

Arts & Crafts



Pottery
Porcelain Painting
Glass Painting
Fusing
Enamelling
Raku



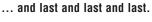






Made in Germany.

Every kiln is manufactured by hand with care. 60 years of experience in kiln manufacturing enables us to set standards in quality and reliability. Short delivery times are a matter of course. Standard models are even available ex stock.



There are Nabertherm kilns well over 30 years old still working all over the world. We only use first-class materials and expert building procedures. For this reason, a three-year guarantee period for all our kilns is only natural for us.



Leading in technology and innovation.

We are regularly revising our product ranges so that you can always profit from state-of-the-art technology in the areas of furnace building and electronic controls.



For us safety is the measure of all things! Our kilns are used in private homes, in potteries, but even in lots of schools, kindergartens and other institutions. That's why our kilns are TÜV tested and bear the GS and CE symbol as proof of our safety philosophy.



Installation problems?

On request we deliver furnaces directly to their future workplaces. The furnace will then be professionally installed. You will receive careful instructions on how to operate the kiln, so that you can make full use of all its features right from the word go.

Our spares service is unbeatable!

We deliver most spare parts within 24 hours – and that around the world and of fair prices – no matter how old your furnace may be.

Questions about your kiln?

Our friendly and competent customer service will help you whether by phone or on site. We'll make sure your kiln doesn't stay cold for long.



Content

Page
Top Loaders, round
Top Loaders, square 7
Chamber Kilns, heated from 2 sides 8
Chamber Kilns, heated from 3 sides 9
Chamber Kilns, heated from 5 sides10
Accessories / Installation service
RAKU Kilns
Fusing furnaces
Enamelling furnaces
Control Equipment & Features









Top Loaders, round

Top 45 - Top 190

Attractive design, lightweight and excellent firing results are only a few features of our top loaders Top 45 to Top 190. Castors are supplied as standardand increase mobility so that you will always find the right place for the furnace.

- Heating elements, embedded in grooves for protection, heating from all sides
- Heating elements in top quality, optimum wire size and length ensuring a long service life
- Low-noise operation of the heating with SolidStateRelais
- Precise temperature distribution thanks to fast the clocking of switching operations
- High-quality Pt-RhPt thermocouple for exact temperature measurements
- Lid contact switch with force-release mechanism
- Multi-layered insulation for low power consumption and cool outer surface
- Brick material in the furnace chamber guarantees clean firing results
- Attractive design with easy-care housing made of stainless steel
- Lid with adjustable quick-release lock, can be secured with padlock
- Wear-resistant lid sealing (brick surface on both ends)
- Spring-supported lid opening, very easy to open
- Infinitely adjustable inlet air opening in the furnace bottom for improved ventilation and short cool-down times.
- Air outlet on the side of the kiln with pipe connection, 80 mm diameter
- Castors for easy transport of the furnace without raising, lockable
- GS safety mark for controlled safety, CE
- Loading rail for Top 45 and Top 60 (optional)
- Raised base for Top 45 and Top 60 (optional)

Model	T _{max} °C	Inner dimens	sions in mm h	Volume in L	Outer o	limensions D	in mm H	Connected power/kW	Connection voltage ¹	Weight in kg
Top 4F	1200	410	240	45	E00	750	670	2.6	1 nhooo	60
Top 45	1300	410	340		580	750	670	3,6	1-phase	60
Top 60	1200	410	460	60	580	750	800	3,6	1-phase	72
Top 60/R	1300	410	460	60	580	750	800	5,5	3-phase*	72
Top 100	1300	480	575	100	660	830	910	7,0	3-phase	100
Top 140	1300	550	575	140	750	920	910	9,0	3-phase	120
Top 190	1300	590	690	190	790	960	1020	12,0	3-phase	150

¹ Notes on the connection voltages please see page 19







Top Loaders, round



Top 16

Thanks to its dimensions the Top 16 is the ideal kiln for hobby ceramics, porcelain painting, for small fusing jobs as well as for producing doll heads. But this reasonably priced kiln model is also very interesting for glazing samples and small pieces. This compact all-rounder is capable of doing everything larger models can do.

- Heating elements, embedded in grooves for protection, heating from all sides
- Heating elements in top quality, optimum wire size and length ensuring a long service life
- Low-noise operation of the heating with SolidStateRelais
- Precise temperature distribution thanks to fast the clocking of switching operations
- High-quality Pt-RhPt thermocouple for exact temperature measurements
- Lid contact switch with force-release mechanism
- Attractive design with easy-care housing made of stainless steel
- Lid with adjustable quick-release lock, can be secured with padlock
- Wear-resistant lid sealing (brick surface on both ends)
- Brick material in the furnace chamber guarantees clean firing results
- Infinitely adjustable inlet air opening
- Air outlet
- GS safety mark for controlled safety, CE
- Lightweight and easy to use

Model	T _{max} °C	Inner dimen	sions in mm h	Volume in L	Outer o	Outer dimensions in mm			Connection voltage ¹	Weight in kg
Top 16	1200	280	230	16	440	700	470	2,3	1-phase	22
Top 16/R	1300	280	230	16	440	700	470	2,6	1-phase	22

¹ Notes on the connection voltages please see page 19









The square top loaders from Nabertherm are extremely rugged. They are also suitable for professional applications. Excellent firing results are always ensured since the loader is heated from 5 sides.

- Heating elements, embedded in grooves for protection, heating from all sides and bottom
- Heating elements in top quality, optimum wire size and length ensuring a long service life
- Low-noise operation of the heating with SolidStateRelais
- Precise temperature distribution thanks to fast the clocking of switching operations
- High-quality Pt-RhPt thermocouple for exact temperature measurements
- Lid contact switch with force-release mechanism
- Multi-layered insulation for low power consumption and cool outer surface
- Brick material in the furnace chamber guarantees clean firing results
- Rugged kiln housing made of high-grade structured stainless steel, easy-care
- Stone lid with adjustable quick-release lock, can be secured with padlock
- Wear-resistant lid sealing (brick surface on both ends)
- Lid opening is supported by gas pressure spring, very easy to open
- Castors for easy transport of the kiln without raising, lockable
- Delivery includes ceramic shelve
- Infinitely adjustable inlet air opening in the kiln bottom for improved ventilation and short cool-down times.
- Air outlet on the side of the kiln with pipe connection, 80 mm diameter
- GS safety mark for controlled safety, CE

Model T _{max} °C		Inner d w	Inner dimensions in mm w d h			Volume Outer dimensions in mm				Connection voltage ¹	Weight in kg	
	H0 70/L	1200	440	380	420	70	640	770	720	3,6	1-phase	120
	HO 70/R	1300	440	380	420	70	640	770	720	5,5	3-phase*	120
	HO 100	1300	480	430	490	100	700	820	810	5,5	3-phase*	160

¹ Notes on the connection voltages please see page 19

*only 2 phases are connected



Firing chamber with heating from 5 sides

Chamber Kilns, heated from 2 sides





N 100 Entry with base (optional)

N 60/L Entry - N 100 Entry

These chamber furnaces impress with their attractive price, appealing design and their excellent craftsmanship. The models N 60.. - N 100.. are ideally suitable for decorating porcelain and glass as well as pottery and fusing applications.

- Tabletop device as standard
- Base optionally available
- Heating from both sides
- High-quality heating elements on support tubes with free radiation of heat guarantee a long service life
- Long service life of heating elements thanks to adapted wiring
- Low-noise operation of the heating with SolidStateRelais
- Precise temperature distribution thanks to fast the clocking of switching operations
- High-quality Pt-RhPt thermocouple
- Door contact switch with force-release mechanism
- Multi-layered insulation with lightweight refractory bricks in the furnace chamber and special backing insulation for lower power consumption
- Housing made of high-grade structured stainless steel
- Infinitely adjustable inlet air opening for improved ventilation and short cool-down times
- Air outlet in the ceiling

Model	T _{max} °C	Inner d	dimensions in mm Volume		Volume in L	Outer o	Outer dimensions in mm W D H		Connected Connection power/kW voltage ¹		Weight in kg
N 60/L Entry	1150	350	400	460	60	590	790	700	3,6	1-phase	82
N 100/L Entry	1150	400	450	575	100	640	840	815	7,0	3-phase	100
N 60 Entry	1300	350	400	460	60	590	790	700	5,5	3-phase*	82
N 100 Entry	1300	400	450	575	100	640	840	815	9,0	3-phase	100

¹ Notes on the connection voltages please see page 19



Chamber Kilns, heated from 3 sides





Being heated from both sides and bottom, these models are perfect for application in schools, kindergartens or in ergotherapy. These furnaces are ideal for operating temperatures of approx. $900-1300\,^{\circ}\text{C}$. For permanently high firing temperatures above $1230\,^{\circ}\text{C}$, we recommend the models series N 100/G-N 300/H.

- Heating from three sides (left/right side and bottom)
- Heating elements embedded in grooves for protection
- Heating elements in top quality, optimum wire size and length ensuring a long service life
- Special arrangement of heating elements ensures optimum temperature distribution
- Low-noise operation of the heating with SolidStateRelais
- Precise temperature distribution thanks to fast the clocking of switching operations
- High-quality Pt-RhPt thermocouple for exact temperature measurements
- Door contact switch with force-release mechanism
- Multi-layered insulation with lightweight refractory bricks and special backing insulation for low power consumption
- Solid, double-walled door withbrick surface on both endssealing (no fibre sealing is used, since it is susceptible to wear and tear)
- Door is adjustable and can be locked with padlock
- Rugged housing design
- Delivery includes ceramic shelve for level mounting
- Environment-friendly, long-life powder-coating of housing
- Infinitely adjustable inlet air opening
- Air outlet in the centre of ceiling ensures good circulation inside the furnace chamber
- Delivery includes pipe connection for connecting an air outlet (80 mm diameter)
- GS safety mark for controlled safety, CE
- As an option: Double-walled housing, side panels made of stainless steel for cool outer surface

Model	Model T _{max} Inner dimensions in mm °C w d h			Volume in L	Outer dimensions in mm W D H ²			Connected power/kW	Connection voltage ¹	Weight in kg	
N 140 E N 210 E	1300 1300	450 500	580 580	570 700	140 210	660 710	1050 1050	1430 1560	9,0 12,0	3-phase 3-phase	220 270
N 280 E	1300	550	580	830	280	760	1050	1690	15,0	3-phase	300

¹ Notes on the connection voltages please see page 19







Double-walled housing for cool outer surface — with side panels made of structured stainless steel. Available as option

Chamber furnaces, heated from 5 sides

N 100/G - N 660/H











Chamber furnaces, heated from 5 sides

N 100/G - N 660/H

First-class craftsmanship, attractive design, long service life and an excellent temperature distribution – the furnace models N100/G to N 660/H for professional applications round off our assortment of furnaces and kilns. Tried and tested for years, an excellent kiln for firing glass, porcelain and stoneware – even for compact loads and temperatures up to 1340 °C. These kilns are used in industry as well as in ceramic workshops, studios, clinics, schools and private homes – practically at every place where a rugged kiln is required, which is suitable for frequent firing processes with excellent temperature distribution.

Top quality:

- Heating from 5 sides
- Heating elements mounted on ceramic support tubes, therefore ensuring free radiation of heat
- Heating elements in top quality, optimum wire size and length ensuring a long service life
- Special arrangement of heating elements ensures optimum temperature distribution
- Bottom heating protected by SIC plate with level stack delivery
- Low-noise operation of the heating with SolidStateRelais
- Precise temperature distribution thanks to fast the clocking of switching operations
- High-quality and wear-resistant PtRh-Pt thermocouple
- Door contact switch with force-release mechanism
- Multi-layered insulation with lightweight refractory bricks, built with bricks and special backing insulation for low power consumption
- Self-supporting and rugged ceiling construction, bricks laid as vault construction
- Double-walled housing, side panels made of stainless steel (from N 100 onwards), thus ensuring a cool outer surface
- Attractive design
- Solid, double-walled door with wear-resistant "brick surface on both ends" sealing
- Door is adjustable and can be locked with padlock
- Environment-friendly, long-life powder-coating of housing
- Infinitely adjustable inlet air opening
- Air outlet in the ceiling for good circulation inside the furnace chamber
- Delivery includes pipe connection for connecting an air outlet (80 mm diameter)
- GS safety mark for controlled safety, CE
- Base included in delivery (from N 440 onwards. I. e. the customer does not need to provide a base)

Model	T _{max}	Inner d	limensions	in mm	Volume	Outer o	dimensions	Connected	Connection	Weight	
	°C	W	d	h	in L	W	D	H ²	power/kW	voltage ¹	in kg
N 100/G N 150/G N 200/G N 300/G N 440/G N 660/G	900 900 900 900 900 900	400 450 500 550 600 600	530 530 530 700 750 1100	460 590 720 780 1000	100 150 200 300 450 650	710 760 810 860 1000	1150 1150 1150 1340 1450 1800	1430 1560 1690 1750 1820 1820	7,0 9,0 11,0 15,0 20,0 26,0	3-phase 3-phase 3-phase 3-phase 3-phase	270 305 345 430 700 850
N 100 N 150 N 200 N 300 N 440 N 660	1300 1300 1300 1300 1300 1300	400 450 500 550 600 600	530 530 530 700 750 1100	460 590 720 780 1000 1000	100 150 200 300 450 650	710 760 810 860 1000	1150 1150 1150 1340 1450 1800	1430 1560 1690 1750 1820 1820	9,0 11,0 15,0 20,0 30,0 40,0	3-phase 3-phase 3-phase 3-phase 3-phase 3-phase	270 305 345 430 700 850
N 100/H N 150/H N 200/H N 300/H N 440/H N 660/H	1340 1340 1340 1340 1340 1340	400 450 500 550 600 600	530 530 530 700 750 1100	460 590 720 780 1000 1000	100 150 200 300 450 650	740 790 840 890 1030 1030	1170 1170 1170 1170 1360 1470 1820	1430 1560 1690 1750 1820 1820	11,0 15,0 20,0 27,0 40,0 52,0	3-phase 3-phase 3-phase 3-phase 3-phase 3-phase	310 380 420 550 800 950

¹ Notes on the connection voltages please see page 19







Other sizes or custom designs available on request

² base included

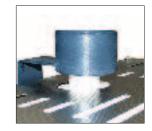
^{*}only 2 phases are connected

Chamber Kilns / Standard Equipment

N 100/G - N 660/H



Free radiation of heat thanks to heating elements on support tubes; optimized positioning for an excellent temperature distribution



Air vent in the central rear section of the ceiling ensures uniform escape of outlet air (roof flap for N 440 and N 660)



Handy quick-release lock, door can be secured with padlock



Large, beautifully designed handle for door operation



Easy-to-use Controller, precise temperature regulation



Double-walled housing for cool outer surface — with side panels made of structured stainless steel
(N 100/G - N 300/H)



Base for ergonomic operation included in delivery. Optional: with special height or running on castors



Infinitely adjustable inlet air opening for optimum air supply during firing and short cool-down periods. Automatic controller available as option.



Solid-state-relays for controlling the kiln heating. Low-noise operation and nearly wear-resistant, the solid-state-relays switch with short pulses, thus allowing optimum adaptation between temperature distribution and firing curve.



Bottom plate can be easily removed to permit convenient cleaning of the furnace bottom.

We recommend: To achieve a long service life of the brick lining and heating elements, the kiln should not be fired permanently to the limit of its capacity. With a max. temperature of 900 °C, the kilns are optimally suitable for decorating glass and porcelain (N 100/G ff.).

For process temperatures of approx. 900 - 1230 °C we recommend models N 100/G - N 660, and for regular high firing temperatures above 1230 °C our models 100/H - N 660/H.



Accessories / Installation Service



Always the right Kiln climate

Automatically closing inlet air flap for our chamber kilns N 100/G - N 300/H and N 140E - N 280E. For a better ventilation of the furnace, improved firing results and shorter cool-down periods. Also suitable for retrofitting old chamber furnaces.



Space-saving pre-drying

Predrying set in shelf design for models N 100.. - N 300/H and N 140 E - N 280 E.



Ergonomic working

Base in special height or on castors.



Professional loading and feeding

Loading rack for chamber furnaces. The filled rack unit is inserted into the kiln using a pallet lift truck.



Assembly boards and supports for piling up products

Matching sets of firing utilities are available for every type of furnace.

Do not hesitate to get in touch with us!









Delivery right up to the installation site, including individual instruction on how to operate the kiln

Installation service

As an alternative to transportation by forwarding agency, we ship our furnaces in most European countries right up to the desired installation site.

No matter whether you want to place the furnace in the basement or on the 1st floor. Within short time our experts deliver the furnace to every location. After installing the furnace, our team will perform all steps required for taking it into service. A individual instruction is part of the package as a matter of course.

RAKU Kilns





MORE THAN HEAT 30-3000 °C

RAKU Kilns







The RAKU 100 is a gas-fired kiln for outdoor operations with standard propane gas. This kiln combines two different furnace concepts with each other. It can either be used as a **top loader** or as **top-hat furnace**. In the basic version, the cover is lifted by two bars. As an accessory, the furnace can be supplied with a lifting stand. This frame is provided with a crank drive which makes it very easy to lift the hat. With this version, you can operate the furnace just by yourself without problems. We can also provide the matching propane burner with pleasure. However, you may decide to use your own model.

- Easy and simple construction, applies particularly to the cover
- Can be used as top-hat furnace or top loader
- Housing sheets made of stainless high-grade steel
- Inspection holes for observing the firing goods
- High-quality insulation with low heat-storage capacity for short heat-up times
- Low gas consumption
- Special flame manipulation for good temperature distribution
- Simple handling

Model	T _{max} Inner dimensions			s in mm	Content in L	Outer o	Outer dimensions in mm W D H ²			t in kg Lifting device
RAKU system 100 lifting stand burner	1150	500 F	500 Power 18 kV	620 V	103	750 750	660 1000	1150 1850	36	16



Lifting stand with crank drive



Propane burner with bottle connection, high-performance with 18 kW



Temperature gauge for RAKU 100, easy to operate, NiCr-Ni temperature sensor, display range 20 – 1200 °C, optional connection of second sensor with display changeover

Fusing furnaces

GF 75 - GF 1050



Model	T _{max} °C	Inner o	limensions in mm		Outer o	Outer dimensions i		Connected power/kW	Connection voltage ¹	Weight in kg
-										
GF 75	950	500	500	350	850	750	1270	3,6	1-phase	70
GF 75 R	950	500	500	350	850	750	1270	5,5	3-phase*	70
GF 190	950	1000	500	350	1340	910	1350	7,2	3-phase	165
GF 240	950	1000	800	350	1450	1200	1270	11,0	3-phase	260
GF 380	950	1200	1000	380	1650	1400	1350	15,0	3-phase	350
GF 420	950	1650	850	380	2100	1250	1270	18,0	3-phase	350
GF 600	950	2000	1000	380	2450	1400	1270	22,0	3-phase	540
GF 920	950	2100	1150	380	2550	1550	1350	26,0	3-phase	670
GF1050	950	2300	1200	380	2750	1600	1350	32,0	3-phase	780

¹ Notes on the connection voltages please see page 19

Other sizes or custom designs available on request

² base included

^{*}only 2 phases are connected



Fusing furnaces





GF 75 - GF 1050

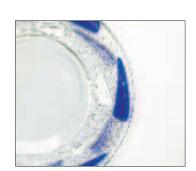
The furnace models GF 75 – GF 1050 are particularly suitable for fusing of glass. Their special construction, with infrared heating down from the ceiling and light fibre insulation, ensures fast heat-up and cool-down periods and optimum fusing results.

GF 75

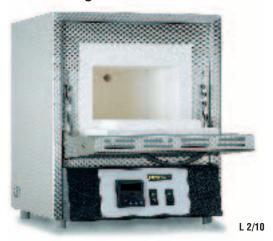
As an infrared heating is used, any direct contact with the heating coils is avoided. This means that the furnace can be opened even during operation, e. g. to realize special effects (by plunge cooling) — without the need to switch off the heating.

- T_{max} 950 °C
- Infrared heating elements for short heat-up times and energy-saving operation
- Overhead heating for direct irradiation of the glass
- Low-noise operation of the heating with Solid-State-Relais
- Precise temperature distribution thanks to fast the clocking of switching operations
- NiCr-Ni thermocouple inside the furnace chamber for precise temperature measurements
- Insulation with special ceramic fibre for fast heat-up and cool-down periods
- Housing of high-grade stainless steel with lid made of perforated sheets (reduced rust formation during the drying of plaster moulds)
- Attractive design and solid build quality
- Lid can be very easily opened and closed thanks to gas shock absorbers
- Adjustable quick-release locks
- Large handle for opening and closing the furnace
- Inlet air openings with stone plugs for air supply, observing the firing goods and fast cooling down
- Rugged base on castors with tray area for glasses and tools
- Controller C 30 K (see page 19) with optional adjustment of up to 18 segments per program. 9 programs can be stored





Enamelling Furnaces





Enamelling Furnaces L 2/10 + L 4/10

The muffle furnaces L 2/10 + L 4/10 are ideally suitable for enamelling. Due to its low power consumption and user-friendliness, this furnace type is the optimum solution for smaller works. The double-walled housing additionally cools down the outside temperature. The lightweight fibre insulation allows short heat-up times.

Top quality:





Control of the heating via silent solid-state-relays

Door contact switch for protecting the operator during opening the furnace

Insulation consisting of hardened vacuum-fibre module with high stability

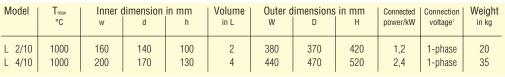
Double-walled housing ensures cool outer surface and high resistance

Housing with structured stainless steel plates

Adjustable inlet air opening in the door

Air vent in the furnace rear

Digital regulator, adjustable holding temperature



¹ Notes on the connection voltages please see page 19



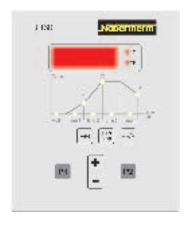


Control Equipment & Features

Controller B 130

This Controller is supplied as standard for every Nabertherm kiln.

- Individual programming
- 2 programs can be stored (as default, bisque and glaze firing are pre-set ex-works)
- Adjustable start time of the furnace (e. g. for using night-time current)
- Adjustable low-level firing times
- Adjustable holding temperature and dwell time
- Input of the programs in increments of 1 °C and/or 1 min.



Controller C 270

In contrast to Controller B 130, this Controller can store several programs and can be used to program a cooling curve for controlled cooling:

- For basic function see Controller B 130
- 6 programs can be stored (as default, bisque and glaze firing are pre-set ex-works)
- 2 freely adjustable heating-up ramps
- Adjustable cooling ramp (slow cooling to protect the charge)

Controller C 30K

This Controller is supplied as standard for all fusing furnaces. Apart from precise heating-up ramps, it also permits to program several cooling ramps.

- 9 programs can be saved
- Max. 18 segments can be stored in a single program
- Real-time clock
- Easy to operate
- Control parameters are optimally adapted to the behaviour of the furnace

Software MV1.2

The combination of Controller C 30K and software MV1.2 allows to use a PC for operating the furnace.

The complete firing procedure is documented in two formats - in tabular form and graphically.

Ask for our special catalogue!



Mains voltages for Nabertherm furnaces

1-phase: All furnaces are available for 110 V - 240 V, 50 or 60 Hz.

3-phase: All furnaces are available for 200 V - 240 V and/or 380 V - 480 V, 50 or 60 Hz.



The whole world of Nabertherm: www.nabertherm.com

You can find whatever you like to know about us and our products under www.nabertherm.com.

Beside any news, trade fair and training seminar dates there is also the opportunity to get in touch directly with your respective key-account manager at our headquarters or local dealer in charge for you.

Professional solutions for:

- Glass
- Ceramics
- Laboratory / Dental
- Heat treatment of Metals
- Foundry Applications

Subsidiary Companies:

GERO HERMES





Distribution Companies:

Nabertherm Shanghai, China Nabertherm S.A., France Nabertherm Schweiz AG Nabertherm Ltd., UK Nabertherm Inc., USA

All other countries see world-wide sales.



ycq@nabertherm-cn.com info@nabertherm.fr info@nabertherm.ch info@nabertherm.co.uk contact@nabertherm-usa.com