# Laboratory & Industrial

Furnaces | Ovens | Incubators





Snoltherm, UAB has been producing heat treatment equipment for laboratory and industrial applications since 1960. The company pays particular attention to the product development by using advanced technologies and scientific innovations in order to meet individual user needs. Highly qualified personnel and premium materials result in high quality, reliability, and durability of our manufactured products.

Due to the growing SNOL brand awareness, Snoltherm exports 95% of its production and is growing in sales more than 90 countries, not only in European markets, but also in other regions such as Asia, the Middle East, Africa, North and South America, Australia.

# Main product lines:

- Laboratory Furnaces
- Laboratory Ovens
- Incubators
- Industrial Furnaces
- Industrial Ovens
- Custom-built Furnaces and Ovens
- Thermal insulation materials
- Storage constructions (Shelving systems and Pallet racks)

## SnolTherm advantages:

- Developed according to European standards SNOL products bear the CE mark and the company's Quality Management System is certified by Bureau Veritas Quality International in compliance with ISO 9001:2015 / LST EN ISO 9001:2015 standards.
- We are one of the biggest manufacturers in the world, producing more than 3,000 units per year.
- Short lead time we keep around 200 of our most popular products in stock.
- Durability some of our customers have continuously used the same SNOL products for more than 60 years.
- If you require, we can manufacture products in compliance with AMS2750G, CQI-9 or EN1539 standards.
- Our team of professional engineers are always ready to offer customized solutions for your hot innovations!







# Laboratory

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# Industrial

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# 1. High temperature electric furnace

## 1.1 Muffle furnaces with fiber-insulated chambers

Our high accuracy laboratory electric furnaces with fiberinsulated chambers, are designed by a group of professional engineers and made from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. Fit with a selection of precise digital controllers and certified heating elements to ensure excellent temperature stability. The furnaces include ceramic hearth plates. To eliminate gasses or smake that are released during thermal processing, a ventilation hole and an exhaust system may be additionally installed in the products. The furnaces are excellent for scientific laboratories, educational institutions, medicine and for industrial use, to be used for hardening, loosening, normalising, and other thermal processing up to temperatures of 1100 °C or 1300 °C.

#### **Basic model**

- · Ceramic bottom plate
- · Control panel is placed in the underpart of the furnace
- Door opens upwards
- Door safety interlock switch
- Equipped with non-programmable controller Omron E5CC
- · Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- · Heating elements, embedded in a vacuum-formed fiber, are inside four walls of the chamber on models up to 1100 °C
- · Heating elements are exposed on ceramic tu bes on two sides of the chamber on models up to 1300 °C
- Low power consumption
- One-piece, high thermal efficiency, vacuum-formed ceramic fiber chamber
- Outside casing metai sheet, powder painted grey
- 1 year warranty

#### SNOL 13/1100 LHM01



- Additional ceramic bottom plates
- Calibration of temperature measurement system
- Data communication/USB
- Data recorder
- Digital timer
- · Fan-assisted chimney for air extraction
- Gas box up to 1100 °C
- Metal tray
- OTP (over temperature protection)
- Outside casing made from stainless steel
- Process observation window (ø 35 mm) up to 1100 °C
- Protective gas injection system (nitrogen or argon)
- Table for supporting the furnace
- Additional 1 year warranty

Model	Vol.,	Tmax,	Chambe	er dimensio	ns, mm	Outsid	e dimensior	ıs, mm	Power,	Voltage, V	Weight, kg		Door openin	g
Model	I	°C	Width	Depth	Height	Width	Depth	Height	kW	Voltage, V	Weight, kg	upwards	sideways	downwards
Up to 1100 °C														
SNOL 3/1100 LHM01	3	1100	120	200	105	345	470	430	1.7	230	17	•	0	0
SNOL 8.2/1100 LHM01	8.2	1100	195	310	135	445	660	495	1.8	230	28	•	0	0
SNOL 8.2/1100 LSM01	8.2	1100	195	310	135	440	530	495	1.8	230	28	0	•	0
SNOL 8.2/1100 LZM01	8.2	1100	195	310	135	440	530	495	1.8	230	28	0	0	•
SNOL 13/1100 LHM01	13	1100	220	335	170	505	685	555	1.8	230	38	•	0	0
SNOL 22/1100 LHM01	22	1100	280	500	160	605	855	620	3.0	230	58	•	0	0
SNOL 39/1100 LHM01	39	1100	320	495	230	655	890	740	6.0	400	74	•	0	0
Up to 1300 °C														
SNOL 6.7/1300 LSM01	6.7	1300	145	310	135	445	575	525	2.4	230	35	0	•	0
SNOL 10/1300 LHM01	10	1300	190	335	170	500	710	560	2.4	230	38	•	0	0



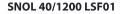
# 1. High temperature electric furnaces

### 1.2 Chamber furnaces with fiber-insulated chambers

Highly accurate laboratory electric furnaces with chambers made of thermal insulation fiber, designed by a group of professional engineers and made from high quality materials. To eliminate gasses or smoke that are released during thermal processing, a ventilation hole and an exhaust system may be additionally installed in the products. The furnaces are excellent for scientific laboratories, educational institutions, medicine and for industrial use, to be used for hardening, loosening, normalising, and other thermal processing up to temperatures of 1600 °C.

#### SNOL 30/1100 LSF01







#### **SNOL 30/1300 LSF01**



#### **Basic model**

- · Ceramic bottom plate
- Chamber made of fiber thermal insulation plates
- Control panel is placed in the underpart of the furnace
- Door opens to the right side
- Door safety interlock switch
- Equipped with non-programmable controller Omron E5CC
- Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- Heating elements in the grooves in three sides of the chamber
- Low power consumption
- · Outside casing metal sheet, powder painted grey
- 1 year warranty

#### **Options**

- Additional ceramic bottom plates
- Buzze
- Calibration of temperature measurement system
- Data communication/USB
- Data recorder
- Digital timer
- Fan-assisted chimney for air extraction
- Gas box up to 1100 °C
- Metal tray
- OTP (over temperature protection)
- Process observation window (ø 35 mm) up to 1100 °C
- Protective gas injection system (nitrogen or argon)
- Table for supporting the furnace
- Additional 1 year warranty

Model	Vol., I	Tmax, °C	Chamb	er dimension	s, mm	Outsi	ide dimensions	, mm	Power, kW	Voltage, V	Weight, kg
Model	VOI., I	i imax, ℃	Width	Depth	Height	Width	Depth	Height	Power, kw	voitage, v	weight, kg
Up to 1100 °C											
SNOL 30/1100 LSF01	30	1100	300	405	275	640	800	830	3.4	230	96
SNOL 80/1100 LSF01	80	1100	300	405	600	745	800	1255	5.4	400	135
Up to 1200 °C											
SNOL 40/1200 LSF01	40	1200	295	420	295	645	870	835	3.4	230	110
SNOL 45/1200 LSF01	45	1200	290	375	450	715	760	1060	4.6	230	120
Up to 1300 °C											
SNOL 30/1300 LSF01	30	1300	200	440	290	640	870	840	4.6	230	120
Up to 1600 °C											
SNOL 8/1600 LSF01	8	1600	150	300	150	605	580	1395	8.0	400	170



# 1. High temperature electric furnaces

### 1.3 Furnaces with ceramic chambers

SNOL 7.2/1100 LSC01

Highly accurate laboratory electric furnaces with solid ceramic chambers, designed by a group of professional engineers and made from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. The furnaces include ceramic bottom plates. To eliminate gasses or smoke that are released during thermal processing, a ventilation hole and an exhaust system may be additionally installed in the products. The furnaces are excellent for scientific laboratories, educational institutions, medicine and for industrial use, to be used for hardening, loosening, normalising, and other thermal processing up to temperatures of 1300 °C.



#### **Basic model**

- Ceramic bottom plate
- Control panel is placed in the underpart of the furnace
- · Door opens to the right side
- Door safety interlock switch
- Equipped with non-programmable controller Omron E5CC
- Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- Low power consumption
- Outside casing metal sheet, powder painted grey
- Partially exposed or enclosed heating elements in four sides around a chamber
- · Solid ceramic chamber
- 1 year warranty

- Additional ceramic bottom plates
- Buzzer
- Calibration of temperature measurement system
- Data communication/USB
- Data recorder
- Digital timer
- · Fan-assisted chimney for air extraction
- Gas box up to 1100 °C
- Metal tray
- OTP (over temperature protection)
- Process observation window (0 35 mm) up to 1100 °C
- · Protective gas injection system (nitrogen or argon)
- Table for supporting the furnace
- Additional 1 year warranty

Model	Vol., I	Tmax, °C	Chamb	er dimension	s, mm	Over	all dimensions,	mm	Power, kW	Voltage, V	Weight, kg
- Wodel	VOI., 1	Hillax, *C	Width	Depth	Height	Width	Depth	Height	Power, KW	voitage, v	weight, kg
Up to 900 °C											
SNOL 4/900 LSC01	4	900	120	295	110	440	555	500	3.7	230	55
SNOL 7.2/900 LSC01	7.2	900	195	295	120	445	590	525	3.3	230	50
SNOL 12/900 LSC01	12	900	215	295	195	640	745	820	4.5	230	120
SNOL 15/900 LSC01	15	900	215	400	195	640	815	820	6.0	400	130
Up to 1100 °C											
SNOL 4/1100 LSC01	4	1100	120	295	110	440	615	500	3.7	230	55
SNOL 7.2/1100 LSC01	7.2	1100	195	295	120	445	590	525	3.3	230	50
SNOL 12/1100 LSC01	12	1100	215	295	195	640	745	820	4.5	230	120
SNOL 15/1100 LSC01	15	1100	215	400	195	640	815	820	6.0	400	130
Up to 1200 °C											
SNOL 4/1200 LSC01	4	1200	120	295	110	440	555	500	3.7	230	55
SNOL 7.2/1200 LSC01	7.2	1200	195	295	120	645	710	705	3.5	230	50
SNOL 12/1200 LSC01	12	1200	215	295	195	640	680	820	4.5	230	120
SNOL 15/1200 LSC01	15	1200	215	400	195	640	680	820	6.0	400	130
Up to 1300 °C											
SNOL 4/1300 LSC01	4	1300	120	295	110	440	555	500	3.7	230	55
SNOL 7.2/1300 LSC01	7.2	1300	195	295	120	645	710	705	3.5	230	50
SNOL 12/1300 LSC01	12	1300	215	295	195	640	680	820	4.5	230	120
SNOL 15/1300 LSC01	15	1300	215	400	195	640	680	820	6.0	400	130



## 2.1 Ashing furnaces

Our ashing furnaces are designed by a group of professional engineers and made from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. Fan-assisted chimney permits to eliminate smokes from the chamber during the process. Ashing process is possible with several types of furnaces: muffle furnaces, fiber-insulated chamber furnaces and ceramic chamber furnaces. This range of furnaces is suitable for ashing and burn off processes in temperatures of 900-1300 °C.

# 

#### **Basic model**

- Chamber made of vacuum formed ceramic fiber/ fiber thermal insulation plates / solid ceramic
- · Continuous air change in the chamber
- · Control panel is placed in the underpart of the furnace
- Door safety interlock switch
- Equipped with non-programmable controller Omron E5CC
- Fan-assisted chimney for air extraction
- Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- ·Low power consumption
- ·Outside casing metal sheet, powder painted grey
- •1 year warranty

#### **Options**

- Additional ceramic bottom plates
- Buzzei
- Calibration of temperature measurement system
- Data communication/USB
- Data recorder
- Digital timer
- Gas box up to 1100 °C
- Metal tray
- OTP (over temperature protection)
- Process observation window (ø 35 mm) up to 1100 °C
- · Protective gas injection system (nitrogen or argon)
- · Table for supporting the furnace
- Additional 1 year warranty

Model	Vol., I	Tmax, °C	Chan	nber dimension:	s, mm	Out	side dimensions	, mm	Dawer MM	Voltore V	Mainhe la
Wodel	VOI., I	illiax, -C	Width	Depth	Heigh	Width	Depth	Height	Power, kW	Voltage, V	Weight, kg
Up to 900 °C											
SNOL 4/900 LSC21	4	900	120	295	110	440	605	500	3.7	230	55
SNOL 7.2/900 LSC21	7.2	900	195	295	120	445	640	525	3.3	230	50
SNOL 12/900 LSC21	12	900	215	295	195	640	795	820	4.5	230	120
SNOL 15/900 LSC21	15	900	215	400	195	640	865	820	6.0	400	130
Up to 1100 °C											
SNOL 3/1100 LHM21	3	1100	120	200	105	345	520	430	1.7	230	17
SNOL 4/1100 LSC21	4	1100	120	295	110	440	605	500	3.7	230	41
SNOL 7.2/1100 LSC21	7.2	1100	195	295	120	445	640	525	3.3	230	50
SNOL 8.2/1100 LHM21	8.2	1100	195	310	135	445	710	495	1.8	230	28
SNOL 8.2/1100 LSM21	8.2	1100	195	310	135	440	580	495	1.8	230	28
SNOL 12/1100 LSC21	12	1100	215	295	195	640	805	820	4.5	230	134
SNOL 13/1100 LHM21	13	1100	220	335	170	505	735	555	1.8	230	38
SNOL 15/1100 LSC21	15	1100	215	295	195	640	865	820	6.0	400	130
SNOL 22/1100 LHM21	22	1100	280	500	160	605	905	620	3.0	230	59
SNOL 30/1100 LSF21	30	1100	300	405	275	645	920	835	3.4	230	96
SNOL 39/1100 LHM21	39	1100	320	495	230	655	940	740	6.0	400	75
Up to 1200 °C											
SNOL 4/1200 LSC21	4	1200	120	295	110	440	605	500	3.7	230	55
SNOL 7.2/1200 LSC21	7.2	1200	195	295	120	645	760	705	3.5	230	50
SNOL 12/1200 LSC21	12	1300	215	295	195	640	740	820	4.5	230	120
SNOL 15/1200 LSC21	15	1300	215	400	195	640	865	820	6.0	400	130
Up to 1300 °C											
SNOL 4/1300 LSC21	4	1300	120	295	110	440	605	500	3.7	230	55
SNOL 6.7/1300 LSM21	6.7	1300	145	310	135	445	625	525	2.4	230	35
SNOL 7. 2/1300 LSC21	7.2	1300	195	295	120	645	760	705	3.5	230	50
SNOL 12/1300 LSC21	12	1300	215	295	195	640	765	820	4.5	230	120
SNOL 15/1300 LSC21	15	1300	215	400	195	640	865	820	6.0	400	130
SNOL 30/1300 LSF21	30	1300	200	425	290	645	920	835	4.6	230	120



### 2.2 Tube furnaces

Our high temperature horizontal tube furnaces designed by professional engineers and made from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. The furnaces are excellent for using in scientific laboratories, educational institutions, medicine and industry for thermal processing up to a temperature of 1250 °C.

#### **Basic model**

- · Ceramic tube chamber
- Control panel is placed in the underpart of the furnace
- · Door safety interlock switch
- Equipped with non-programmable controller Omron E5CC
- Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- · Low power consumption
- Outside casing metal sheet, powder painted grey
- 1 year warranty

#### **Options**

- · Additional ceramic bottom plates
- Buzzei
- · Calibration of temperature measurement system
- · Data communication/USB
- Data recorder
- · Digital timer
- Gas box up to 1100 °C
- Metal tray
- OTP (over temperature protection)
- Process observation window (ø 35 mm) up to 1100 °C
- Protective gas injection system (nitrogen or argon)
- · Table for supporting the furnace
- Additional 1 year warranty

Model Vol., l	Tmax, °C	Chamber dimensions, mm		Ov	erall dimensions, r	nm	Power, kW	Voltage, V	Weight, kg	
Model	VOI., 1	IIIIdx, C	Diameter	Depth	Width Depth Height	voitage, v				
SNOL 0.2/1250	0.2	1250	Ø 35	200	675	545	565	3.7	230	38
SNOL 0.4/1250	0.4	1250	Ø 50	200	675	545	565	3.7	230	38
SNOL 0.8/1250	0.8	1250	Ø 70	200	675	545	565	3.7	230	38

## 2.3 Weighing furnaces

Our SNOL 13/1100 LED is designed for combustion loss determination with the assistance of added balances, which weigh the materials before, during, and after the process. This could also inform about the completion of the process – as soon as the weight ceases to decrease. It is used in a variety of technical processes; you no longer need to open the furnace and take out the contents in order to find out the status of materials like, for example, sediment, sludge, soil, waste, or inorganic materials such as cement, lime, calcinated bauxite, and refractories.

#### **Basic model**

- · Ceramic bottom plate mounted to a ceramic tube
- Control panel is placed in the underpart of the furnace
- · Door opens upwards
- · Door safety interlock switch
- Equipped with non-programmable controller Omron E5CC
- Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- Heating elements, embedded in a vacuum-formed fiber, are inside four walls of the chamber
- Low power consumption
- One-piece, high thermal efficiency, vacuum-formed ceramic fiber chamber
- · Outside casing metal sheet, powder painted grey
- · 1 year warranty

#### **Options**

- · Additional ceramic bottom plates
- Balances
- Buzzer
- · Calibration of temperature measurement system
- Data communication/USB
- Data recorder
- Digital timer
- Fan-assisted chimney for air extraction
- Gas box up to 1100 °C
- Metal tray
- OTP (over temperature protection)
- Process observation window (ø 35 mm) up to 1100 °C
- Protective gas injection system (nitrogen or argon)
- · Table for supporting the furnace
- Additional 1 year warranty

Model	Vol., l	Tmax, °C	Chan	nber dimension	s, mm	Out	side dimensions	mm	Power, kW	Voltage, V	Weight, kg
Model	VOI., 1	Tillax, C	Width	Depth	Heigh	Width	Depth	Height	i owei, kw	voitage, v	Weight, kg
SNOL 13/1100 LED	13	1100	220	335	170	500	690	877	1.8	230	55



# SNOL 0.8/1250







### 2.4 Shaft furnaces

Our top-loading (shaft) low and high temperature electric laboratory furnaces are designed by professional engineers and made from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. The furnaces are excellent for drying, hardening, preliminary heating, loosening, normalising and other thermal processes of up to 900 °C, which is mostly used in scientific laboratories, educational institutions, medicine and industry.

#### **Basic model**

- · Solid ceramic chamber or made from stainless steel
- Enclosed heating elements
- Door opens from the top
- Equipped with non-programmable controller Omron E5CC
- Ceramic bottom plate
- Low power consumption
- Fast heating time due to low thermal mass construction
- · Good stability and uniformity
- Outside casing metal sheet, powder painted grey
- 1 year warranty

#### **Options**

- Reinforced bottom
- Additional ceramic bottom plates
- Buzzer
- Digital timer
- OTP (over temperature protection)
- Data recorder
- Data communication/USB
- Calibration of temperature measurement system
- Table for supporting the furnace
- · Additional 1 year warranty

#### **SNOL 10/900 LXC02**



#### SNOL 75/600 LHN02



Model	Model Vol., I Tmax,	Tmay °C	Cham	ber dimension	s, mm	Out	side dimensions,	mm	Power, kW	Voltage, V	Weight, kg
Model	VOI., 1	max, c	Width	Depth	Heigh	Width	Depth	Height	r ower, kw		
SNOL 10/900 LXC02	10	900	190	210	405	770	850	1010	4.5	230	144
SNOL 75/600 LHN01	75	550	340	390	550	870	660	850	6.0	400	116



# 3. Incubators

## 3.1 Incubators up to 100°C

Precise temperature-controlled incubators with natural convection are designed for the heat treatment of harmless, solid, or bulk materials. They can be used for drying glassware, growing bacteria or other microorganisms, cultures in the ambient air temperatures from T+5 °C to 100 °C in static conditions (T – temperature of the room where the laboratory incubator is being operated).

#### **SNOL 55/100 IN**



**SNOL 120/100 IN** 



#### Basic model

- Stainless steel chamber
- 2 stainless steel shelves
- · Outside casing metal sheet, powder painted grey
- Door opening to the right
- · Working chamber with additional glass door
- OTP non-adjustable over temperature protection
- Control panel is placed in the top
- Non-programmable temperature controller Omron E5CC
- High quality, ecological thermal insulation material
- · Low power consumption
- 2 year warranty

#### **Optional equipment:**

- Programmable controller
- Buzzer
- Outside casing made from stainless steel
- Calibration of temperature measurement system
- Data communication/USB
- Digital timer
- Additional shelves
- Metal tray
- Table for supporting incubator

Model	Vol., I	Tmax, °C	Cham	ber dimensions	, mm	Overall dimensions, mm			Power, kW	Voltage, V
Model	۷٥١., ۱	illax, C	Width	Depth	Height	Width	Depth	Height	i olici, kii	voitage, v
Up to 100°C										
SNOL 55/100 IN	55	100	380	380	380	610	760	710	0,4	230
SNOL 120/100 IN	120	100	550	380	585	780	760	910	0,6	230



## 4.1 Chamber ovens up to 300 °C

Our new line of laboratory ovens is designed by a group of professional engineers to be economical and made from high quality materials to be long-lasting. The range of laboratory ovens is suitable for heat treatment of materials up to 300 °C and can be used for drying, heating, thermal testing, and ageing in air flow environments.



#### **Basic model**

- Control panel is located at the top
- · Ventilation motor on back side
- Chamber made from stainless steel
- 3 stainless steel shelves; (except SNOL 20/300 and SNOL 55/300)
- Outside casing metal sheet, powder painted grey
- Insulation rock wool (complete lack of asbestos)
- Door opening to the side
- OTP (over temperature protection)
- Equipped with non-programmable controller Omron E5CC
- Buzzer
- Fan speed controller
- Low power consumption
- · Short heating up / cooling down period
- 2 year warranty.

#### **Optional equipment:**

- Programmable controller
- · Outside casing made from stainless steel
- Calibration of temperature measurement system
- Data communication/USB
- Digital timer
- Additional shelves
- Metal tray
- Process observation window
- Table for supporting the oven

Model	Vol., I	, I Tmax, °C ∙	Cham	ber dimensions	, mm	Ove	erall dimension	s, mm	Power, kW	Voltage, V
Model	VOI., 1	illax, C	Width	Depth	Height	Width	Depth	Height	r owel, kw	voitage, v
Up to 300°C										
SNOL 20/300 NNL	20	300	240	280	345	470	655	670	1	230
SNOL 55/300 NNL	55	300	380	380	380	610	760	710	2	230
SNOL 120/300 NNL	120	300	550	380	585	780	760	910	2	230
SNOL 220/300 NNL	220	300	730	470	620	965	845	955	3.4	230
SNOL 420/300 NNL	420	300	995	470	860	1235	830	1205	6	400
SNOL 700/300 NNL	700	300	915	590	1300	1155	960	1655	8	400



# 4.2 Chamber ovens up to 350 °C

Our low temperature laboratory ovens are designed by a group of professional engineers to be economical and made from high quality materials to be long-lasting. This ensures optimal results for thermal processing of various materials and parts up to a temperature of 350 °C. This line of products is an excellent fit for scientific laboratories, educational institutions, medicine and industry.

#### SNOL 67/350 LSN01



#### **Basic model**

- · Chamber made from stainless steel
- · Control panel is placed in the underpart of the furnace
- Controllable valve for air exchange in the chamber
- Door opens to the side
- Equipped with non-programmable controller Omron E5CC
- Natural or forced air circulation depending on the model
- · Good stability and uniformity
- Hermetically sealed doors
- · High degree of accuracy
- · High quality, ecological thermal insulation material
- ·Low power consumption
- Outside casing metal sheet, powder painted grey
- Shelves, 3 pcs. (except SNOL 20/300)
- ·Short heating up/cooling down period
- •1 year warranty

#### Options

- Additional shelves
- Buzzer
- · Calibration of temperature measurement system
- Data communication/USB
- Digital timer
- OTP (over temperature protection)
- Metal tray
- · Outside casing made from stainless steel
- · Process observation window
- Reinforced shelves
- Table for supporting the oven
- · Additional 1 year warranty

Model	Vol., I	Tmax, °C	Chamber dimensions, mm			Ove	rall dimensions	, mm	Power, kW	Voltage, V	Weight, kg
Model	VOI., 1	IIIIax, C	Width	Depth	Heigh	Width	Depth	Height	KVV	voitage, v	Weight, kg
Up to 350 °C											
SNOL 58/350 LSP11	58	350	390	375	360	670	615	580	2.0	230	40
SNOL 58/350 LSN11	58	350	390	375	360	670	615	580	2.0	230	40
SNOL 67/350 LSP01	67	350	390	445	390	670	615	580	2.0	230	37
SNOL 67/350 LSN01	67	350	390	445	390	670	615	580	2.0	230	37



# 4.3 Chamber ovens up to 200 °C

Our low temperature laboratory ovens are designed by a group of professional engineers to be economical and made from high quality materials to be long-lasting. This ensures optimal results for thermal processing of various materials and parts up to a temperature of 200 °C. Optional forced air circulation (only in model SNOL 200/200) assures an even temperature distribution throughout the chamber and high quality thermal processing occurs quickly. This line of products is an excellent fit for scientific laboratories, educational institutions, medicine and industry.



#### **Basic model**

- · Chamber made from mild or stainless steel
- Control panel is placed in the underpart of the furnace
- Controllable valve for air exchange in the chamber
- · Door opens to the side
- Equipped with non-programmable controller Omron E5CC
- · Natural or forced air circulation depending on the model
- · Good stability and uniformity
- Hermetically sealed doors
- High degree of accuracy
- High quality, ecological thermal insulation material
- Low power consumption
- Outside casing metal sheet, powder painted grey
- Shelves, 3 pcs. (except SNOL 20/300)
- Short heating up/cooling down period
- 1 year warranty

#### Options

- Additional shelves
- Buzzer
- Calibration of temperature measurement system
- Data communication/USB
- Digital timer
- OTP (over temperature protection)
- Metal tray
- Outside casing made from stainless steel
- Process observation window
- Reinforced shelves
- Table for supporting the oven
- · Additional 1 year warranty

Model	Vol., I	Tmax, °C	Chamber dimensions, mm			Ove	rall dimensions	, mm	Power,	Voltage, V	Weight, kg
Model	VOI., 1	Tillax, °C	Width	Depth	Heigh	Width	Depth	Height	kW	voitage, v	<i>3-4</i> 3
Up to 200°C											
SNOL 24/200 LSP01	24	200	300	380	200	400	515	410	2.0	230	18
SNOL 200/200 LSP11	200	200	710	610	460	1040	780	775	2.0	230	78
SNOL 200/200 LSN11	200	200	710	610	460	1040	780	775	2.0	230	78



### 4.4 Multi-chamber ovens

Our multi-chamber low temperature electric ovens are designed by professional engineers and made from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. Forced air circulation allows a homogenous temperature distribution to be achieved and ensures optimal results for processes such as drying, preliminary heating and other thermal processes of various materials and parts of up to a temperature of 200 °C. This line of products can be used in scientific laboratories, educational institutions, medicine and industry.

SNOL 4x80/200 LSN18

#### **Basic model**

- · Chamber made from mild or stainless steel
- Control panel is placed in the underpart of the furnace
- · Controllable valve for air exchange in the chamber
- Door opens to the side
- Equipped with non-programmable controller Omron E5CC
- Natural air circulation
- · Hermetically sealed doors
- OTP (over temperature protection)
- · Outside casing metal sheet, powder painted grey
- · Shelves, 2 pcs.
- 1 year warranty

#### **Options**

- Additional shelves
- Buzzer
- Calibration of temperature measurement system
- Data communication/USB
- Digital timer
- Fan speed controller
- Metal tray
- Outside casing made from stainless steel
- Process observation window
- Reinforced shelves
- · Table for supporting the oven

Model	Vol., l	Vol., I Tmax, °C <b>—</b>		Chamber dimensions, mm		Overall dimensions, mm			Power,	Voltage, V	Weight, kg
Model	VOI., I	max, c	Width	Depth	Heigh	Width	Lenght	Height	kW	voitage, v	Weight, kg
SNOL 4x80/200 LSP18	4x80	200	500	400	400	1910	925	1950	18.0	400	440
SNOL 4x80/200 LSN18	4x80	200	500	400	400	1910	925	1950	18.0	400	440
SNOL 2x240/200 LSP11	2x240	200	500	400	1200	1500	960	1715	24.0	400	450
SNOL 2x240/200 LSN11	2x240	200	500	400	1200	1500	960	1715	24.0	400	450

### 4.5 Protective atmosphere ovens

Our SNOL 78/300 is a protective atmosphere oven, which is designed by a group of professional engineers and manufactured in our factory. This type of oven ensures protection from oxidation processes of various metals in up to 300  $^{\circ}\text{C}$ . This can be applied in scientific laboratories, educational institutions, medicine or industry.

#### **Basic model**

- · Chamber made from stainless steel
- Hermetically sealed chamber
- Protective gas injection system (nitrogen or argon)
- Flow meter
- Reducer
- Equipped with non-programmable controller Omron E5CC
- Outside casing metal sheet, powder painted grey
- 1 year warranty

Model	Vol., l	Tmax, °C	Chamber dimensions, mm		s, mm	Overall dimensions, mm		Power,	Voltage, V	Weight, kg	
Model		illiax, C	Width	Depth	Heigh	Width	Lenght	Height	kW	voitage, v	Weight, kg
SNOL 78/300-1 LSN01	78	300	410	435	425	600	755	715	2.0	230	48



### 5.1 Chamber ovens up to 750 °C

Our universal industrial electric furnaces/ ovens with induced air circulation are designed by a group of professional engineers and made from high quality materials, such as heavy-duty metal parts and thermal insulation materials, which are manufactured in our factory. The air circulation ensures an even temperature distribution and achieves great uniformity. Fit with a selection of precise digital controllers and certified heating elements to ensureexcellenttemperature stability. The application variety ranges from electronic, plastic or metal to other branches of industry, with the possibilities to use this product line for aging, annealing, curing, normalising, primary heating, stress relieving and other thermal processes up to 750 °C. The combination of our knowledge and expertise leads to a high quality and long-lasting product with long-term stable efficiency, no matter the application.

#### **Base model**

- Door opening to left/right side (depending on customer needs)
- Control panel on the left/right side (depending on customer needs)
- Outside casing metal sheet, powder painted grey (RAL 7035), frame - black
- Heating from 2 sides with tubular (U-shaped) heating elements
- Insulation made from rock wool
- Fitted with standard shelves, 2 pcs.
- Ventilation motor on the top or rear, vertical or horizontal air flow
- · Adjustable air supply/extraction
- Equipped with non-programmable PID controller Omron E5CC
- OTP (over temperature protection)
- SSR relay
- Door safety switch
- Low power consumption
- · Short heating/cooling time
- High level of accuracy
- 1 year warranty

#### **Optional equipment**

- Additional shelves
- Reinforced shelves
- Reinforced bottom
- Automatic air vent control
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel oven exterior
- Oven mounting platform
- · Additional 1 year warranty



Model	V-I I	Inne	er dimensions, r	nm	Danier LW	Exter	ior dimensions,	mm*
Model	Vol., I	Width	Depth	Height	Power, kW	Width	Depth	Height
Up to 250 °C								
SNOL 125/250	125	500	500	500	4	1450	1200	1400
SNOL 250/250	250	500	500	1000	4	1450	1200	2000
SNOL 420/250	420	700	600	1000	6	1600	1250	2000
SNOL 500/250	500	700	700	1000	6	1600	1300	2000
SNOL 600/350	600	800	800	1000	8	1700	1400	2000
SNOL 700/350	700	800	900	1000	8	1700	1500	2000
SNOL 800/250	800	900	900	1000	12	1800	1500	2000
SNOL 970/250	970	900	900	1200	12	1800	1500	2200
SNOL 1000/250	1000	1000	1000	1000	16	1900	1600	2000
SNOL 1200/250	1200	1000	1000	1200	16	1900	1600	2200
SNOL 1500/250	1500	1000	1000	1500	18	1900	1600	2500
SNOL 2200/250	2200	1000	1500	1500	18	2000	2100	2500
SNOL 2500/250	2500	1000	1500	1700	24	2000	2100	2900
SNOL 3400/250	3400	1000	2000	1700	24	2000	2600	2900
SNOL 4000/250	4000	1200	2000	1700	30	2200	2600	2900
SNOL 4800/250	4800	1200	2000	2000	30	2200	2600	3200

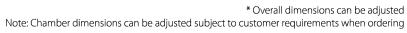
\* Overall dimensions can be adjusted

Note: Chamber dimensions can be adjusted subject to customer requirements when ordering





		Inne	r dimensions,	mm		Exteri	or dimensions, m	m*
Model	Vol., I	Width	Depth	Height	Power, kW	Width	Depth	Height
Up to 350 °C								
SNOL 125/350	125	500	500	500	6	1450	1200	1400
SNOL 250/350	250	500	500	1000	6	1450	1200	2000
SNOL 420/350	420	700	600	1000	8	1600	1250	2000
SNOL 500/350	500	700	700	1000	8	1600	1300	2000
SNOL 600/350	600	800	800	1000	10	1700	1400	2000
SNOL 700/350	700	800	900	1000	10	1700	1500	2000
SNOL 800/350 SNOL 970/350	800 970	900	900 900	1000 1200	14 18	1800 1800	1500 1500	2000 2200
SNOL 1000/350	1000	1000	1000	1000	18	1900	1600	2000
SNOL 1200/350	1200	1000	1000	1200	22	1900	1600	2200
SNOL 1500/350	1500	1000	1000	1500	22	1900	1600	2500
SNOL 2200/350	2200	1000	1500	1500	26	2000	2100	2500
SNOL 2500/350	2500	1000	1500	1700	26	2000	2100	2900
SNOL 3400/350	3400	1000	2000	1700	30	2000	2600	2900
SNOL 4000/350	4000	1200	2000	1700	30	2200	2600	2900
SNOL 4800/350	4800	1200	2000	2000	30	2200	2600	3200
Up to 450 °C								
SNOL 125/450	125	500	500	500	8	1450	1200	1400
SNOL 250/450	250	500	500	1000	10	1450	1200	2000
SNOL 420/450	420	700	600	1000	12	1600	1250	2000
SNOL 500/450	500	700	700	1000	12	1600	1300	2000
SNOL 600/450	600	800	800	1000	16	1700	1400	2000
SNOL 700/450	700	800	900	1000	18	1700	1500	2000
SNOL 800/450	800	900	900	1000	18	1800	1500	2000
SNOL 970/450	970	900	900	1200	21	1800	1500	2200
SNOL 1000/450	1000	1000	1000	1000	21	1900	1600	2000
SNOL 1200/450	1200	1000	1000	1200	24	1900	1600	2200
SNOL 1500/450	1500	1000	1000	1500	24	1900	1600	2500
SNOL 2200/450	2200	1000	1500	1500	35	2000	2100	2500
SNOL 2500/450	2500	1000	1500	1700	35	2000	2100	2900
SNOL 3400/450	3400	1000	2000	1700	45	2000	2600	2900
SNOL 4000/450	4000	1200	2000	1700	55	2200	2600	2900
SNOL 4800/450 Up to 650 °C	4800	1200	2000	2000	55	2200	2600	3200
SNOL 125/650	125	500	500	500	8	1450	1200	1400
SNOL 250/650	250	500	500	1000	12	1450	1200	2000
SNOL 420/650	420	700	600	1000	16	1600	1250	2000
SNOL 500/650	500	700	700	1000	16	1600	1300	2000
SNOL 600/650	600	800	800	1000	18	1700	1400	2000
SNOL 700/650	700	800	900	1000	18	1700	1500	2000
SNOL 800/650	800	900	900	1000	21	1800	1500	2000
SNOL 970/650	970	900	900	1200	25	1800	1500	2200
SNOL 1000/650	1000	1000	1000	1000	25	1900	1600	2000
SNOL 1200/650	1200	1000	1000	1200	30	1900	1600	2200
SNOL 1500/650	1500	1000	1000	1500	32	1900	1600	2500
SNOL 2200/650	2200	1000	1500	1500	45	2000	2100	2500
SNOL 2500/650	2500	1000	1500	1700	45	2000	2100	2900
SNOL 3400/650	3400	1000	2000	1700	55	2000	2600	2900
SNOL 4000/650	4000	1200	2000	1700	65	2200	2600	2900
SNOL 4800/650	4800	1200	2000	2000	75	2200	2600	3200
Up to 750 °C	105	500				1.50	1000	4.00
SNOL 125/750	125	500	500	500	16	1450	1200	1400
SNOL 250/750	250	500	500	1000	18	1450	1200	2000
SNOL 420/750 SNOL 500/750	400 500	700 700	600 700	1000	24 24	1600 1600	1250	2000
SNOL 600/750		800	800	1000	27	1700	1300	2000
SNOL 700/750	600 700	800	900	1000	27	1700	1400 1500	2000
SNOL 800/750	800	900	900	1000	32	1800	1500	2000
SNOL 970/750	970	900	900	1200	32	1800	1500	2200
SNOL 1000/750	1000	1000	1000	1000	32	1900	1600	2000
SNOL 1200/750	1200	1000	1000	1200	45	1900	1600	2200
SNOL 1500/750	1500	1000	1000	1500	48	1900	1600	2500
SNOL 2200/750	2200	1000	1500	1500	65	2000	2100	2500
SNOL 2500/750	2500	1000	1500	1700	65	2000	2100	2900
SNOL 3400/750	3400	1000	2000	1700	80	2000	2600	2900
SNOL 4000/750	4000	1200	2000	1700	95	2200	2600	2900
SNOL 4800/750	4800	1200	2000	2000	110	2200	2600	3200
						* Overall din	nensions can b	o adjusted





### 5.2 Ovens with a removable hearth

Industrial electric ovens with a removable hearth are designed for more comfortable loading and built from high quality materials, which are manufactured in our factory, such as heavy-duty metal parts and thermal insulation materials. The bogie hearth is manually removable but can be fitted with an electromechanical reducer for effortless removal. Fit with a selection of precise digital controllers and certified heating elements to ensure excellent temperature stability. This range of ovens can be applied for annealing, curing, hardening, primary heating, normalising, stress relieving, and other thermal treatment processes up to 750 °C. Induced air circulation ensures an even temperature distribution and achieves great uniformity.

#### **Base model**

- Manually removable hearth on rails
- Door opening to left /right side (depending on customer needs)
- Control panel on the left/ right side (depending on customer needs)
- Outside casing metal sheet, powder painted grey (RAL 7035), frame - black
- Heating from 2 sides with tubular (U-shaped) heating elements
- Thermal insulation made from rock wool
- Chamber made from mild /stainless steel for ovens up to 350 °C
- Chamber made from stainless steel for ovens above 350 °C
- Ventilation motor on the top or rear, for vertical or horizontal air flow
- · Adjustable air supply /extraction
- OTP (over temperature protection),
- Equipped with non-programmable PIO controller Omron E5CC
- SSR relay
- Door safety switch
- Low power consumption
- Short heating /cooling time
- High level of accuracy
- 1 year warranty

#### **Optional equipment**

- Electromechanically removable hearth on rails
- Automated lift up doors
- Custom control box parts
- Controlled cooling
- Rack with shelves
- · Automatic air vent control
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel oven exterior



86-4-1	Vol. I	Inne	er dimensions, r	nm	Power, kW	Exte	rior dimensions,	mm*
Model	Vol., I	Width	Depth	Height	Power, KW	Width	Depth	Height
Up to 250 °C								
SNOL 500/250 BH	500	700	700	1000	8	1600	1100	2100
SNOL 800/250 BH	800	900	900	1000	12	1800	1300	2100
SNOL 970/250 BH	970	900	900	1200	12	1800	1300	2300
SNOL 1000/250 BH	1000	900	1000	1200	16	1800	1400	2300
SNOL 1200/250 BH	1200	1000	1000	1200	18	1900	1400	2300
SNOL 2200/250 BH	2200	1000	1500	1500	20	1900	2200	2800
SNOL 3000/250 BH	3000	1000	2000	1500	25	1900	2700	2800
SNOL 4200/250 BH	4200	1000	2500	1700	30	1900	3200	3000
SNOL 5100/250 BH	5100	1200	2500	1700	30	2100	3200	3000
SNOL 9000/250 BH	9000	1500	3000	2000	45	2400	3700	3300

\* Overall dimensions can be adjusted

Note: Chamber dimensions can be adjusted subject to customer requirements when ordering





Model     Vol., I     Width     Depth     Height     Power, kW     Width     Depth       Up to 350 °C     SNOL 500/350 BH     500     700     700     1000     8     1600     1100       SNOL 800/350 BH     800     900     900     1000     14     1800     1300       SNOL 970/350 BH     970     900     900     1200     18     1800     1300       SNOL 1000/350 BH     1000     900     1000     1200     18     1800     1400       SNOL 1200/350 BH     1200     1000     1000     1200     22     1900     1400       SNOL 2200/350 BH     2200     1000     1500     28     1900     2200       SNOL 3000/350 BH     3000     1000     2000     1500     32     1900     2700	2100 2100 2300 2300 2300 2300 2800
SNOL 500/350 BH     500     700     700     1000     8     1600     1100       SNOL 800/350 BH     800     900     900     1000     14     1800     1300       SNOL 970/350 BH     970     900     900     1200     18     1800     1300       SNOL 1000/350 BH     1000     900     1000     1200     18     1800     1400       SNOL 1200/350 BH     1200     1000     1000     1200     22     1900     1400       SNOL 2200/350 BH     2200     1000     1500     1500     28     1900     2200	2100 2300 2300 2300 2300 2800
SNOL 800/350 BH     800     900     900     1000     14     1800     1300       SNOL 970/350 BH     970     900     900     1200     18     1800     1300       SNOL 1000/350 BH     1000     900     1000     1200     18     1800     1400       SNOL 1200/350 BH     1200     1000     1000     1200     22     1900     1400       SNOL 2200/350 BH     2200     1000     1500     1500     28     1900     2200	2100 2300 2300 2300 2300 2800
SNOL 970/350 BH     970     900     900     1200     18     1800     1300       SNOL 1000/350 BH     1000     900     1000     1200     18     1800     1400       SNOL 1200/350 BH     1200     1000     1000     1200     22     1900     1400       SNOL 2200/350 BH     2200     1000     1500     1500     28     1900     2200	2300 2300 2300 2800
SNOL 1000/350 BH     1000     900     1000     1200     18     1800     1400       SNOL 1200/350 BH     1200     1000     1000     1200     22     1900     1400       SNOL 2200/350 BH     2200     1000     1500     1500     28     1900     2200	2300 2300 2800
SNOL 1200/350 BH     1200     1000     1000     1200     22     1900     1400       SNOL 2200/350 BH     2200     1000     1500     1500     28     1900     2200	2300 2800
<b>SNOL 2200/350 BH</b> 2200 1000 1500 1500 28 1900 2200	2800
SNOI 3000/350 RH 3000 1000 2000 1500 22 1000 2700	2800
2/00 1000 2000 1000 32 1700 2/00	
<b>SNOL 4200/350 BH</b> 4200 1000 2500 1700 38 1900 3200	3000
<b>SNOL 5100/350 BH</b> 5100 1200 2500 1700 45 2100 3200	3000
<b>SNOL 9000/350 BH</b> 9000 1500 3000 2000 55 2400 3700	3300
Up to 450 °C	
<b>SNOL 500/450 BH</b> 500 700 700 1000 14 1700 1200	2200
<b>SNOL 800/450 BH</b> 800 900 900 1000 21 1900 1400	2200
<b>SNOL 970/450 BH</b> 970 900 900 1200 21 1900 1400	2400
<b>SNOL 1000/450 BH</b> 1000 900 1000 1200 21 1900 1500	2400
<b>SNOL 1200/450 BH</b> 1200 1000 1000 1200 24 2000 1500	2400
<b>SNOL 2200/450 BH</b> 2200 1000 1500 1500 37 2000 2300	2900
<b>SNOL 3000/450 BH</b> 3000 1000 2000 1500 37 2000 2800	2900
<b>SNOL 4200/450 BH</b> 4200 1000 2500 1700 45 2000 3300	3100
<b>SNOL 5100/450 BH</b> 5100 1200 2500 1700 50 2200 3300	3100
<b>SNOL 9000/450 BH</b> 9000 1500 3000 2000 60 2500 3800	3400
Up to 650 °C	
<b>SNOL 500/650 BH</b> 500 700 700 1000 18 1700 1200	2200
<b>SNOL 800/650 BH</b> 800 900 900 1000 24 1900 1400	2200
<b>SNOL 970/650 BH</b> 970 900 900 1200 24 1900 1400	2400
<b>SNOL 1000/650 BH</b> 1000 900 1000 1200 28 1900 1500	2400
<b>SNOL 1200/650 BH</b> 1200 1000 1000 1200 28 2000 1500	2400
<b>SNOL 2200/650 BH</b> 2200 1000 1500 1500 48 2000 2300	2900
<b>SNOL 3000/650 BH</b> 3000 1000 2000 1500 55 2000 2800	2900
<b>SNOL 4200/650 BH</b> 4200 1000 2500 1700 65 2000 3300	3100
<b>SNOL 5100/650 BH</b> 5100 1200 2500 1700 78 2200 3300	3100
SNOL 9000/650 BH     9000     1500     3000     2000     90     2500     3800	3400
Up to 750 °C	
<b>SNOL 500/750 BH</b> 500 700 700 1000 27 1800 1300	2300
<b>SNOL 800/750 BH</b> 800 900 900 1000 36 2000 1500	2300
<b>SNOL 970/750 BH</b> 970 900 900 1200 36 2000 1500	2500
<b>SNOL 1000/750 BH</b> 1000 900 1000 1200 42 2000 1600	2500
<b>SNOL 1200/750 BH</b> 1200 1000 1000 1200 42 2100 1600	2500
<b>SNOL 2200/750 BH</b> 2200 1000 1500 1500 72 2100 2400	3000
<b>SNOL 3000/750 BH</b> 3000 1000 2000 1500 80 2100 2900	3000
SNOL 4200/750 BH     4200     1000     2500     1700     95     2100     3400	3200
<b>SNOL 5100/750 BH</b> 5100 1200 2500 1700 117 2300 3400	3200
<b>SNOL 9000/750 BH</b> 9000 1500 3000 2000 135 2600 3900	3500

\* Overall dimensions can be adjusted Note: Chamber dimensions can be adjusted subject to customer requirements when ordering



# 5.3 Walk-in type chamber ovens

Walk-in type industrial electric ovens without bottom insulation are designed to provide the user with various types of loading possibilities and are built from high quality materials, such as heavy-duty metal parts and thermal insulation materials, which are manufactured in our factory. The oven can be loaded using any type of trolley or any other convenient way, that can withstand the processing temperature. Fit with a selection of precise digital controllers and certified heating elements to ensure excellent temperature stability. This range of ovens can be applied for annealing, curing, hardening, primary heating, normalising, stress relieving, and other thermal treatment processes up to 350 °C. Induced air circulation ensures an even temperature distribution and achieves great uniformity.

#### **Base model**

- · Doors opening to the left and right sides
- Control panel on the left/right side (depending on customer needs)
- Outside casing metal sheet, powder painted grey (RAL 7035), frame - black
- Heating from 2 sides with tubular (U-shaped) heating elements
- Insulation made from rock wool
- Chamber made from mild / stainless steel
- Ventilation motor on the top or rear, for vertical or horizontal air flow
- Adjustable air supply/extraction
- Equipped with non-programmable PID controller Omron E5CC
- OTP (over temperature protection)
- SSR relay
- Door safety switch
- Low power consumption
- Short heating/cooling time
- High level of accuracy
- 1 year warranty

#### **Optional equipment**

- Automated lift up doors
- · Automatic air vent control
- Custom control box parts
- Controlled cooling
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel oven exterior
- Additional 1 yearwarranty









Market Control	V-I I	Inn	er dimensions, ı	nm		Exter	ior dimensions,	mm*
Model	Vol., I	Width	Depth	Height	Power, kW	Width	Depth	Height
Up to 250 °C								
SNOL 500/250 Arc	500	700	700	1000	6	1600	1100	1700
SNOL 800/250 Arc	800	900	900	1000	12	1800	1300	1700
SNOL 970/250 Arc	970	900	900	1200	12	1800	1300	1900
SNOL 1000/250 Arc	1000	900	1000	1200	14	1800	1400	1900
SNOL 1200/250 Arc	1200	1000	1000	1200	16	1900	1400	1900
SNOL 2200/250 Arc	2200	1000	1500	1500	18	1900	2000	2300
SNOL 3000/250 Arc	3000	1000	2000	1500	24	1900	2500	2300
SNOL 4200/250 Arc	4200	1000	2500	1750	28	1900	3000	2550
SNOL 5100/250 Arc	5100	1200	2500	1750	32	2100	3000	2550
SNOL 9000/250 Arc	9000	1500	3000	2000	43	2400	3500	2800
Up to 350 °C								
SNOL 500/350 Arc	500	700	700	1000	8	1700	1200	1700
SNOL 800/350 Arc	800	900	900	1000	14	1900	1400	1700
SNOL 970/350 Arc	970	900	900	1200	18	1900	1400	1900
SNOL 1000/350 Arc	1000	900	1000	1200	18	1900	1500	1900
SNOL 1200/350 Arc	1200	1000	1000	1200	22	2000	1500	1900
SNOL 2200/350 Arc	2200	1000	1500	1500	26	2000	2100	2300
SNOL 3000/350 Arc	3000	1000	2000	1500	30	2000	2600	2300
SNOL 4200/350 Arc	4200	1000	2500	1700	36	2000	3100	2550
SNOL 5100/350 Arc	5100	1200	2500	1700	40	2200	3100	2550
SNOL 9000/350 Arc	9000	1500	3000	2000	50	2500	3600	2800

\* Overall dimensions can be adjusted Note: Chamber dimensions can be adjusted subject to customer requirements when ordering



# 6. High-temperature electric furnaces

## 6.1 Chamber furnaces up to 1300°C

High-accuracy industrial electric furnaces are designed by professional engineers and made from high-quality materials, such as heavy-duty metal parts and thermal insulation materials, which are manufactured in our factory. Furnaces are equipped with ceramic or heat resistant steel hearth plates, depending on your application. They can be applied in metal and other branches of industry, and used for hardening, normalising, stress relieving, or other thermal treatment processes up to 1300 °C. Also, the furnace is fit with vents for removal of escaping gases or smoke during the thermal treatment process.

#### **Base model**

- Door opening to left/right side (depending on customer needs)
- Control panel on the left/right side (depending on customer needs)
- Outside casing metal sheet, powder painted grey (RAL 7035), frame - black
- · Heating elements wrapped on ceramic tubes
- Thermal insulation made from refractory bricks and fibre
- Ceramic bottom plates
- Equipped with non-programmable PID controller Omron E5CC
- OTP (over temperature protection)
- SSR relay
- Door safety switch
- Low power consumption
- Short heating time
- · High level of accuracy
- 1 year warranty

#### **Optional equipment**

- Manual door lifting
- Automated door lifting
- Custom control box parts
- Controlled cooling
- Reinforced bottom
- Heat resistant metal hearth plate up to 1150 °C
- Vent on the top
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- tainless steel furnace exterior
- Additional 1 year warranty









Model			Inne	er dimensions, r	mm		Exter	ior dimensions,	mm*
SNOL 64/1200     64     400     400     400     15     1300     1000     1300       SNOL 125/1200     125     500     500     500     25     1600     1200     1500       SNOL 2001/200     200     500     800     500     30     1600     1600     1500       SNOL 3601/200     250     500     1000     600     40     1700     1900     1600       SNOL 3601/200     360     600     1000     600     45     1990     1900     1600       SNOL 3001/200     500     700     1000     700     45     1990     1900     1600       SNOL 3001/200     500     700     1000     700     45     1990     1900     1800       SNOL 3001/200     900     1200     900     70     2100     2900     200       SNOL 3001/200     1700     1000     70     2200     1900     2200       SNOL 34001/200     1500     1500     1500     85 </th <th>Model</th> <th>Vol., I</th> <th></th> <th></th> <th></th> <th>Power, kW</th> <th></th> <th></th> <th></th>	Model	Vol., I				Power, kW			
SNOL 125/1200     125     500     500     500     25     1600     1200     1500       SNOL 260/1200     200     500     800     500     30     1600     1600     1500       SNOL 250/1200     250     500     1000     500     30     1600     1900     1500       SNOL 360/1200     300     600     40     1700     1900     1600       SNOL 400/1200     400     700     1000     600     45     1900     1900     1800       SNOL 500/1200     500     70     1000     700     45     1900     1900     1800       SNOL 500/1200     800     900     1000     900     50     2100     1900     200       SNOL 1500/1200     1000     1000     1000     70     2200     1900     2200       SNOL 1500/1200     1500     1000     1500     1500     85     2200     2600     2700       SNOL 2500/1200     3400     1200     2500     <	Up to 1200 °C								
SNOL 200/1200     200     500     800     500     30     1600     1600     1500       SNOL 360/1200     250     500     1000     500     30     1600     1900     1500       SNOL 400/1200     360     600     1000     600     45     1900     1900     1600       SNOL 500/1200     500     700     1000     700     45     1900     1900     1800       SNOL 800/1200     800     900     1000     900     50     2100     1900     2000       SNOL 1700/1200     970     900     1200     900     70     2100     2200     2000       SNOL 1300/1200     1000     1000     1000     1000     70     2200 <td>SNOL 64/1200</td> <td>64</td> <td>400</td> <td>400</td> <td>400</td> <td>15</td> <td>1300</td> <td>1000</td> <td>1300</td>	SNOL 64/1200	64	400	400	400	15	1300	1000	1300
SNOL 250/1200     250     500     1000     500     30     1600     1900     1600       SNOL 360/1200     360     600     1000     600     40     1700     1900     1600       SNOL 400/1200     400     700     1000     600     45     1900     1900     1800       SNOL 500/1200     500     700     1000     700     45     1900     1900     2000       SNOL 500/1200     800     900     1000     700     2100     1900     2000       SNOL 970/1200     970     900     1200     1000     70     2200     1900     2200       SNOL 1200/1200     1000     1000     1500     1000     70     2200     2600     2200       SNOL 1200/1200     1500     1000     1500     1500     1500     95     2200     2600     2700       SNOL 2500/1200     2500     1000     1500     1700     120     2200     2600     2900       SNOL 2500/1200 <td>SNOL 125/1200</td> <td>125</td> <td>500</td> <td>500</td> <td>500</td> <td>25</td> <td>1600</td> <td>1200</td> <td>1500</td>	SNOL 125/1200	125	500	500	500	25	1600	1200	1500
SNOL 360/1200     360     600     1000     600     40     1700     1900     1600       SNOL 400/1200     400     700     1000     600     45     1900     1900     1600       SNOL 500/1200     500     700     1000     700     45     1900     1900     1800       SNOL 500/1200     800     900     1000     900     50     2100     1900     2000       SNOL 1000/1200     1000     1000     1000     1000     70     2200     1900     2200       SNOL 1200/1200     1200     1000     1200     1000     70     2200     2200     2200       SNOL 2500/1200     1500     1000     1500     1500     85     2200     2600     2700       SNOL 2500/1200     2500     1000     1500     1500     1500     95     2200     2600     2700       SNOL 2500/1200     3400     1200     2000     1700     120     2200     320     200     200	SNOL 200/1200	200	500	800	500	30	1600	1600	1500
\$NOL 400/1200	SNOL 250/1200	250	500	1000	500	30	1600	1900	1500
\$NOL 500/1200	SNOL 360/1200	360	600	1000	600	40	1700	1900	1600
SNOL 800/1200     800     900     1000     900     70     2100     2200     2000       SNOL 970/1200     970     900     1200     900     70     2100     2200     2000       SNOL 1000/1200     1000     1000     1000     1000     70     2200     2200     2200       SNOL 1500/1200     1500     1000     1500     1000     70     2200     2200     2200       SNOL 2500/1200     1500     1500     1500     95     2200     2600     2700       SNOL 2500/1200     2500     1000     1500     1700     120     2200     2600     2900       SNOL 3400/1200     3400     1000     2000     1700     140     2200     3200     2900       SNOL 3400/1200     4000     1200     2000     1700     160     2500     3200     3200     2900       SNOL 3400/1200     4000     1200     2000     1700     160     250     320     320     3200     32	SNOL 400/1200	400	700	1000	600	45	1900	1900	1600
SNOL 970/1200     970     900     1200     900     70     2100     2200     200       SNOL 1000/1200     1000     1000     1000     1000     70     2200     1900     2200       SNOL 1200/1200     1200     1000     1500     1000     85     2200     2600     2200       SNOL 2200/1200     2200     1000     1500     1000     85     2200     2600     2700       SNOL 2200/1200     2200     1000     1500     1500     1700     120     2200     2600     2700       SNOL 3400/1200     3400     1000     2000     1700     140     2200     3200     2900       SNOL 4000/1200     4000     1200     2000     1700     160     2500     3200     2900       SNOL 4400/1200     4800     1200     2000     1700     160     2500     320     2900       SNOL 4400/1200     4800     1200     200     30     160     2500     30     30     160	SNOL 500/1200	500	700	1000	700	45	1900	1900	1800
SNOL 1000/1200     1000     1000     1000     1000     70     2200     1900     2200       SNOL 1200/1200     1200     1000     1200     1000     70     2200     2200     2200       SNOL 1500/1200     1500     1500     1500     95     2200     2600     2700       SNOL 2200/1200     2500     1000     1500     1700     120     2200     2600     2700       SNOL 3400/1200     3400     1000     2000     1700     120     2200     3200     2900       SNOL 4800/1200     4800     1200     2000     1700     160     2500     3200     2900       SNOL 4800/1200     4800     1200     2000     2000     160     2500     320     2900       SNOL 4800/1200     4800     1200     2000     200     160     2500     320     3200     3200     3200     3200     3200     3200     3200     3200     3200     3200     3200     3200     3200 <t< td=""><td>SNOL 800/1200</td><td>800</td><td>900</td><td>1000</td><td>900</td><td>50</td><td>2100</td><td>1900</td><td>2000</td></t<>	SNOL 800/1200	800	900	1000	900	50	2100	1900	2000
SNOL 1200/1200     1200     1000     1200     1000     70     2200     2200     2200       SNOL 1500/1200     1500     1000     1500     1000     85     2200     2600     2200       SNOL 2200/1200     2200     1000     1500     1500     95     2200     2600     2700       SNOL 3400/1200     3400     1000     2000     1700     140     2200     2600     2900       SNOL 4800/1200     4000     1200     2000     1700     160     2500     3200     2900       SNOL 4800/1200     4800     1200     2000     2000     160     2500     3200     3200     2900       SNOL 4800/1200     4800     1200     2000     2000     160     2500     3200     3	SNOL 970/1200	970	900	1200	900	70	2100	2200	2000
SNOL 1500/1200     1500     1000     1500     1000     85     2200     2600     2200       SNOL 2200/1200     2200     1000     1500     1500     95     2200     2600     2700       SNOL 2500/1200     2500     1000     1500     1700     120     2200     2600     2900       SNOL 3400/1200     3400     1200     2000     1700     140     2200     3200     2900       SNOL 4800/1200     4800     1200     2000     2000     160     2500     3200     3200     2900       SNOL 4800/1200     4800     1200     2000     2000     160     2500     3200     3200     3300       SNOL 4800/1200     4800     1200     2000     2000     160     2500     3200	SNOL 1000/1200	1000	1000	1000	1000	70	2200	1900	2200
\$NOL 2200/1300	SNOL 1200/1200	1200	1000	1200	1000	70	2200	2200	2200
SNOL 2500/1200     2500     1000     1500     1700     120     2200     2600     2900       SNOL 3400/1200     3400     1000     2000     1700     140     2200     3200     2900       SNOL 4800/1200     4000     1200     2000     1700     160     2500     3200     3200     2900       SNOL 4800/1200     4800     1200     2000     2000     160     2500     3200     3200     3300       Up to 1300 °C     SNOL 54/1300     64     400     400     400     25     1300     1000     1500       SNOL 250/1300     125     500     500     500     30     1600     1200     1500       SNOL 250/1300     250     500     800     500     35     1600     1900     1500       SNOL 400/1300     360     600     1000     600     45     1700     1900     1600       SNOL 500/1300     500     700     1000     600     50     1900     1900 <td>SNOL 1500/1200</td> <td>1500</td> <td>1000</td> <td>1500</td> <td>1000</td> <td>85</td> <td>2200</td> <td>2600</td> <td>2200</td>	SNOL 1500/1200	1500	1000	1500	1000	85	2200	2600	2200
SNOL 3400/1200	SNOL 2200/1200	2200	1000	1500	1500	95	2200	2600	2700
SNOL 4900/1200     4000     1200     2000     1700     160     2500     3200     2900       SNOL 4900/1200     4800     1200     2000     2000     160     2500     3200     3300       Up to 1300 °C     Up to 1300 °C     SNOL 64/1300     64     400     400     400     25     1300     1000     1300       SNOL 125/1300     125     500     500     500     30     1600     1200     1500       SNOL 250/1300     200     500     800     500     35     1600     1600     1500       SNOL 360/1300     360     600     1000     500     35     1600     1900     1600       SNOL 400/1300     360     600     1000     600     45     1700     1900     1600       SNOL 500/1300     500     700     1000     600     50     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     200	SNOL 2500/1200	2500	1000	1500	1700	120	2200	2600	2900
NOL 4800/1200   4800   1200   2000   2000   160   2500   3200   3200   3300   3300   3300   3200   3300   3200	SNOL 3400/1200	3400	1000	2000	1700	140	2200	3200	2900
Up to 1300 °C       SNOL 64/1300     64     400     400     400     25     1300     1000     1300       SNOL 125/1300     125     500     500     500     30     1600     1200     1500       SNOL 200/1300     200     500     800     500     35     1600     1600     1500       SNOL 250/1300     250     500     1000     500     35     1600     1900     1500       SNOL 360/1300     360     600     1000     600     45     1700     1900     1600       SNOL 400/1300     400     700     1000     600     50     1900     1900     1600       SNOL 800/1300     800     900     1000     700     60     1900     1900     1800       SNOL 970/1300     970     900     1200     900     80     2100     2200     200       SNOL 1250/1300     1250     1000     1000     80     2200     2200     200     200 </td <td>SNOL 4000/1200</td> <td>4000</td> <td>1200</td> <td>2000</td> <td>1700</td> <td>160</td> <td>2500</td> <td>3200</td> <td>2900</td>	SNOL 4000/1200	4000	1200	2000	1700	160	2500	3200	2900
SNOL 64/1300     64     400     400     400     25     1300     1000     1300       SNOL 125/1300     125     500     500     500     30     1600     1200     1500       SNOL 200/1300     200     500     800     500     35     1600     1600     1500       SNOL 360/1300     360     600     1000     600     45     1700     1900     1600       SNOL 400/1300     400     700     1000     600     50     1900     1900     1600       SNOL 500/1300     500     700     1000     600     50     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     200       SNOL 1500/1300     1500     1000     1000     90     2200     2200     200       SNOL 2200/1300     1500     1500<	SNOL 4800/1200	4800	1200	2000	2000	160	2500	3200	3300
SNOL 125/1300     125     500     500     500     30     1600     1200     1500       SNOL 200/1300     200     500     800     500     35     1600     1600     1500       SNOL 250/1300     250     500     1000     500     35     1600     1900     1500       SNOL 360/1300     360     600     1000     600     45     1700     1900     1600       SNOL 400/1300     400     700     1000     600     50     1900     1900     1800       SNOL 500/1300     500     700     1000     700     60     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1250/1300     1250     1000     1000     80     2200     2200     2200       SNOL 2200/1300     1500	Up to 1300 °C								
SNOL 200/1300     200     500     800     500     35     1600     1600     1500       SNOL 250/1300     250     500     1000     500     35     1600     1900     1500       SNOL 360/1300     360     600     1000     600     45     1700     1900     1600       SNOL 400/1300     400     700     1000     600     50     1900     1900     1600       SNOL 500/1300     500     700     1000     700     60     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     80     2200     1900     2200       SNOL 1500/1300     1500     1000     1500     1000     90     2200     2600     2700       SNOL 2200/1300     2500	SNOL 64/1300	64	400	400	400	25	1300	1000	1300
SNOL 250/1300     250     500     1000     500     35     1600     1900     1500       SNOL 360/1300     360     600     1000     600     45     1700     1900     1600       SNOL 400/1300     400     700     1000     600     50     1900     1900     1600       SNOL 500/1300     500     700     1000     700     60     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     80     2200     1900     2200       SNOL 1500/1300     1250     1000     1000     90     2200     2200     2200       SNOL 2200/1300     1500     1500     1500     100     150     120     2200     2600     2700       SNOL 3400/1300     3400	SNOL 125/1300	125	500	500	500	30	1600	1200	1500
SNOL 360/1300     360     600     1000     600     45     1700     1900     1600       SNOL 400/1300     400     700     1000     600     50     1900     1900     1600       SNOL 500/1300     500     700     1000     700     60     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     80     2200     1900     2200       SNOL 1500/1300     1250     1000     1000     90     2200     2200     2200       SNOL 2200/1300     1500     1500     1500     120     2200     2600     2700       SNOL 3400/1300     3400     1000     1500     1700     150     2200     2600     2900       SNOL 4000/1300     3400     1000     2000 </td <td>SNOL 200/1300</td> <td>200</td> <td>500</td> <td>800</td> <td>500</td> <td>35</td> <td>1600</td> <td>1600</td> <td>1500</td>	SNOL 200/1300	200	500	800	500	35	1600	1600	1500
SNOL 400/1300     400     700     1000     600     50     1900     1900     1600       SNOL 500/1300     500     700     1000     700     60     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     80     2200     1900     2200       SNOL 1250/1300     1250     1000     1000     90     2200     2200     2200       SNOL 2200/1300     1500     1500     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1	SNOL 250/1300	250	500	1000	500	35	1600	1900	1500
SNOL 500/1300     500     700     1000     700     60     1900     1900     1800       SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     1000     80     2200     1900     2200       SNOL 1250/1300     1250     1000     1250     1000     90     2200     2600     2200       SNOL 2200/1300     1500     1500     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 360/1300	360	600	1000	600	45	1700	1900	1600
SNOL 800/1300     800     900     1000     900     60     2100     1900     2000       SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     1000     80     2200     1900     2200       SNOL 1250/1300     1250     1000     1250     1000     90     2200     2200     2200       SNOL 2200/1300     1500     1500     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 400/1300	400	700	1000	600	50	1900	1900	1600
SNOL 970/1300     970     900     1200     900     80     2100     2200     2000       SNOL 1000/1300     1000     1000     1000     1000     80     2200     1900     2200       SNOL 1250/1300     1250     1000     1250     1000     90     2200     2200     2200       SNOL 1500/1300     1500     1500     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 500/1300	500	700	1000	700	60	1900	1900	1800
SNOL 1000/1300     1000     1000     1000     1000     80     2200     1900     2200       SNOL 1250/1300     1250     1000     1250     1000     90     2200     2200     2200       SNOL 1500/1300     1500     1500     1000     90     2200     2600     2200       SNOL 2200/1300     2200     1000     1500     1500     120     2200     2600     2700       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 800/1300	800	900	1000	900	60	2100	1900	2000
SNOL 1250/1300     1250     1000     1250     1000     90     2200     2200     2200       SNOL 1500/1300     1500     1000     1500     1000     90     2200     2600     2200       SNOL 2200/1300     2200     1000     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 970/1300	970	900	1200	900	80	2100	2200	2000
SNOL 1500/1300     1500     1000     1500     1000     90     2200     2600     2200       SNOL 2200/1300     2200     1000     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 1000/1300	1000	1000	1000	1000	80	2200	1900	2200
SNOL 2200/1300     2200     1000     1500     1500     120     2200     2600     2700       SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 1250/1300	1250	1000	1250	1000	90	2200	2200	2200
SNOL 2500/1300     2500     1000     1500     1700     150     2200     2600     2900       SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 1500/1300	1500	1000	1500	1000	90	2200	2600	2200
SNOL 3400/1300     3400     1000     2000     1700     180     2200     3200     2900       SNOL 4000/1300     4000     1200     2000     1700     200     2500     3200     2900	SNOL 2200/1300	2200	1000	1500	1500	120	2200	2600	2700
SNOL 4000/1300 4000 1200 2000 1700 200 2500 3200 2900	SNOL 2500/1300	2500	1000	1500	1700	150	2200	2600	2900
	SNOL 3400/1300	3400	1000	2000	1700	180	2200	3200	2900
<b>SNOL 4800/1300</b> 4800 1200 2000 2000 200 2500 3200 3300	SNOL 4000/1300	4000	1200	2000	1700	200	2500	3200	2900
	SNOL 4800/1300	4800	1200	2000	2000	200	2500	3200	3300

\* Overall dimensions can be adjusted Note: Chamber dimensions can be adjusted subject to customer requirements when ordering



# 6. High-temperature electric furnaces

## 6.2 Chamber furnaces with a removable hearth up to 1300°C

Industrial electric furnaces with a removable hearth are designed for more comfortable loading and built from high quality materials to withstand heavy loads. The ceramic or heat resistant metal hearth plate is manually removable, but can be fitted with an electromechanical reducer for effortless removal. Fit with a selection of precise digital controllers and certified heating elements to ensure excellent temperature stability. This range of furnaces can be applied for hardening, normalising, stress relieving, and other thermal treatment processes up to 1300 °C.

#### **Base model**

- Manually removable hearth on rails
- · Door opening to left/right side (depending on customer needs)
- · Control panel on the left/right side (depending on customer needs)
- Outside casing metal sheet, powder painted grey(RAL 7035), frame - black
- Heating elements wrapped on ceramic tubes
- Thermal insulation made from refractory bricks and fibre
- Ceramic bottom plates
- Equipped with non-programmable PID controller Omron E5CC
- OTP (over temperature protection)
- SSR relay
- Door safety switch
- Low power consumption
- Short heating time
- High level of accuracy
- 1 year warranty

#### **Optional equipment**

- Manually liftable door
- · Electromechanically lifting door
- · Electromechanically removable hearth on rails
- Custom control box parts
- Controlled cooling
- Heat resistant metal hearth plate up to 1150 °C
- Vent on top
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel furnace exterior
- Additional 1 year warranty









\* Overall dimensions can be adjusted Note: Chamber dimensions can be adjusted subject to customer requirements when ordering



## 7.1 Customized projects

The company designs and manufactures specialised, technologically advanced thermal processing equipment of various complexity based on customers' requirements. A highly qualified professional engineer team with many years of experience in thermal processing equipment design and manufacturing is capable of producing tailor-made technical solutions for project implementation and ensures high quality and reliability of the unit.

# 7.1.1 Hardening line

We can offer a separate or combined solution for hardening. Our quenching tank is designed to harden metal components. It can be used with various cooling agents, such as oil, water or polymer substances to cool down metal components and also it can be fitted with a turning platform for raw material transfer from a furnace to the quenching tank. The whole solution can be combined together with multiple furnaces and quenching tanks for the whole process.



	Model	Vol., I	In	ner dimensions, mn	ı	Weight,	Exterior dimensions, mm*			
Model	VOI., I	Width	Height	Depth	kg	Width	Lenght	Height		
SNO	OL 1000/-	1000	1345	840	106	320	1630	1460	1070	

<sup>\*</sup> Overall dimensions can be adjusted

Note: Tank dimensions can be adjusted subject to customer requirements when ordering

# 7.1.2 Conveyor-type oven SNOL 500/100

#### **Purpose**

For metai product curing after washing process Operating temperature – up to 100 °C Productivity - 3000 kg/h

#### **Product features**

- · Forced air circulation
- Separate zones for adjustable temperature configurations, heating and cooling
- · Belt-conveyor with adjustable uniform speed
- Stainless steel rollers
- Automatic control system





### 7.1.3 Shaft electric furnace SNOL 600/900

Shaft electric furnaces are built from high-quality heat insulating materials and covered with a steel exterior. They are designed to be loaded through the top and closed with a lid. This furnace is most suitable for metal component carbonisation (cementation) and hardening processes in oxidation and reduction environment.

#### **Purpose**

For metal component carbonization (cementation) and hardening processes in oxidation and reduction environment

**Operating temperature** – up to 900 °C **Capacity** – 600 l

#### **Product features**

- Forced air circulation
- · Adjustable carbonisation agent concentration in the chamber
- · Automatic furnace lid opening
- · Double sealing
- Retort and diffuser are made of heat resistant stainless steel
- · Additional heating element control



# 7.1.4 Oven for heat treating composite materials SNOL 15840/150

#### **Purpose**

For hardening sailing boats' masts

Operating temperature – up to 150 °C Capacity – 15840 l

#### **Product features**

- Forced air circulation
- · Horizontai airflow
- Controlled cooling process
- Pulling-out load transportation device
- · Vacuum pump connector





## 7.1.5 Heating under an inter gas atmosphere

Our engineers can offer a solution for heating materials which oxidize or are explosive or flammable during heat treatment, by introducing inert gasses such as Nitrogen or Argon into the chamber or a more air tight option – a gas box. The solution can work automatically, semi-automatically or manually. A gas box can also be fit with an additional thermocouple.



### 7.1.6 Gas heated furnaces

Our engineers can also design gas heated furnaces for quicker temperature ramps and non-flammable thermal processes. Insulated using high quality refractory bricks and fibre for the most efficient processing. Equipped with the most necessary components for liquid gas injection and exhaust fume extraction.







# 7.1.7 Many various options to choose from

Our team can fit the furnace with various options. Even if you do not find a desired option in our catalogue, we can look for solution how to include it in your furnace.

#### Construction

- Stainless steel exterior
- Electric door lock system
- Reinforced bottom
- · Removable hearth
- · Electromechanically removable hearth rails
- Legs (height can be customized)
- Casters (with/without brakes)
- Heat resistant metal hearth plate up to 1150°C
- Ceramic hearth plate
- Observation window up to 600°C
- Hole for thermocouple
- Light bulb inside chamber
- · Air in/outlet system
- Fan speed controller
- Exhaust system
- Automatically opening air outlet valves
- Hepa filter for chimney
- Fast cooling system

#### **Control**

- Separate heating zone control
- · Data communication/USB
- PC connection and software SNOL v2.0
- Signal lights

#### **Additional accessories**

- Power cable (20 kw and up)
- Hood (for collecting steam and fumes)
- Fork lifter

#### **Services**

- Calibration of temperature measurement system in 1 point
- Testing protocol
- Packing included
- Transportation
- Installation service



## 8. Control devices

# **8.1 Temperature controllers**

SNOL products are equipped with high-precision digital microprocessor Omron or Eurotherm temperature controllers fitted with self-tuning and manual PID settings. Temperature measurement is supported by thermocouple. The customer can select a basic or programmable temperature controller, which offers up to 32 programming segments (rate of temperature rise or decrease control, maintenance of preset temperature, automatic shutdown). A wide range of devices allows to select the most appropriate controller for your process.

**Omron E5CC** 



**Omron E5CC-T** 



**Eurotherm 3216** 



**Eurotherm 3208** 



Eurotherm 3504



**Eurotherm Nanodac** 



					Control	method	Control signal			
		Number of	Number of steps				Туре		Nombras	
Model	Programmable	programs	in a programs	Computer port	PID	ON/OFF	Relay	Voltage	Number of auxiliary outputs	
Omron E55CC	0	1	2	•	•	•	•	•	3	
Omron E55CC-T	•	8	32	•	•	•	•	•	3	
Omron E55AC	0	1	2	•	•	•	•	•	3	
Omron E55AC-T	•	8	32	•	•	•	•	•	3	
Eurotherm 3216	0	1	8	•	•	•	•	•	2	
Eurotherm 3208	•	5	8	•	•	•	•	•	3	
Eurotherm 3508	•	50	50	•	•	•	•	•	2	
Eurotherm 3504	•	50	50	•	•	•	•	•	5	
<b>Eurotherm Nanodac</b>	•	100	25	•	•	•	•	•	5	
Eurotherm E+PLC100*	•	-	-	•	•	•	•	•	4	
* DID controller recorder and	1016: 1: 16									

 $<sup>^{\</sup>ast}$  PID controller, recorder and PLC in one - designed for elaborate control algorythms.



### 8. Control devices

### 8.2 Eurotherm data recorders

Eurotherm data recorders are ideal for basic visualisation and recording requirements. They have a full colour display and utilise touch screen technology for clear and intuitive configuration and operation. Also, support of a USB port comes as standard to enable the use of a mouse, keyboard or a bar code scanner. Data can be moved manually or automatically archived to multiple locations: removable media, network servers or the Eurotherm Review database on a PC. These recorders can easily be integrated into a larger system and data files can be transferred across the network.

#### **Main features:**

- · Advanced data security and archiving
- 5.5"; 1/4 VGA, Color touch screen display
- Designed for network and stand alone use
- FTP client and server
- · Live, remote data viewing and configuration
- 125ms parallel sampling.



# 8.3 Computer software SNOL V2.0

SNOL V2.0 is a computer software for data recording, viewing and configuring the temperature controller running your thermal treatment process. The software is designed for Windows operating system. Computer software allows to simply run, review and display charts on thermal process temperatures and other settings.

#### **Main features:**

- Up to 128 controllers connection
- Supports up to 4 computer ports
- · Control of device parameters and programs via computer
- Live, remote data viewing and configuration
- · Graphical representation of the data
- Data export to Microsoft Excel format
- · Ability to observe the process in a distance by internet
- Connections RS-232 and RS-485.
- Multiple language entry (ability to install necessary language).



### 8.4 Timer

The main function of the timer is to remotely start the furnace. The timer works in real-time. During the operation, the output contact of the timer is operated according to the settings of the dial-switches. However, it is possible to manually override this operation for each channel individually at all times.

#### **Main features:**

- Start and stop 24 hour / 7 day oven operation
- Stores up to 20 programs with up to 1 O ON and 1 O OFF events/day
- Manual 3-way override
- 16 Amp, 277 VAC resistive SPDT output contacts
- Reserve carryover: 3 years (Non-replaceable battery)
- · Manual Daylight Time Changeover
- · 3 languages option



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