INDUSTRIAL
APPLICATIONS

SMALL ENOUGH
TO CARE
BIG ENOUGH
TO DARE

Kambič

www.kambic.com

Who we are

A Slovenian-based family company.

With 40 years of experience, Kambič is a specialized supplier in the field of design, production and validation of industrial applications.

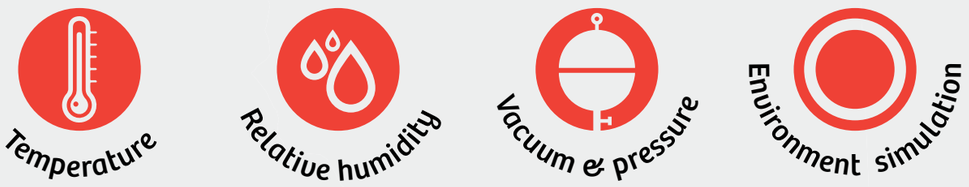
Our goal is to be the preferred partner delivering the ideal balance between optimized solutions, quality and investment costs.

Semič / Slovenia-EU

What we do

All under one roof:

- R&D of mechanical components and solutions
- R&D of electronics and SW
- Manufacturing
- Testing, calibrating and validating
- Customer support, on-site service



SMALL ENOUGH TO CARE BIG ENOUGH TO DARE

Tradition

July 1, 1985
First product launched by the company founder and owner Mr. Anton Kambič.

1995
New factory opens at Metliška cesta 16, Semič.

1998
CNC metal processing starts.

2002
Acquisition of Certification ISO 9001:2000.

June 22, 2005
Company transforms to Kambič d.o.o.

2006
First international exhibition at ACHEMA 2006.

2009
Innovation award by the Chamber of Commerce of the Dolenjska and Bela krajina region.

2010
Mr. Anton Kambič, the founder of the company, is awarded the ‘Craftsman of the Year’ title by the Chamber of Craft and Small Business of Slovenia.

2011
Metrology division is launched.

2013
Kambič metrology goes global.

2017
Manufacturing floor & capacity expand.

ISO 9001:2015

2023
Expanded production capacity

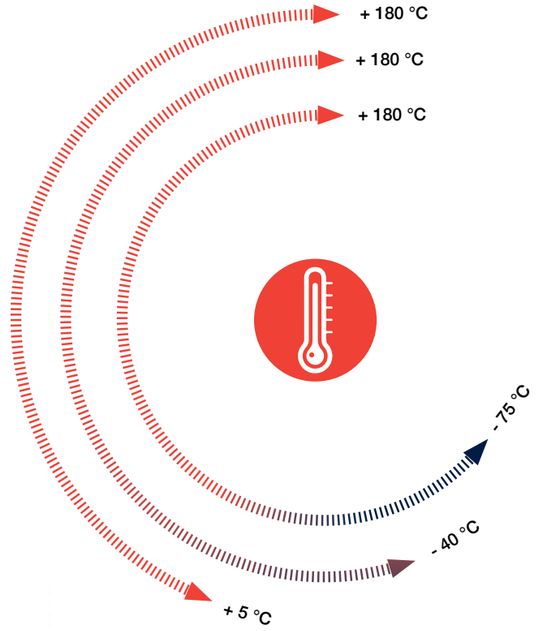
Climatic Chambers

- Temperature and relative humidity control
- Maintaining superior temperature & Rh stability
- Data loggers and sensors calibration
- World-class metrology performance
- Accelerated ageing
- Stress tests

Model: **KK-340 CHLT**
Volume: **~ 340 L**
Temperature range: **- 40 °C ...+ 180 °C**
Temperature stability: **± 0.5 °C @ - 40 °C**
± 0.08 °C @ 50 °C 50 % Rh
± 0.1 °C @ 90 °C 90 % Rh
± 0.2 °C @ 180 °C
Temperature uniformity: **± 1.0 °C @ - 40 °C**
± 0.3 °C @ 50 °C 50 % Rh
± 0.4 °C @ 90 °C 90 % Rh
± 1.5 °C @ 180 °C

Climatic Chamber

KK-CH (+ 5 °C...+ 180 °C)	KK-CHLT (- 40 °C...+ 180 °C)	KK-CHULT (- 75 °C...+ 180 °C)
		
Models:	Models:	Models:
KK-68 CH	KK-68 CHLT	KK-190 CHULT
KK-190 CH	KK-190 CHLT	KK-340 CHULT
KK-340 CH	KK-340 CHLT	KK-500 CHULT
KK-500 CH	KK-500 CHLT	KK-1000 CHULT
KK-1000 CH	KK-1000 CHLT	



CHAMBER SIZE = CHAMBER VOLUME [liters]	CHAMBER INTERIOR DIMENSIONS (WxHxD) [mm] for CH & CHLT models	CHAMBER INTERIOR DIMENSIONS (WxHxD) [mm] for CHULT models
68	410 x 475 x 350	/
190	600 x 615 x 510	620 x 590 x 515
340	600 x 835 x 685	620 x 810 x 690
500	800 x 835 x 800	870 x 800 x 800
1000	1000 x 1000 x 1000	1000 x 1000 x 1000

*More details in the dedicated Technical Data Sheet.

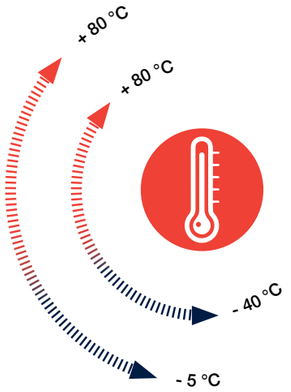
Polymer Conditioning & test Chambers

- Acelerated conditioning of Polymers
- Enhansed phisical properties of products conditioned products
- Stabile dimensional properties of conditioned products
- Conditioning of automotive parts
- Conditioning of house hold apliences and parts
- House hold apliences testing
- Automotive testing
- Product stability testing

Model: **KK-8000 CHLT**

- Temperature and relative humidity controlled test room
- Ideal for performance and type testing of consumable products
- Wide temperature and Rh range
- Panoramic observation glass with both side heater
- Multiple access ports
- Intensive LED illumination of the device under test

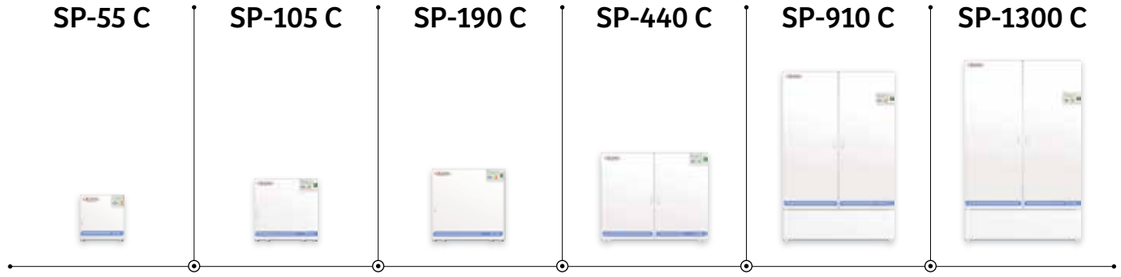
1. Compressor based refrigeration system. Condensing unit mounted on the top of the chamber or placed in any other spot of the chamber.
2. PLC based controller. Simple and effective programming of all processes. SW pack for PC available.
3. Electronics compartment. Mounted on the chamber or remote location.
4. Extensive heat insulation. Various insulation panel thicknesses.
5. Access port with both end plugs Ø50 or Ø90.
6. Heavy duty closing mechanism with safety unlocking system from interior.
7. Fully stainless steel interior. Exterior powder coated RAL 9010 (other colors available on request).
8. Sealed and extensively heat insulated door – various sizes available.
9. Door observation window.
10. Backup unit (optional).



*More details in the dedicated Technical Data Sheet.

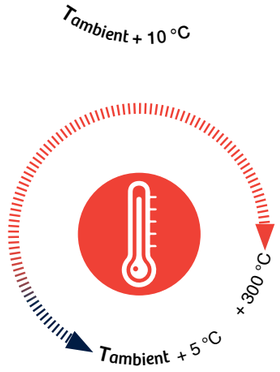
Performance Ovens

- Drying, heat treatment, surface treatment, curing all at precise temperatures.
- Pilot & research hot air drying
- Drying after washing
- Material preheating
- Hot air sterilization
- Tooling preheating
- Fills curing



Model: **SP-910 C**
Volumen: **910 L**
Temperature range: **Tambient + 5 °C... + 300 °C**
Temperature stability **±0.1 °C**
Temperature uniformity: **±1.3 @ 60 °C**
±1.7 @ 100 °C
±3.5 @ 200 °C
Accessories: **Exhaust fan unit**

Model: **SP-190 C**
Volumen: **190 L**
Temperature range: **Tambient + 5 °C ... + 300 °C**
Temperature stability **± 0.1 °C**
Temperature uniformity: **± 0.3 @ 60 °C**
± 0.7 @ 100 °C
± 1.0 @ 200 °C
With accessories: **Cut out notch 100 x 50 mm**
2x access port Ø90 mm
Observation window with chamber illuminationww



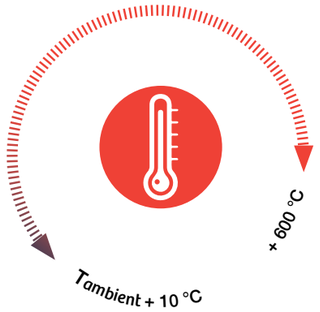
CHAMBER SIZE = CHAMBER VOLUME [liters]	EXTERIOR DIMENSIONS (WxHxD) [mm]	INTERIOR DIMENSIONS (WxHxD) [mm]
55	510 x 535 x 575	400 x 400 x 345
105	725 x 725 x 715	490 x 500 x 440
190	835 x 840 x 790	600 x 615 x 515
440	1235 x 1025 x 835	1000 x 800 x 550
910	1280 x 1975 x 870	1000 x 1300 x 730
1300	1340 x 105 x 990	1060 x 430 x 850

*More details in the dedicated Technical Data Sheet.

High Temperature Ovens

- Heat treatment, surface treatment, curing all at precise temperature.
- Heat treatment for stress release
- Heat treatment for sintering
- High temperature drying
- Molds preheating
- Fills curing

Modell: **SP-875 C FIRE**
Volumen: **875 L**
Temperature range: **Tambient + 10 °C ... + 600 °C**
Temperature stability: **± 1.0 °C @ 350 °C**



1. PLC based controller. Simple and effective programming of all process steps, including optional manual controls.
   RS-232, USB or Ethernet communication ports.
2. Adjustable over temperature shutdown.
3. Main switch with power phase indicator.
4. High capacity fan for air circulation in chamber.
   Ensuring temperature stability and uniformity.
5. Height adjustable shelves (additional shelves optional).
6. Heavy duty closing mechanism with adjustable position / closing force.
7. Chamber door with floating inner insulation door ensuring low surface temperature even at max temperature.
8. Fully enclosed design with AISI 304 stainless steel exterior.
9. AISI 304 stainless steel chamber, designed for temperatures up to 600 °C.
10. Industrial heavy duty temperature sensor.
    1. control sensor
    2. over temp cutoff

CHAMBER SIZE = CHAMBER VOLUME IN LITERS	EXTERIOR DIMENSIONS (WXHXD) in mm	INTERIOR DIMENSIONS (WXHXD) in mm
60	712 x 673 x 655	400 x 400 x 400
190	942 x 883 x 836	600 x 600 x 543
420	1062 x 973 x 1030	750 x 700 x 755
875	1461 x 768 x 1066	998 x 1250 x 700

*More details in the dedicated Technical Data Sheet.

Industrial Freeze Dryers

Refined solution for rapid, repeatable small or industrial scale freeze drying.

- Dairy products (milk, starter cultures, yoghurts, probiotics, ice-cream,…)
- Vegetables & fruits (strawberries, figs, beans,…)
- Fish & meat
- Floral

Model: **LIO-80 FP**
Ice condenser capacity: **80 kg**
Ice condenser temperature: **- 50 °C**
Shelf surface capacity: **20**
Total trays capacity: **7 m²**

Model: **LIO-300 FP**
Ice condenser capacity: **300 kg**
Ice condenser temperature: **- 50 °C**
Shelf surface capacity: **3 trolleys, each with 25 trays**
Total trays capacity: **19.5 m²**

*More details in the dedicated Technical Data Sheet.

Tailored Equipment

Model: **LSP-140 C**

- Designed to assist in industrial processes of COIL COATING and HOT AIR CYCLE in lab environment
- Constant fresh air supply in safety function
- Door latch with an auto open feature in case of overpressure in chamber
- Single-handed operation door
- Rotating pin point shelf in chamber
- Extra-large digital countdown timer display
- Superior heat insulated doors and housing

Lab Coil Coating Curing Oven

Recirculating Cooling & Heating System Chiller / Process Thermostat

Model: **GKZ-02**

- Designed for clean heating of pharmaceutical grade compressed air
- No air contamination through heating process (no filters required)
- All contact surfaces AISI 316
- Designed to be used in a clean room environment
- All contact surfaces polished to Ra < 0.5 µm
- Exterior body AISI 304
- Compact mobile design
- Max air flow: 1200 L/min

Model: **HS-10 DVP**

- Huge cooling capacity over full temperature range
- Rapid temperature change due to optimized fluid capacity
- Water cooled single compressor cooling system
- Large capacity circulation pump
- Fully stainless steel enclosure
- Advanced fully programmable controller
- Respectable heating capacity
- Cooling capacity even at high temperatures

*More details in the dedicated Technical Data Sheet.

Pharma Compressed Air Heating System

Tailored Equipment

Model:	**SP-3360 C HD**
External dimension (WxHxD):	**~1720 x 2855 x 2200 mm**
Internal dimensions (WxHxD):	**1000 x 2400 x 1400 mm**
Working volume:	**3360 L**
Temperature range:	**Tambient + 10 °C ... 200 °C**
Temperature stability:	**< + / - 0,5 °C**
Temperature uniformity:	**at + 170 °C < ± 2.5 °C**
Air circulation:	**Forced with a fan**
Power requirements:	**38 kW / 3 x 400 V**
Air exchange and forced cooling:	**Exchange rate controled by motorized flap and fan max capacity : 850 m³/h.** **Forced cooling with air exchange with air flow max 5000 m³/h.**
Doors:	**One wing Metal**

Industrial furnace

Model:	**SP-1500 S**
External dimension (WxHxD):	**1781 x 2410 x 1305 mm**
Internal dimensions (WxHxD):	**1080 x 1400 x 1000 mm**
Volume:	**1500 L**
Temperature range:	**Tambient + 5 °C... 250 °C**
Temperature stability:	**< + / - 0,2 °C**
Temperature uniformity:	**At + 170 °C < ± 2.5 °C**
Air circulation:	**Forced with a fan**
Platform rotation:	**Yes**
Power requirements:	**38 kW / 3 x 400 V**
Over temperature shut off:	**Built in**
Power supply:	**20 kW / 32A / 3 x 400 V – 50 / 60 Hz**
Doors:	**Two wing metal**

*More details in the dedicated Technical Data Sheet.

Product rotation for homogenius thermal affect

Tailored Equipment

Model: **SP-5140 C**

External dimension (WxHxD): **1714 x 2784 x 3066 mm**

Internal dimensions (WxHxD): **1000 x 2100 x 2450 mm**

Working volume: **5140 L**

Temperature range: **Tambient + 5 °C ÷ 250 °C**

Temperature stability: **< + / - 0,3 °C**

Air circulation in the Workspace: **Forced with a fan**

Power requirements: **48 kW - 3 x 400 V / 50 Hz**

Exhaust: **Additional fan Fresh air thru filter**

Silicone thermal processing furnace

Modell: **SP-1500 C**

External dimension (WxHxD): **1425 x 1870 x 1300 mm**

Internal dimensions (WxHxD): **1100 x 1350 x 1100 mm**

Volume: **1633 L**

Temperature range: **Tambient + 5 °C ÷ 200 °C**

Temperature stability: **< + / - 0,3 °C**

Air circulation: **Forced with a fan**

Power supply: **14 kW / 20A / 3 x 400 V / 50 Hz**

Industrial push-in furnace

*More details in the dedicated Technical Data Sheet.

Tailored Equipment

Model: **SP-1000 C**
External dimension (WxHxD): **1140 + 300 x 1870 x 1080 mm**
Internal dimensions (WxHxD): **800 x 1350 x 900 mm**
Working volume: **972 L**
Temperature range: **Tambient + 5 °C ÷ 200 °C**
Temperature stability: **< + / - 0,3 °C**
Temperature uniformity: **At + 170 °C < ± 2.5 °C**
Air circulation: **Forced with a fan**
Power requirements: **11 kW / 20 A / 3 x 400 V / 50 Hz**
Doors: **One wing metal**

Industrial push-in furnace

Model: **VSP-3000 ROT**
Load IN opening (WxH): **1000 x 900 mm**
Load OUT opening (WxH): **1000 x 620 mm**
Shelve dimension (WxH): **900 x 400 mm**
No. of shelves: **20**
Shelve interdistance: **305 mm**
Max rotating speed: **25 mm/s**
Temperature range: **Tambient + 5 °C ... 120 °C**
Air Circulation: **Forced with fan**
Power: **13 kW**

*More details in the dedicated Technical Data Sheet.

Vertical rotating shelve furnace

Tailored Equipment

Model: **KK-500 CHLT UF**

- Ultra-fast cool down rate 12.5 °C/min (EN 60068-3-5)
- Huge heat compensation capacity 5 kW @ - 30 °C
- Air-cooled single-stage refrigeration system
- Overhanging chamber design
- Access points for heavy-duty table integration

"Ultra-Fast" Climatic Chamber

Model: **SP-1000 x 1000 C**

- Designed to assist industrial heat testing processes on large surfaces
- DUT even up to 1m x1m
- Constant fresh air circulation
- Door-in-door design
- Pizza door with auto open feature in case of overpressure in chamber
- Hinged full front door for maintenance access
- Lightweight aluminum frame shelf with thin stainless steel wire mesh for minimal shelf to DUT contact effect
- Completely removable shelf
- Minimal temperature defect during pizza door open sequence

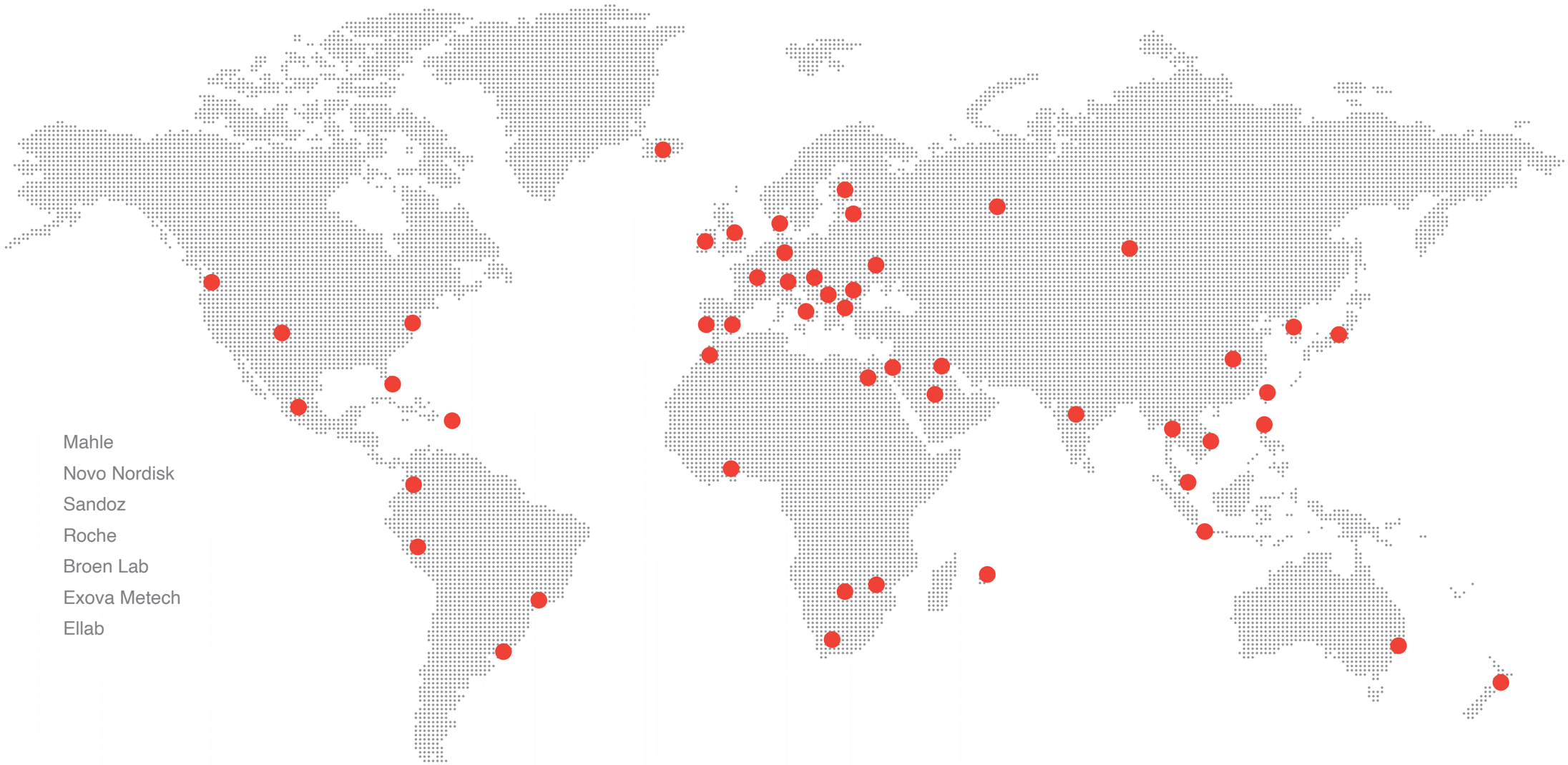
Temperature Oven

*More details in the dedicated Technical Data Sheet.

Worldwide partners & customers:

Industries

Pharma
Electronics
Chemical
Mechanical
Automotive
Aviation
Weather agencies
Testing facilities
R&D institutes
Universities
Biotechnology
Aerospace



References

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ESA
Danfoss
Samsung
Trescal
TDK
Medico Support
Tesla
Mahle
Novo Nordisk
Sandoz
Roche
Broen Lab
Exova Metech
Ellab

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