – F 220



Sturdy professional-grade castors on fusing furnaces F 75 – F 220

Model	Tmax °C	Inner dimensions in mm			Floor space in m ²	Outer dimensions ¹ in mm			Connected load ² kW	Electrical connection*	Weight in kg
		w	d	h		W	D	H			
F 30	950	Ø 410			0.13	640	770	585	2.0	1-phase	55
F 75/L	950	750	520	230	0.33	945	930	690	3.6	1-phase	95
F 75	950	750	520	230	0.33	945	930	690	5.5	3-phase	95
F 110	950	930	590	230	0.47	1130	1000	690	7.5	3-phase	110
F 220	950	930	590	460	0.47	1130	1000	920	15.0	3-phase	150

¹External dimensions vary when furnace is equipped with additional equipment. Dimensions on request

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²The connected load refers to the standard furnace and may increase for a furnace with additional equipment. For furnaces with connection options for multi-range voltages, the connected load applies to the highest permissible connected voltage.