

SNOL

Customized for Your hot innovations

Industri Ovne



Kemi og Maskinløsninger

Thermal processing equipment for industries



SNOL

Customized for your hot innovations



Du har emnerne - PERS GROUP har kemi og maskinløsningerne

1. Low-temperature electric ovens

1.1 Chamber ovens up to 750 °C	4
1.2 Ovens with a removable hearth	6
1.3 Walk-in type chamber ovens	8

2. High-temperature electric furnaces

2.1 Chamber furnaces up to 1300 °C	10
2.2 Chamber furnaces with removable hearth up to 1300 °C	12

3. Other thermal processing equipment

3.1 Customized projects	14
3.1.1 Hardening tanks	14
3.1.2 Conveyor-type furnace SNOL 500/1000	14
3.1.3 Shaft electric furnace SNOL 600/900	15
3.1.4 Shaft electric furnace SNOL 40/1000	15
3.1.5 Heating inside of an inert gas atmosphere	16
3.1.6 Gas heated furnaces	16
3.1.7 Options list	17

4. Control devices

4.1 Controllers	18
4.2 SNOL controller	18
4.3 Data recorder Eurotherm 6100E	19
4.4 Computer software SNOL V2.0	19
4.5 Timer Galaxy	19

1. Low-temperature electric ovens

1.1 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 ensure excellent temperature 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

- Equipped with non-programmable controller Omron E5CC
- Control panel on the left/right side (depending on customer needs)
- Adjustable air supply/extraction
- Ventilation motor on the top, vertical air flow
- Heating from 2 sides with tubular (U-shaped) heating elements
- Insulation made from rock wool
- Outside casing – metal sheet, powder painted grey (RAL 7035), frame – black
- Door opening to left/right side (depending on customer needs)
- Fitted with standard shelves, 2 pcs.
- Low power consumption
- Short heating/cooling time
- High level of accuracy
- Door safety switch
- OTP (over temperature protection), Omron K8 relay
- SSR relay
- 1 year warranty

Optional equipment

- Additional shelves
- Reinforced shelves
- Reinforced bottom
- Ventilation motor on the rear, horizontal air flow
- Automatic air vent control
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel furnace exterior
- Furnace mounting platform
- Additional 1 year warranty



Model	Vol., l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm *		
		Width	Height	Depth		Width	Height	Depth
Up to 250 °C								
SNOL 125/250	125	500	500	500	4	1230	1430	1060
SNOL 250/250	250	500	1000	500	4	1230	1930	1060
SNOL 420/250	420	700	1000	600	6	1430	1930	1160
SNOL 500/250	500	700	1000	700	6	1430	1930	1260
SNOL 600/250	600	800	1000	800	8	1530	1930	1360
SNOL 700/250	700	800	1000	900	8	1710	1930	1610
SNOL 800/250	800	900	1000	900	12	1810	1930	1610
SNOL 970/250	970	900	1200	900	12	1810	2310	1610
SNOL 1000/250	1000	1000	1000	1000	16	1910	2110	1710
SNOL 1200/250	1200	1000	1200	1000	16	1910	2310	1710
SNOL 1500/250	1500	1000	1500	1000	18	1910	2610	1710
SNOL 2200/250	2200	1000	1500	1500	18	1910	2610	2210
SNOL 2500/250	2500	1000	1700	1500	24	1910	2810	2210
SNOL 3400/250	3400	1000	1700	2000	24	1910	2810	2710
SNOL 4000/250	4000	1200	1700	2000	30	2110	3010	2710
SNOL 4800/250	4800	1200	2000	2000	36	2110	3310	2710



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



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Model	Vol. l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm *		
		Width	Height	Depth		Width	Height	Depth
Up to 350 °C								
SNOL 125/350	125	500	500	500	6	1230	1430	1060
SNOL 250/350	250	500	1000	500	6	1230	1930	1060
SNOL 420/350	420	700	1000	600	8	1430	1930	1160
SNOL 500/350	500	700	1000	700	8	1430	1930	1260
SNOL 600/350	600	800	1000	800	10	1530	1930	1360
SNOL 700/350	700	800	1000	900	10	1710	1930	1610
SNOL 800/350	800	900	1000	900	14	1810	1930	1610
SNOL 970/350	970	900	1200	900	18	1810	2310	1610
SNOL 1000/350	1000	1000	1000	1000	18	1910	2110	1710
SNOL 1200/350	1200	1000	1200	1000	22	1910	2310	1710
SNOL 1500/350	1500	1000	1500	1000	22	1910	2610	1710
SNOL 2200/350	2200	1000	1500	1500	26	1910	2610	2210
SNOL 2500/350	2500	1000	1700	1500	26	1910	2810	2210
SNOL 3400/350	3400	1000	1700	2000	30	1910	2810	2710
SNOL 4000/350	4000	1200	1700	2000	30	2110	3010	2710
SNOL 4800/350	4800	1200	2000	2000	30	2110	3310	2710
Up to 450 °C								
SNOL 125/450	125	500	500	500	8	1230	1430	1060
SNOL 250/450	250	500	1000	500	10	1230	1930	1060
SNOL 420/450	420	700	1000	600	12	1430	1930	1160
SNOL 500/450	500	700	1000	700	12	1430	1930	1260
SNOL 600/450	600	800	1000	800	16	1530	1930	1360
SNOL 700/450	700	800	1000	900	18	1710	1930	1610
SNOL 800/450	800	900	1000	900	18	1810	1930	1610
SNOL 970/450	970	900	1200	900	21	1810	2310	1610
SNOL 1000/450	1000	1000	1000	1000	21	1910	2110	1710
SNOL 1200/450	1200	1000	1200	1000	24	1910	2310	1710
SNOL 1500/450	1500	1000	1500	1000	24	1910	2610	1710
SNOL 2200/450	2200	1000	1500	1500	35	1910	2610	2210
SNOL 2500/450	2500	1000	1700	1500	35	1910	2810	2210
SNOL 3400/450	3400	1000	1700	2000	45	1910	2810	2710
SNOL 4000/450	4000	1200	1700	2000	55	2110	3010	2710
SNOL 4800/450	4800	1200	2000	2000	55	2110	3310	2710
Up to 650 °C								
SNOL 125/650	125	500	500	500	8	1530	1730	1360
SNOL 250/650	250	500	1000	500	12	1530	2230	1360
SNOL 420/650	420	700	1000	600	16	1730	2230	1460
SNOL 500/650	500	700	1000	700	16	1730	2230	1560
SNOL 600/650	600	800	1000	800	18	1830	2230	1660
SNOL 700/650	700	800	1000	900	18	1830	2230	1760
SNOL 800/650	800	900	1000	900	21	1930	2230	1760
SNOL 970/650	970	900	1200	900	25	1930	2430	1760
SNOL 1000/650	1000	1000	1000	1000	25	2030	2230	1860
SNOL 1200/650	1200	1000	1200	1000	30	2030	2430	1860
SNOL 1500/650	1500	1000	1500	1000	32	2030	2730	1860
SNOL 2200/650	2200	1000	1500	1500	45	2030	2730	2360
SNOL 2500/650	2500	1000	1700	1500	45	2030	2930	2360
SNOL 3500/650	3500	1000	1700	2000	55	2030	2930	2860
SNOL 4000/650	4000	1200	1700	2000	65	2410	3310	3010
SNOL 4800/650	4800	1200	2000	2000	75	2410	3610	3010
Up to 750 °C								
SNOL 125/750	125	500	500	500	16	1530	1730	1360
SNOL 250/750	250	500	1000	500	18	1530	2230	1360
SNOL 400/750	400	700	1000	600	24	1730	2230	1460
SNOL 500/750	500	700	1000	700	24	1730	2230	1560
SNOL 600/750	600	800	1000	800	27	1830	2230	1660
SNOL 700/750	700	800	1000	900	27	1830	2230	1760
SNOL 800/750	800	900	1000	900	32	1930	2230	1760
SNOL 970/750	970	900	1200	900	32	1930	2430	1760
SNOL 1000/750	1000	1000	1000	1000	32	2030	2230	1860
SNOL 1200/750	1200	1000	1200	1000	45	2030	2430	1860
SNOL 1500/750	1500	1000	1500	1000	48	2030	2730	1860
SNOL 2200/750	2200	1000	1500	1500	65	2030	2730	2360
SNOL 2500/750	2500	1000	1700	1500	65	2030	2930	2360
SNOL 3400/750	3400	1000	1700	2000	80	2030	2930	2860
SNOL 4000/750	4000	1200	1700	2000	95	2410	3310	3010
SNOL 4800/750	4800	1200	2000	2000	110	2410	3610	3010

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

1. Low-temperature electric ovens

1.2 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 rails
- Induced horizontal or vertical air circulation
- Adjustable air supply / extraction
- The chamber made of mild or stainless steel for ovens up to 350 °C
- Chamber made of stainless steel for ovens above 350 °C
- Tightly sealed doors are opened to the right
- Protection against overheating
- Microprocessor heating controller (see page 14)
- High-quality and environmentally friendly thermal insulation material
- Low power consumption
- Short heating / cooling time
- High level of accuracy
- Exterior painted with powder paint (RAL 7035), black case
- 1 year guarantee

Optional equipment

- Electromechanically removable hearth rails
- Door opens to the left
- Rack with shelves
- Automatic air vent control
- Digital timer
- Data recorder
- Connection to computer via RS-232/RS-485/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel oven exterior
- Additional 1 year guarantee



Model	Vol., l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm *		
		Width	Height	Depth		Width	Height	Depth
Up to 250 °C								
SNOL 500/250 BH	500	700	1000	700	8	1730	2230	1460
SNOL 800/250 BH	800	900	1000	900	12	1930	2230	1660
SNOL 970/250 BH	970	900	1200	900	12	1930	2430	1660
SNOL 1000/250 BH	1000	900	1200	1000	16	1930	2430	1760
SNOL 1200/250 BH	1200	1000	1200	1000	18	2030	2430	1760
SNOL 2200/250 BH	2200	1000	1500	1500	20	2030	2730	2260
SNOL 3000/250 BH	3000	1000	1500	2000	25	2030	2730	2760
SNOL 4200/250 BH	4200	1000	1700	2500	30	2030	2930	3260
SNOL 5100/250 BH	5100	1200	1700	2500	30	2230	2930	3260
SNOL 9000/250 BH	9000	1500	2000	3000	45	2530	3230	3760

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



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Model	Vol., l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm*		
		Width	Height	Depth		Width	Height	Depth
Up to 350 °C								
SNOL 500/350 BH	500	700	1000	700	8	1730	2230	1460
SNOL 800/350 BH	800	900	1000	900	14	1930	2230	1660
SNOL 970/350 BH	970	900	1200	900	18	1930	2430	1660
SNOL 1000/350 BH	1000	900	1200	1000	18	1930	2430	1760
SNOL 1200/350 BH	1200	1000	1200	1000	22	2030	2430	1760
SNOL 2200/350 BH	2200	1000	1500	1500	28	2030	2730	2260
SNOL 3000/350 BH	3000	1000	1500	2000	32	2030	2730	2760
SNOL 4200/350 BH	4200	1000	1700	2500	38	2030	2930	3260
SNOL 5100/350 BH	5100	1200	1700	2500	45	2230	2930	3260
SNOL 9000/350 BH	9000	1500	2000	3000	55	2530	3230	3760
Up to 450 °C								
SNOL 500/450 BH	500	700	1000	700	8	1730	2230	1460
SNOL 800/450 BH	800	900	1000	900	14	1930	2230	1660
SNOL 970/450 BH	970	900	1200	900	18	1930	2430	1660
SNOL 1000/450 BH	1000	900	1200	1000	18	1930	2430	1760
SNOL 1200/450 BH	1200	1000	1200	1000	22	2030	2430	1760
SNOL 2200/450 BH	2200	1000	1500	1500	28	2030	2730	2260
SNOL 3000/450 BH	3000	1000	1500	2000	32	2030	2730	2760
SNOL 4200/450 BH	4200	1000	1700	2500	38	2030	2930	3260
SNOL 5100/450 BH	5100	1200	1700	2500	45	2230	2930	3260
SNOL 9000/450 BH	9000	1500	2000	3000	55	2530	3230	3760
Up to 650 °C								
SNOL 500/650 BH	500	700	1000	700	18	2030	2530	1760
SNOL 800/650 BH	800	900	1000	900	24	2230	2530	1960
SNOL 970/650 BH	970	900	1200	900	24	2230	2730	1960
SNOL 1000/650 BH	1000	900	1200	1000	28	2230	2730	2060
SNOL 1200/650 BH	1200	1000	1200	1000	28	2330	2730	2060
SNOL 2200/650 BH	2200	1000	1500	1500	48	2330	3030	2560
SNOL 3000/650 BH	3000	1000	1500	2000	55	2330	3030	3060
SNOL 4250/650 BH	4250	1000	1700	2500	65	2330	3230	3560
SNOL 5100/650 BH	5100	1200	1700	2500	78	2530	3230	3560
SNOL 9000/650 BH	9000	1500	2000	3000	90	2830	3530	4060
Up to 750 °C								
SNOL 490/750 BH	490	700	1000	700	27	2030	2530	1760
SNOL 810/750 BH	810	900	1000	900	36	2230	2530	1960
SNOL 972/750 BH	972	900	1200	900	36	2230	2730	1960
SNOL 1080/750 BH	1080	900	1200	1000	42	2230	2730	2060
SNOL 1250/750 BH	1250	1000	1250	1000	42	2330	2780	2060
SNOL 2250/750 BH	2250	1000	1500	1500	72	2330	3030	2560
SNOL 3000/750 BH	3000	1000	1500	2000	80	2330	3030	3060
SNOL 4375/750 BH	4375	1000	1750	2500	95	2330	3280	3560
SNOL 5250/750 BH	5250	1200	1750	2500	117	2530	3280	3560
SNOL 9000/750 BH	9000	1500	2000	3000	135	2830	3530	4060

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

1. Low-temperature electric ovens

1.3 Walk-in type chamber ovens

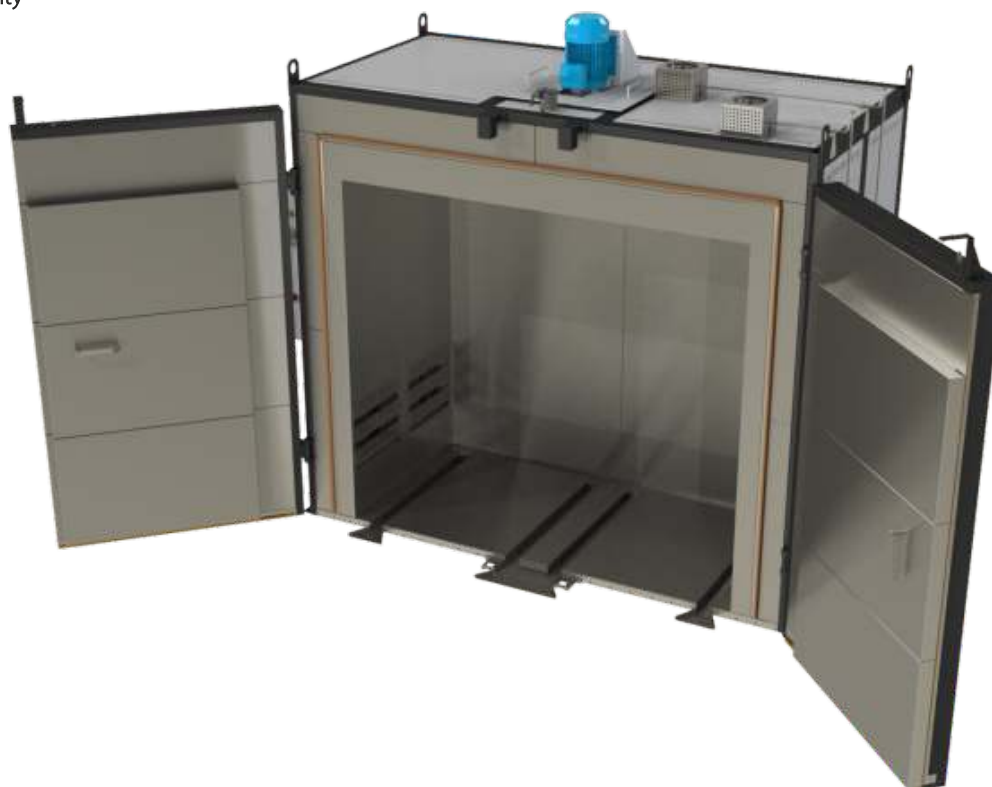
Walk-in type industrial electric ovens without bottom insulation are designed to provide the user with various types of loading possibilities and are built from high quality materials, such as heavy-duty metal parts and thermal insulation materials, which are manufactured in our factory. The oven can 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

- Equipped with non-programmable controller Omron E5CC
- Control panel on the left/right side (depending on customer needs)
- Adjustable air supply/extraction
- Ventilation motor on the top, vertical air flow
- Heating from 2 sides with tubular (U-shaped) heating elements
- Chamber made from mild or stainless steel
- Thermal insulation made from rock wool
- Outside casing – metal sheet, powder painted grey (RAL 7035), frame – black
- Doors opening to the left and right sides
- Low power consumption
- Short heating/cooling time
- High level of accuracy
- Door safety switch
- OTP (over temperature protection), Omron K8 relay
- SSR relay
- 1 year warranty

Optional equipment

- Ventilation motor on the rear, horizontal air flow
- Automatic air vent control
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel furnace exterior
- Additional 1 year warranty





Model	Vol., l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm*		
		Width	Height	Depth		Width	Height	Depth
Up to 250 °C								
SNOL 490/250 Arc	490	700	1000	700	6	1610	1730	1260
SNOL 810/250 Arc	810	900	1000	900	12	1810	1730	1460
SNOL 972/250 Arc	972	900	1200	900	12	1810	1930	1460
SNOL 1000/250 Arc	1000	900	1200	1000	14	1810	1930	1560
SNOL 1200/250 Arc	1200	1000	1200	1000	16	1910	1930	1560
SNOL 2250/250 Arc	2250	1000	1500	1500	18	1910	2230	2060
SNOL 3000/250 Arc	3000	1000	1500	2000	24	1910	2330	2560
SNOL 4375/250 Arc	4375	1000	1700	2500	28	1910	2530	3060
SNOL 5250/250 Arc	5250	1200	1700	2500	32	2110	2530	3060
SNOL 9000/250 Arc	9000	1500	2000	3000	43	2410	2830	3560
Up to 350 °C								
SNOL 490/350 Arc	490	700	1000	700	8	1610	1730	1260
SNOL 810/350 Arc	810	900	1000	900	14	1810	1730	1460
SNOL 970/350 Arc	970	900	1200	900	18	1810	1930	1460
SNOL 1000/350 Arc	1000	900	1200	1000	18	1810	1930	1560
SNOL 1200/350 Arc	1200	1000	1200	1000	22	1910	1930	1560
SNOL 2250/350 Arc	2250	1000	1500	1500	26	1910	2230	2060
SNOL 3000/350 Arc	3000	1000	1500	2000	30	1910	2330	2560
SNOL 4250/350 Arc	4250	1000	1700	2500	36	1910	2530	3060
SNOL 5100/350 Arc	5100	1200	1700	2500	40	2110	2530	3060
SNOL 9000/350 Arc	9000	1500	2000	3000	50	2410	2830	3560

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

2. High-temperature electric furnaces

2.1 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

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

Optional equipment

- Manual door lifting
 - Electromechanical door lifting
 - Turning platform for loading and unloading
 - Reinforced bottom
 - Heat resistant metal hearth plate up to 1150 °C
 - Digital timer
 - Data recorder
 - Data communication/USB
 - Calibration and maintenance of temperature measurement system
 - Stainless steel furnace exterior
- Additional 1 year warranty





Model	Vol., l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm*		
		Width	Height	Depth		Width	Height	Depth
Up to 1200 °C								
SNOL 64/1200	64	400	400	400	20	1900	2200	1600
SNOL 125/1200	125	500	500	500	25	2000	2300	1700
SNOL 200/1200	200	500	800	500	30	2000	2600	1700
SNOL 250/1200	250	500	1000	500	30	2000	2800	1700
SNOL 360/1200	360	600	1000	600	40	2100	2800	1800
SNOL 400/1200	400	700	1000	600	45	2200	2800	1800
SNOL 500/1200	500	700	1000	700	45	2200	2800	1900
SNOL 800/1200	800	900	1000	900	50	2400	2800	2100
SNOL 970/1200	970	900	1200	900	70	2400	3000	2100
SNOL 1000/1200	1000	1000	1000	1000	70	2500	2800	2200
SNOL 1200/1200	1200	1000	1200	1000	70	2500	3000	2200
SNOL 1500/1200	1500	1000	1500	1000	85	2500	3300	2200
SNOL 2200/1200	2200	1000	1500	1500	95	2500	3300	2700
SNOL 2500/1200	2500	1000	1700	1500	120	2500	3500	2700
SNOL 3400/1200	3400	1000	1700	2000	140	2500	3500	3200
SNOL 4000/1200	4000	1200	1700	2000	160	2700	3500	3200
SNOL 4800/1200	4800	1200	2000	2000	160	2700	3800	3200
Up to 1300 °C								
SNOL 64/1300	64	400	400	400	25	2300	2600	2200
SNOL 125/1300	125	500	500	500	30	2400	2700	2300
SNOL 200/1300	200	500	800	500	35	2400	3000	2300
SNOL 250/1300	250	500	1000	500	35	2400	3200	2300
SNOL 360/1300	360	600	1000	600	45	2500	3200	2400
SNOL 400/1300	400	700	1000	600	50	2600	3200	2400
SNOL 500/1300	500	700	1000	700	60	2600	3200	2500
SNOL 800/1300	800	900	1000	900	60	2800	3200	2700
SNOL 970/1300	970	900	1200	900	80	2800	3400	2700
SNOL 1000/1300	1000	1000	1000	1000	80	2900	3200	2800
SNOL 1250/1300	1250	1000	1250	1000	90	2900	3450	2800
SNOL 1500/1300	1500	1000	1500	1000	90	2900	3700	2800
SNOL 2200/1300	2200	1000	1500	1500	120	2900	3700	3300
SNOL 2500/1300	2500	1000	1750	1500	150	2900	3950	3300
SNOL 3500/1300	3500	1000	1750	2000	180	2900	3950	3800
SNOL 4000/1300	4000	1200	1750	2000	200	3100	3950	3800
SNOL 4800/1300	4800	1200	2000	2000	200	3100	4200	3800

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

2. High-temperature electric furnaces

2.2 Chamber furnaces with a removable hearth up to 1300°C

Industrial electric ovens 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 ovens can be applied for hardening, normalising, stress relieving, and other thermal treatment processes up to 1300 °C.

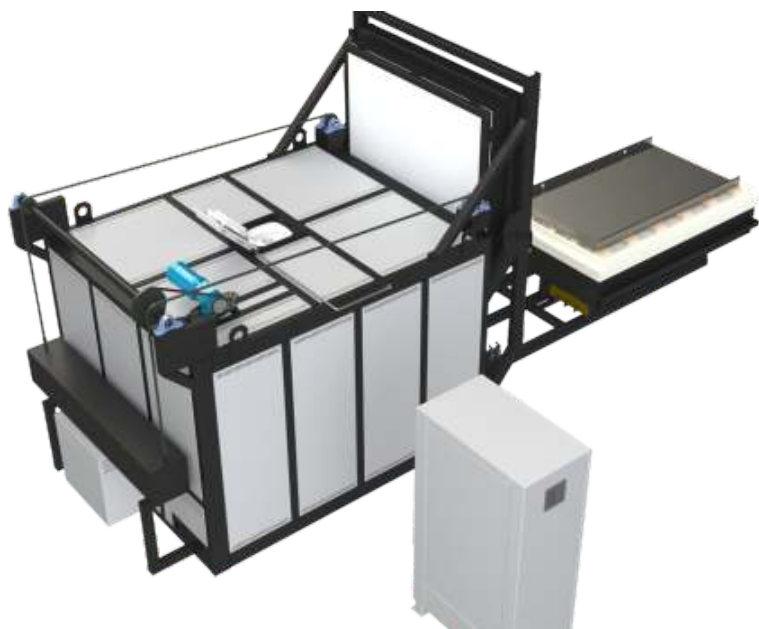
Base model

- Equipped with non-programmable controller Omron E5CC
- Manually removable hearth on rails
- Control panel on the left/right side (depending on customer needs)
- Ceramic bottom plates
- Adjustable air supply/extraction
- Vent on top
- Heating elements wrapped on ceramic tubes
- Thermal insulation made from refractory bricks and fibre
- Outside casing – metal sheet, powder painted grey (RAL 7035), frame – black
- Door opening to left/right side (depending on customer needs)
- Low power consumption
- Short heating/cooling time
- High level of accuracy
- Door safety switch
- OTP (over temperature protection), Omron K8 relay
- SSR relay
- 1 year warranty

Optional equipment

- Manually liftable door
- Electromechanically lifting door
- Electromechanically removable hearth on rails
- Turning platform for loading and unloading
- Heat resistant metal hearth plate up to 1150 °C
- Digital timer
- Data recorder
- Data communication/USB
- Calibration and maintenance of temperature measurement system
- Stainless steel furnace exterior
- Additional 1 year warranty





Model	Vol., l	Inner dimensions, mm			Power, kW	Exterior dimensions, mm*		
		Width	Height	Depth		Width	Height	Depth
Up to 1200 °C								
SNOL 500/1200 BH	500	700	1000	700	50	2200	2800	1900
SNOL 800/1200 BH	800	900	1000	900	52	2400	2800	2100
SNOL 970/1200 BH	970	900	1200	900	72	2400	3000	2100
SNOL 1080/1200 BH	1080	900	1200	1000	72	2400	3000	2200
SNOL 1200/1200 BH	1200	1000	1200	1000	72	2500	3000	2200
SNOL 2200/1200 BH	2200	1000	1500	1500	100	2500	3300	2700
SNOL 3000/1200 BH	3000	1000	1500	2000	140	2500	3300	3200
SNOL 4200/1200 BH	4200	1000	1700	2500	160	2500	3500	3700
SNOL 5100/1200 BH	5100	1200	1700	2500	200	2700	3500	3700
SNOL 9000/1200 BH	9000	1500	2000	3000	240	3000	3800	4200
Up to 1300 °C								
SNOL 500/1300 BH	500	700	1000	700	55	2500	3400	2600
SNOL 800/1300 BH	800	900	1000	900	55	2700	3400	2800
SNOL 970/1300 BH	970	900	1200	900	80	2700	3600	2800
SNOL 1080/1300 BH	1080	900	1200	1000	80	2700	3600	2900
SNOL 1250/1300 BH	1250	1000	1250	1000	80	2800	3650	2900
SNOL 2200/1300 BH	2200	1000	1500	1500	140	2800	3900	3400
SNOL 3000/1300 BH	3000	1000	1500	2000	160	2800	3900	3900
SNOL 4200/1300 BH	4200	1000	1750	2500	200	2800	4150	4400
SNOL 5250/1300 BH	5250	1200	1750	2500	240	3000	4150	4400
SNOL 9000/1300 BH	9000	1500	2000	3000	240	3300	4400	4900

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

3. Other thermal processing equipment

3.1 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.

3.1.1 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.

Base model

- Pneumatic unloading and lifting mechanism
- Vertical load transfer during cooling process
- Tank interior is made from stainless steel
- Exterior is painted with powder paint (RAL 7035), black frame

Optional equipment

- Turning platform for loading and unloading



Model	Vol., l	Inner dimensions, mm			Weight, kg	Exterior dimensions, mm*		
		Width	Height	Depth		Width	Length	Height
SNOL 1000/-	1000	1345	840	106	320	1630	1460	1070

* Overall dimensions can be adjusted

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

3.1.2 Conveyor-type furnace SNOL 500/100

Purpose

For metal product curing after washing process

Operating temperature – up to 100 °C

Productivity – 3000 kg/h

Product features

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



3. Other thermal processing equipment

3.1.3 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

- Induced 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



3.1.4 Furnace for hardening masts SNOL 15840/150

Purpose

For hardening sailing boats' masts

Operating temperature – up to 150 °C

Capacity – 16 m³

Product features

- Induced air circulation
- Horizontal airflow
- Controlled cooling process
- Pulling-out load transportation device
- Vacuum pump connector



3. Other thermal processing equipment

3.1.5 Heating inside of an inert 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.



3.1.6 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.



3. Other thermal processing equipment

3.1.7 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 still go out of our way to find what you need and 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
- Test certificate
- Packing - included
- Transportation
- Installation service

4. Control devices

4.1 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



Eurotherm 3216



Eurotherm 3504



Omron E5CC-T



Eurotherm 3208



Eurotherm Nanodac



Model	Programmable	Number of programs	Number of steps In a program	Computer port	Control method		Control signal		
					PID	ON/OFF	Type		Numbers of auxiliary outputs
							Relay	Voltage	
Omron E5CC	○	1	2	●	●	●	●	●	3
Omron E5CC-T	●	8	32	●	●	●	●	●	3
Eurotherm 3216	○	1	8	●	●	●	●	●	2
Eurotherm 3208	●	5	8	●	●	●	●	●	3
Eurotherm 3508	●	50	50	●	●	●	●	●	2
Eurotherm 3504	●	50	50	●	●	●	●	●	5
Eurotherm Nanodac	●	100	25	●	●	●	●	●	5
Eurotherm E+PLC100 *	●	-	-	●	●	●	●	●	4

* PID controller, recorder and PLC in one – designed for elaborate control algorithms.

4.2 SNOL controller user interface

We have designed and simplified our own custom user interface for ergonomic daily use without any complex codes and we offer it as an option in addition to our industrial furnace Omron touch screen controller.



4. Control devices

4.3 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.



4.4 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).



4.5 Timer Galaxy

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 10 ON and 10 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
- Available only with Omron devices.



Du har emnerne som skal afgrates. *Vi har løsningerne!*



***Kom med dine emner
til vores Test-center.***

I fællesskab finder vi den rette
brugbare løsning til opgaven.

Har du spørgsmål er du velkommen til at kontakte vores industri konsulenter

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