

High-Temperature Ovens, Forced Convection Chamber Furnaces up to 850 °C

These chamber furnaces with air circulation are characterized by their extremely high temperature uniformity. Hence, they are especially suitable for processes such as annealing, crystalizing, preheating, curing, but also for numerous processes in tool making. Due to the modular concept, the forced convection furnaces can be adjusted to the process requirements by adding suitable equipment.



Forced convection chamber furnace NAT 15/65 as table-top model

Forced convection chamber furnace NA 30/65 with manual lift door and protective gas box

Standard Equipment

- Tmax 450 °C, 650 °C, or 850 °C
- Horizontal air circulation with optimum distribution through stainless steel baffles
- Swing door hinged on the right
- = Temperature uniformity up to +/- 4 °C according to DIN 17052-1 (NAT 15/65 and NAT 30/85 up to +/- 5 °C) in the empty work space see page 71
- One frame sheet and rails for two additional trays included in the scope of delivery (NAT 15/65 and NAT 30/85 without frame sheet)
- Base frame included in the delivery, NAT 15/65 and NAT 30/85 designed as table-top model
- Controller B400/B410 (5 programs with each 4 segments), alternative controllers see page 75

Additional Equipment (not for Model NAT 15/65 and NAT 30/85)

- Optimization of the temperature uniformity up to +/- 3 °C according to DIN 17052-1 in the empty work space see page 71
- Air inlet and exhaust air flaps when used for drying
- Controlled fan assisted cooling
- Manual lift door (up to model NA 120/..)
- Pneumatic lift door
- Air circulation with speed control, recommendable for processes with light or sensitive charge
- Additional frame sheet
- Gas supply boxes different charging methods
- Feed and charging aids
- Charge control with documentation of the charge thermocouple

MORE THAN HEAT 30-3000 °C





Forced convection chamber furnace NA 120/45

Forced convection chamber furnace NA 250/85

| Model | Tmax | Inner dimensions in mm | | | Volume | Outer dimensions ³ in mm | | | Connected | Electrical | Weight |
|------------------------|-------|------------------------|------|-----|--------|-------------------------------------|------|------|------------|----------------------|--------|
| | in °C | w | d | h | in I | W | D | Н | load in kW | connection* | in kg |
| NA 30/45 | 450 | 290 | 420 | 260 | 30 | 1040 | 1290 | 1385 | 3.6 | 1-phase | 285 |
| NA 60/45 | 450 | 350 | 500 | 350 | 60 | 1100 | 1370 | 1475 | 6.6 | 3-phase | 350 |
| NA 120/45 | 450 | 450 | 600 | 450 | 120 | 1250 | 1550 | 1550 | 9.8 | 3-phase | 460 |
| NA 250/45 | 450 | 600 | 750 | 600 | 250 | 1350 | 1650 | 1725 | 12.8 | 3-phase | 590 |
| NA 500/45 | 450 | 750 | 1000 | 750 | 500 | 1550 | 1900 | 1820 | 18.8 | 3-phase | 750 |
| NA 675/45 | 450 | 750 | 1200 | 750 | 675 | 1550 | 2100 | 1820 | 25.0 | 3-phase | 900 |
| NAT 15/65 ¹ | 650 | 295 | 340 | 170 | 15 | 470 | 790 | 460 | 3.3 | 1-phase | 60 |
| NA 30/65 | 650 | 290 | 420 | 260 | 30 | 870 | 1290 | 1385 | 7.0 | 3-phase ² | 285 |
| NA 60/65 | 650 | 350 | 500 | 350 | 60 | 910 | 1390 | 1475 | 9.0 | 3-phase | 350 |
| NA 120/65 | 650 | 450 | 600 | 450 | 120 | 990 | 1470 | 1550 | 13.0 | 3-phase | 460 |
| NA 250/65 | 650 | 600 | 750 | 600 | 250 | 1170 | 1650 | 1680 | 21.0 | 3-phase | 590 |
| NA 500/65 | 650 | 750 | 1000 | 750 | 500 | 1290 | 1890 | 1825 | 28.0 | 3-phase | 750 |
| NA 675/65 | 650 | 750 | 1200 | 750 | 675 | 1290 | 2100 | 1825 | 28.0 | 3-phase | 900 |
| NAT 30/851 | 850 | 320 | 320 | 300 | 30 | 800 | 800 | 590 | 6.0 | 1-phase | 90 |
| NA 60/85 | 850 | 350 | 500 | 350 | 60 | 790 | 1330 | 1440 | 11.0 | 3-phase | 315 |
| NA 120/85 | 850 | 450 | 600 | 450 | 120 | 890 | 1420 | 1540 | 14.0 | 3-phase | 390 |
| NA 250/85 | 850 | 600 | 750 | 600 | 250 | 1120 | 1690 | 1810 | 23.0 | 3-phase | 840 |
| NA 500/85 | 850 | 750 | 1000 | 750 | 500 | 1270 | 1940 | 1960 | 34.0 | 3-phase | 1150 |
| NA 675/85 | 850 | 750 | 1200 | 750 | 675 | 1270 | 2190 | 1960 | 34.0 | 3-phase | 1300 |









Tray



Roller conveyor in furnace chamber

¹Table-top model ²Heating only between two phases ³External dimensions vary when furnace is equipped with additional equipment, Dimensions on request.