Borel

Standard Furnaces & Ovens

Switzerland

A division of SOLO Swiss Group

Products Catalogue

Furnaces, ovens & accessories

www.borel.eu

Standard Furnaces & Ovens since 1927

About Borel

BOREL Swiss manufactures furnaces and ovens for all thermal processing applications. BOREL Swiss provides a wide range of standard furnaces, ovens, kilns and many others equipments since 1927.

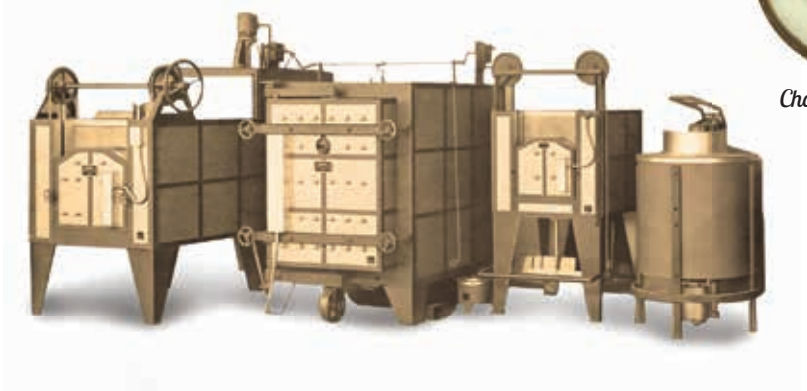
With a team of 40 people, Borel manufactures its products in Europe. Borel furnaces are used all over the world in the industry, laboratories, research centers and universities for processes such as drying, preheating, heat processing, heat treatment, melting, ashing in the glass, ceramics, metal, plastic, medical, dental, aircraft industries and jeweller's art.

Borel equipments are manufactured according to the European quality and safety standards with CE marking.

BOREL Swiss SA is a Division of **SOLO Swiss Group**
www.soloswiss.com

Borel was founded in 1927 by Dr. Charles Borel. It is one of the oldest furnaces manufacturers in Europe. Borel products are used by more than 20'000 customers worldwide.

Charles Borel



Ovens

Furnaces

Melting Furnaces

Other Equipments

Conterm Ovens 250°C

CT 250

- Natural convection electrical oven for all applications.
- Stainless steel interior, shelf height adjustable.
- Rock wool insulation of all surfaces, including door.
- Aeration device with adjustable outlet on the right hand side.
- Battery of shielded electrical resistors.
- Temperature controller, analog thermometer, safety thermostat.
- CE marking and operating instructions.
- Delivered with 2 shelves.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
CT 250-19	19 L	250 x 300 x 250	600 x 600 x 445	0.62 kW
CT 250-36	36 L	300 x 400 x 300	650 x 600 x490	0.92 kW
CT 250-52	52 L	470 x 330 x 330	820 x 530 x 520	1.0 kW
CT 250-80	80 L	400 x 500 x 400	740 x 700 x 560	1.2 kW
CT 250-150	150 L	600 x 500 x 500	950 x 700 x 680	2.0 kW

ThermoNatural Ovens 350°C

TN 350

- Natural convection electrical oven for all applications.
- Mild or stainless steel for versions -I, several shelves.
- Rock wool insulation of all surfaces, including door.
- Battery of shielded electrical resistors.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with 2 shelves.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
TN 350-67	67 L	390 x 390 x 445	675 x 600 x 625	2.0 kW
TN 350-67-I	67 L	390 x 390 x 445	675 x 600 x 625	2.0 kW

Digitronic Ovens 250°C

DJ 250

- Forced convection electric oven for all applications.
- Stainless steel interior, multiple shelves supports.
- Rock wool insulation of all surfaces, including door.
- Stainless steel motor ventilator. Adjustable air outlet.
- Battery of shielded electrical resistors.
- Digital temperature controller.
- CE marking and operating instructions.
- Delivered with 2 shelves.
- V models with inner glass door, otherwise solid door.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
DJ 250-33 (V)	33 L	280 x 400 x 300	660 x 600 x 500	1.2 kW
DJ 250-47 (V)	47 L	450 x 330 x 320	810 x 530 x 560	1.2 kW
DJ 250-76 (V)	76 L	380 x 500 x 400	750 x 700 x 650	1.6 kW
DJ 250-145 (V)	145 L	580 x 500 x 500	1000 x 690 x 650	2.0 kW

Specifications subject to change. Photos for illustration purposes only

DryBig Ovens 250°C

DB 250

- Forced convection electric oven for all applications.
- Stainless steel interior, multiple shelves supports.
- Rock wool insulation of all surfaces, including door.
- Stainless steel motor ventilator. Adjustable air outlet.
- Battery of shielded electrical resistors.
- Digital temperature controller.
- CE marking and operating instructions.
- Delivered with 2 shelves (perforated plates).
- 3 x 400 VAC (M version : single-phase 230VAC). 400 liters volume and over, with swing doors.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
DB 250-216 (available in M version)	216 L	600 x 630 x 600	1115 x 870 x 720	4.0 kW
DB 250-288 (available in M version)	288 L	600 x 800 x 600	1115 x 1160 x 810	5.0 kW
DB 250-400	400 L	800 x 1000 x 500	1315 x 1360 x 740	5.25 kW
DB 250-720	720 L	1000 x 1200 x 600	1520 x 1500 x 800	6.0 kW

ThermoDryer Ovens 250°C & 400°C

TR 350 & TR 400

- Forced convection electrical oven for all applications.
- Mild or stainless steel for versions I, several shelves.
- Rock wool insulation of all surfaces, including door.
- Stainless steel motor ventilator.
- Battery of shielded electrical resistors.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with 2 shelves (perforated plates).

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
TR 350-58 (I)	58 L	390 x 360 x 380	684 x 615 x 675	2.0 kW
TR 400-140 (I)	140 L	390 x 390 x 900	925 x 685 x 1370	8.0 kW
TR 400-180 (I)	180 L	555 x 605 x 555	1200 x 1100 x 950	6.0 kW
TR 400-400 (I)	400 L	710 x 810 x 660	1640 x 1380 x 1665	20 kW
TR 400-735 (I)	735 L	830 x 1490 x 750	1480 x 2400 x 1450	48 kW

Vacioterm Vacuum Ovens 200°C

VC 200

- Electric oven for all applications - Work under vacuumed atmosphere.
- Cylindrical stainless steel interior, with anodised aluminium shelves, and door with tempered glass view port.
- Working chamber surrounded by heating elements.
- Digital temperature controller.
- CE marking and operating instructions.
- Delivered with 2 shelves.
- Frontal air intake, vacuum achieved with sealing valve.

Model	**Int. Vol.**	**Int. Dim** (øxD)	**Ext. Dim.** (WxHxD)	**Power**	**Max. Vaccum**
VC 200-47	47 L	ø 330 x 480	755 x 540 x 650	2 kW	10^{-2} mm Hg

Specifications subject to change. Photos for illustration purposes only

HighTemp Ovens 400°C

HT 400

- Forced convection electric oven for all applications.
- Stainless steel interior, multiple shelves supports.
- Rock wool insulation of all surfaces, including door.
- Stainless steel motor ventilator.
- Battery of shielded electrical resistors.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with 2 shelves (perforated plates).

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
HT 400-80	80 L	400 x 500 x 400	1200 x 800 x 610	4.0 kW

Industrial Ovens 150°C, 250°C & 350°C

IA 150 - IA 250 - IA 350

- Forced convection electric oven for all applications.
- Interior in aluminium and exterior in galvanised plate.
- Rock wool insulation of all surfaces, including door.
- Adjustable horizontal ventilation, and adjustable exhaust.
- Battery of shielded electrical resistors.
- Regulation: Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power (150°C)**	**Power (250°C)**	**Power (350°C)**
IA (*) 1000	1000 L	1000 x 1000 x 1000	1950 x 2100 x 1400	9 kW	15 kW	18 kW
IA (*) 1500-H	1500 L	1000 x 1500 x 1000	1950 x 2650 x 1400	15 kW	18 kW	30 kW
IA (*) 1500	1500 L	1000 x 1000 x 1500	1950 x 2150 x 1900	15 kW	18 kW	30 kW
IA (*) 2000	2250 L	1000 x 1500 x 1500	1950 x 2650 x 1900	15 kW	18 kW	30 kW
IA (*) 3000-H	3240 L	1200 x 1800 x 1500	2200 x 3000 x 1900	24 kW	30 kW	45 kW
IA (*) 3000	3240 L	1200 x 1500 x 1800	2200 x 2700 x 2200	24 kW	30 kW	45 kW
IA (*) 3500	3375 L	1500 x 1500 x 1500	2500 x 2700 x 1900	24 kW	30 kW	45 kW
IA (*) 4500-H	4500 L	1500 x 2000 x 1500	2500 x 3200 x 1900	30 kW	45 kW	54 kW
IA (*) 4500	4500 L	1500 x 1500 x 2000	2500 x 2700 x 2500	30 kW	45 kW	54 kW
IA (*) 6000	6000 L	1500 x 2000 x 2000	2500 x 3200 x 2500	30 kW	45 kW	60 kW
IA (*) 8000	8000 L	2000 x 2000 x 2000	3000 x 3200 x 2500	45 kW	45 kW	75 kW

** All the temperatures*

Cube Chamber Furnaces 1050°C

CU 1050

- Compact electric chamber furnace for all applications.
- Cylindrical working chamber in refractory ceramic + levelling base.
- Heating muffle. Heating interruption on door opening.
- Axron Swiss PID temperature controller, timer.
- CE marking and operating instructions.
- Delivered with removable ceramic sole.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
CU 1050-2	2.1 L	110 x 110 x 175	400 x 420 x 455	2.0 kW

Bench-Top Furnaces 1100°C

RI 1100

- Compact electric chamber furnace for all applications.
- Horizontal swing door. One-piece muffle.
- Multilayer insulation. Interior in ceramic fibre and refractory bricks.
- Heating muffle. Heating interruption on door opening.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with exhaust plug, metal sole.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
RI 1100-10	9.5 L	210 x 145 x 370	510 x 645 x 580	3.9 kW

Opening Tube Furnaces 1100°C

TO 1100

- Opening electric tube furnace for all applications.
- Robust construction made of bent plate.
- Interior in ceramic fibre and refractory bricks.
- Working chamber surrounded by heating elements.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Heated length**	**Tube dim** (Ø x lenght)	**Ext. Dim.** (WxHxD)	**Power**
TO 1100-70-250	250 mm	70	630 x 510 x 380	0.9 kW
TO 1100-70-500	500 mm	70	630 x 510 x 380	1.8 kW
TO 1100-100-250	250 mm	100	630 x 510 x 380	2.7 kW
TO 1100-100-500	500 mm	100	630 x 510 x 380	1.3 kW
TO 1100-150-250	250 mm	150	630 x 510 x 380	2.6 kW
TO 1100-150-500	500 mm	150	630 x 510 x 380	3.0 kW
TO 1100-200-250	250 mm	160	630 x 510 x 380	1.9 kW
TO 1100-200-500	500 mm	160	630 x 510 x 380	1.9 kW
TO 1100 250-375	375 mm	200	630 x 510 x 380	3.8 kW
TO 1100-300-500	500 mm	250	630 x 510 x 380	3.8 kW

Specifications subject to change. Photos for illustration purposes only

Chamber Furnaces 1100°C - 1600°C

FP 1100°C / 1200°C / 1300°C / 1400°C / 1500°C / 1600°C

- Electric chamber furnace for all applications
- Robust construction made of bent plate. Vertical lifting front door.
- Multilayer insulation. Interior in ceramic fibre and refractory bricks.
- Silicone carbide heating elements. Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with removable ceramic sole.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FP 1100-6	6.3 L	210 x 150 x 200	550 x 650 x 580	2.5 kW
FP 1100-8	7.5 L	210 x 180 x 200	550 x 650 x 580	2.5 kW
FP 1100-10	10 L	200 x 200 x 250	560 x 720 x 670	3.7 kW
FP 1100-15	15 L	220 x 230 x 300	560 x 720 x 670	4.7 kW
FP 1100-30	28 L	280 x 280 x 380	600 x 780 x 750	4.7 kW
FP 1100-45	45 L	300 x 300 x 500	660 x 770 x 720	7.0 kW

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FP 1200-5	5 L	180 x 140 x 200	550 x 650 x 580	2.4 kW
FP 1200-7	7.3 L	200 x 140 x 250	550 x 650 x 580	2.4 kW
FP 1200-10	10 L	200 x 200 x 250	560 x 720 x 670	4.5 kW
FP 1200-12	12 L	200 x 200 x 300	560 x 720 x 670	4.5 kW
FP 1200-15	15 L	220 x 230 x 300	560 x 720 x 670	4.5 kW
FP 1200-18	18 L	230 x 230 x 350	590 x 790 x 700	4.5 kW
FP 12 00-27	27.4 L	280 x 280 x 350	590 x 790 x 700	5.0 kW
FP 1200-45	45 L	300 x 300 x 500	660 x 770 x 720	6.5 kW

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FP 1300-6	6.3 L	200 x 140 x 250	550 x 650 x 580	2.9 kW
FP 1300-9	9 L	200 x 180 x 250	560 x 720 x 670	2.9 kW
FP 1300-12	12 L	200 x 200 x 300	560 x 720 x 670	4.9 kW
FP 1300-15	15 L	230 x 230 x 300	560 x 720 x 670	4.9 kW
FP 1300-18	18 L	230 x 230 x 350	590 x 790 x 700	4.9 kW
FP 1300-25	24.6 L	270 x 270 x 350	590 x 790 x 700	4.9 kW
FP 1300-45	45 L	300 x 300 x 500	660 x 770 x 720	5.6 kW

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FP 1400-5	5.3 L	150 x 140 x 250	540 x 650 x 580	7.0 kW
FP 1400-9	9 L	200 x 180 x 250	560 x 720 x 670	10.5 kW
FP 1400-15	15 L	220 x 220 x 310	600 x 770 x 750	12 kW
FP 1400-33	32.5 L	250 x 270 x 480	600 x 770 x 550	24 kW

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FP 1500-5	5.3 L	150 x 140 x 250	560 x 720 x 670	10.5 kW
FP 1500-7	7 L	200 x 140 x 250	560 x 720 x 670	10.5 kW
FP 1500-9	9 L	200 x 180 x 250	560 x 720 x 670	15 kW
FP 1500-15	15 L	220 x 220 x 310	600 x 770 x 750	12 kW
FP 1500-24	24.3 L	250 x 270 x 360	600 x 770 x 750	24 kW
FP 1500-30	29.7 L	250 x 270 x 440	600 x 770 x 750	24 kW

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FP 1600-5	5.3 L	150 x 140 x 240	550 x 650 x 580	12 kW
FP 1600-7	6.9 L	170 x 170 x 240	560 x 720 x 670	12 kW
FP 1600-9	8.6 L	210 x 180 x 240	560 x 720 x 670	15 kW
FP 1600-15	15 L	220 x 220 x 310	600 x 770 x 750	12 kW
FP 1600-25	23.4 L	250 x 260 x 380	600 x 770 x 750	24 kW
FP 1600-30	27.3 L	250 x 260 x 460	600 x 770 x 750	24 kW

Specifications subject to change. Photos for illustration purposes only

Furnaces with Portable Ladle

FP 1100-1200 P

- A ladle is a mobile muffle in refractory steel provided with an inert gas inlet. The muffle is designed to be placed in a chamber furnace with the parts themselves arranged in the muffle. It is then possible to work under protective gas.
- The muffle is parallelepiped-shaped (with one hinged face closing by gravity), with a gas inlet (which also serves as a handle) and a mobile floor grid system on which the parts are placed. The mobile floor makes it easy to transfer the parts from the muffle to the quenching tank.
- The maximum temperature withstood by the muffles is 1100°C. Muffles available with chamber furnaces for 1100°C, or 1200°C.
- Our packs are composed of a furnace able to receive a muffle, a ladle and protection for the heating element.
- Working with non-flammable gas (nitrogen, forming gas 95-5 etc.).
- Our muffles are fitted with a valve to regulate the gas supply. Type M10L connector.
- CE marking and operating instructions.

Model / Pack	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Furnaces used**
FP 1100-15-P Laddle S + furnace 1100°C	1.4	120 x 60 x 200	125 x 65 x 260	FP 1100-15
FP 1200-15-P Laddle S + furnace 1200°C	1.4	120 x 60 x 200	125 x 65 x 260	FP 1200-15
FP 1100-30-P Laddle L + furnace 1100°C	4.0	190 x 90 x 250	195 x 110 x 320	FP 1100-30
FP 1200-27-P Laddle L + furnace 1200°C	4.0	190 x 90 x 250	195 x 110 x 320	FP 1200-27
FP 1100-45-P Laddle L + furnace 1100°C	10	245 x 140 x 330	255 x 150 x 420	FP 1100-45
FP 1200-45-P Laddle L + furnace 1200°C	10	245 x 140 x 330	255 x 150 x 420	FP 1200-45

ThermoLab Furnace 1100°C

TL 1100

- Electric chamber furnace, testing furnace.
- Constructed in folded sheet steel, horizontal opening door.
- Light fibres for all walls.
- Heating muffle. Heating interruption on door opening.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with removable ceramic sole.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
TL 1100-8	8.2 L	200 x 133 x 300	440 x 500 x 530	1.8 kW

Top-Loading Furnaces 1100°C & 1280°C

TH 1100 & TH 1280

- Compact electric chamber furnace for all applications
- Interior in ceramic fibre and refractory bricks.
- Exhaust vent on top.
- Coil resistors on ceramic tubes.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power 1100°C**	**Power 1280°C**
TH (*) 40	39 L	330 x 330 x 360	600 x 620 x 670	4.1 kW	4.5 kW
TH (*) 60	58 L	330 x 490 x 360	600 x 770 x 670	5.0 kW	5.5 kW

** All the temperatures*

Specifications subject to change. Photos for illustration purposes only

Car-hearth Furnaces 1100°C & 1250°C

CH 1100 & 1250

- Chamber furnace with mobile sole (trolley on rails).
- Constructed in folded and profiled sheet steel.
- Axron Swiss temperature controller/programmer.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
CH (*)1500	1500 L	1000 x 1000 x 1500	1500 x 1950 x 2200	56 kW
CH (*)2000	2000 L	1000 x 1000 x 2000	1500 x 1950 x 2700	75 kW
CH (*)2400	2400 L	1200 x 1000 x 2400	1700 x 1950 x 2700	110 kW
CH (*)2500	2500 L	1000 x 1000 x 2500	1500 x 1950 x 3200	120 kW
CH (*)3000	3000 L	1000 x 1000 x 3000	1500 x 1950 x 3700	172 kW
CH (*)3000-H	3000 L	1200 x 1000 x 2500	1700 x 1950 x 3200	172 kW
CH (*)3600	3600 L	1200 x 1000 x 3000	1700 x 1950 x 3700	185 kW

** All the temperatures*

ThermoConvect Furnaces 600°C

FT 600

- Air circulating furnace for all applications.
- Stainless steel interior.
- Insulation in ceramic fibre and refractory bricks.
- Fan with stainless steel turbine.
- Battery of shielded electrical resistors.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FT 600-30	30 L	300 x 250 x 450	1050 x 1150 x 960	6 kW
FT 600-73	73 L	450 x 250 x 650	1250 x 1600 x 1195	8 kW
FT 600-180	180 L	560 x 610 x 560	1300 x 1440 x 1010	10 kW
FT 600-290	290 L	600 x 600 x 800	1820 x 2200 x 1990	20 kW
FT 600-300	300 L	750 x 390 x 850	1355 x 1745 x 1400	20 kW
FT 600-970	970 L	900 x 1200 x 900	1730 x 2300 x 1420	25 kW

Industrial Furnaces 550°C

FI 550

- Electric chamber furnace for all applications.
- Interior in ceramic fibre and refractory bricks.
- Air intake and exhaust controlled by temperature controller.
- Shielded electrical resistors on 4 surfaces.
- Axron Swiss temperature controller/programmer, 30 programmes of 15 segments with delayed start time setting function.
- Main door includes 3 small doors.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power** (kW)
FI 550-500	570 L	700 x 1000 x 820	1200 x 1895 x 1400	14 kW
FI 550-700	720 L	800 x 1100 x 860	1440 x 1895 x 1500	17 kW
FI 550-1000	1000 L	800 x 1100 x 1200	1300 x 1895 x 1800	21 kW
FI 550-1600	1600 L	1200 x 1100 x 1200	1700 x 1895 x 1800	24 kW
FI 550-2100	2100 L	1200 x 1200 x 1500	1700 x 1895 x 2100	30 kW
FI 550-2400	2400 L	1650 x 1200 x 1200	2150 x 1895 x 1800	34 kW
FI 550-3700	3700 L	1650 x 1200 x 1900	2150 x 1895 x 2500	38 kW

Specifications subject to change. Photos for illustration purposes only

Industrial Furnaces 600°C & 1100°C

FI 600 & FI 1100

- Electric chamber furnace for all applications.
- Mechanically welded frame.
- Interior in ceramic fibre and refractory bricks.
- Air intake and exhaust controlled by temperature controller.
- Electrical coil resistors on 4-6 sides of the furnace.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power** (kW)
FI 600-60	55 L	390 x 400 x 350	730 x 1680 x 840	5.2 kW
FI 600-130	130 L	450 x 530 x 500	1000 x 1680 x 1070	9.0 kW
FI 600-180	180 L	550 x 600 x 550	1160 x 1750 x 1190	12 kW
FI 600-300	300 L	700 x 680 x 650	1100 x 1780 x 1240	17 kW
FI 600-500	500 L	800 x 780 x 810	1200 x 1880 x 1400	24 kW
FI 600-850	860 L	900 x 1150 x 830	1300 x 1980 x 1410	30 kW
FI 600-1550	1550 L	1350 x 1200 x 960	1750 x 1980 x 1540	48 kW

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power** (kW)
FI 1100-50	52 L	370 x 400 x 350	730 x 1680 x 840	5.2 kW
FI 1100-120	120 L	450 x 500 x 500	1000 x 1680 x 1070	9.0 kW
FI 1100-180	175 L	530 x 600 x 550	1160 x 1750 x 1190	12 kW
FI 1100-250	245 L	680 x 680 x 530	1100 x 1780 x 1090	14 kW
FI 1100-400	395 L	780 x 780 x 650	1200 x 1880 x 1240	21 kW
FI 1100-740	740 L	840 x 1100 x 800	1300 x 1980 x 1410	30 kW
FI 1100-1100	1110 L	1040 x 1150 x 930	1500 x 1980 x 1540	42 kW
FI 1100-1600	1610 L	1290 x 1200 x 1040	1750 x 1980 x 1650	52 kW

Industrial Furnaces 1250°C

FI 1250

- Electric chamber furnace for all applications.
- Manually operated vertically-opening door, counterweighted for easy opening, avoids direct contact to the hot surface of the furnace.
- Interior in ceramic fibre and refractory bricks.
- Electrical coil resistors. Resistors mounted on ceramic tubes and/or in grooves depending on the models.
- Axron Swiss temperature controller/programmer, 30 programmes of 15 segments with delayed start time setting function.
- CE marking and operating instructions.
- Delivered with a removable ceramic sole.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power** (kW)
FI 1250-53	52.5 L	315 x 320 x 540	1255 x 1500 x 1600	12 kW
FI 1250-63	63 L	350 x 300 x 600	1255 x 1500 x 1200	14 kW
FI 1250-84	84 L	350 x 300 x 800	1255 x 1500 x 1400	21 kW
FI 1250-120	120 L	500 x 400 x 600	1380 x 1600 x 1200	21 kW
FI 1250-140	140 L	350 x 400 x 1000	1255 x 1600 x 1600	21 kW
FI 1250-160	160 L	520 x 415 x 800	1380 x 1600 x 1660	24 kW
FI 1250-200	200 L	500 x 400 x 1000	1380 x 1600 x 1860	30 kW
FI 1250-280	280 L	700 x 500 x 800	1700 x 1700 x 1660	33 kW
FI 1250-350	350 L	700 x 500 x 1000	1700 x 1700 x 1660	33 kW
FI 1250-420	420 L	700 x 500 x 1200	1700 x 1730 x 1870	37 kW
FI 1250-490	490 L	700 x 700 x 1000	1700 x 1900 x 1660	40 kW
FI 1250-640	640 L	800 x 800 x 1000	1750 x 1950 x 1660	52 kW

Specifications subject to change. Photos for illustration purposes only

Air Circulating Furnaces 650°C

PO 650-P1

- Air circulating furnace for all applications.
- Robust construction made of bent plate.
- Interior in ceramic fibre and refractory bricks.
- Air circulation by a turbine to improve homogeneity.
- Battery of shielded electrical resistors.
- PID Axron Swiss digital temperature controller. Timer.
- CE marking and operating instructions.
- Delivered with furnace basket.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
PO 650-S-P1	7.1 L	168 x 320	810 x 1020 x 650	3.5 kW
PO 650-M-P1	19.9 L	250 x 405	800 x 1093 x 700	6.0 kW
PO 650-L-P1	64 L	377 x 570	1045 x 1485 x 890	9.0 kW

Cracked Amoniac Generator 950°C

GE 950

- Cracked ammonia generator for heat treatment, brazing and welding.
- Heated retort is insulated with ceramics.
- Working chamber surrounded by heating elements.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Ammonia cracking: at output, constant composition of 25% nitrogen and 75% hydrogen. For 1kg of ammonia, 2.7 m3 of strongly reducing protective gas is produced.

Model	**Ext. Dim.** (WxHxD)	**Max Flow**	**Nb of Outlets**	**Power**
GE 950-3	560 x 865 x 810	3 m^3 / hour	2	3 kW
GE 950-7	930 x 970 x 675	7 m^3 / hour	3	7 kW

Top-Hat Furnaces 900°C

FC 900

- Electric furnace for glass work
- Robust constructed made of bent plate. Hydraulic cylinders provide assisted opening.
- Exhaust vent on top
- Electrical coil resistors on furnace ceiling with quartz tube protection.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FC 900-38	38.4 L	400 x 240 x 400	750 x 490 x 610	2.4 kW

Elevator Furnaces 1100°C & 1400°C

LE 1100 & LE 1400

- Medium frequency fusion furnace with rising floor for rapid withdrawing.
- Mechanically welded frame.
- Interior in ceramic fibre and refractory bricks.
- Working chamber surrounded by heating elements.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
LE 1100-8	7.5 L	180 x 200 x 210	630 x 1220 x 810	2.0 kW
LE 1400-8	7.4 L	180 x 180 x 230	630 x 1220 x 810	4.5 kW

Car-Hearth Furnaces 1200°C

FM 1200

- Chamber furnace with mobile hearth (trolley on rails).
- Vertical lifting front door.
- Interior in ceramic fibre and refractory bricks.
- Exhaust vent on top.
- Coil resistors on ceramic tubes.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with removable ceramic sole.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FM 1200-27	27.4 L	280 x 280 x 350	590 x 790 x 700	4.5 kW
FM 1200-45	45 L	300 x 300 x 500	660 x 770 x 720	6.0 kW

High Temperature Furnaces 1700°C & 1800°C

MO 1700 - MO 1800

- Electric chamber furnace for all applications, high temperature.
- Robust construction made of bent plate. Vertical lifting front door.
- Interior in ceramic fibre and refractory bricks.
- Heating elements type MoSi2.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
MO 1700-2	2.5 L	120 x 140 x150	820 x 630 x 520	3.3 kW
MO 1700-4	4 L	140 x 140 x 200	820 x 630 x 520	5.0 kW
MO 1700-8	8.1 L	180 x 180 x 250	600 x 1350 x 640	8.0 kW
MO 1800-2	2.5 L	120 x 140 x 150	820 x 630 x 520	3.9 kW
MO 1800-4	4 L	140 x 140 x 200	820 x 630 x 520	5.7 kW
MO 1800-8	8.1 L	180 x 180 x 250	600 x 1350 x 640	9.0 kW

Specifications subject to change. Photos for illustration purposes only

Elevator Furnaces 1600-1800°C

LE 1600-1800

- Medium frequency fusion furnace with rising floor for rapid withdrawing.
- Welded chassis mounted on wheels.
- Interior in ceramic fibre and refractory bricks.
- Heating elements type MoSi2.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
LE 1600-8	8 L	200 x 200 x 200	620 x 1900 x 770	8 kW
LE 1700-8	8 L	200 x 200 x 200	620 x 1900 x 770	8 kW
LE 1800-8	8 L	200 x 200 x 200	620 x 1900 x 770	8 kW

High Temp Furnaces under controlled atmosphere 1600-1800°C

AT 1600-1800

- For work under protective gas (nitrogen, argon etc.).
- Welded chassis mounted on wheels.
- Interior in ceramic fibre and refractory bricks.
- Heating elements type MoSi2.
- Working with non-flammable gas (nitrogen, forming gas 95-5 etc.).
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
AT 1600-4	3.9 L	140 x 140 x 245	810 x 1800 x 1115	4.4 kW
AT 1600-12	12 L	200 x 240 x 250	930 x 1880 x 1115	9.0 kW
AT 1700-4	3.9 L	140 x 140 x 200	890 x 1820 x 1115	4.4 kW
AT 1700-12	12 L	200 x 240 x 250	930 x 1880 x 1115	9.0 kW
AT 1800-4	3.9 L	140 x 140 x 200	890 x 1820 x 1115	4.4 kW
AT 1800-12	12 L	200 x 240 x 250	930 x 1880 x 1115	9.0 kW

Titling Furnace 1050°C

KN 1050

- Small furnace with metal chamber that tilts into a quenching tank. For quenching or annealing applications, work under inert or flammable (optional) gas.
- Transferring of the parts from the furnace into the quenching tank, without contact with air. Parts recovery basket.
- Metallic housing is insulated from quenching basket.
- Working chamber surrounded by heating elements. Stainless steel tank for quenching liquid.
- Axron Swiss PID temperature controller.
- Delivered with ladle.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Oil Tank Vol.**	**Int. Dim.** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
KN 1050-40	0.68 L	40 L	70 x 20 x 98 / 300	600 x 700 x 600	2.0 kW
KN 1050-320	2.7 L	320 L	150 x 60 x 160 / 490	1350 x 1700 x 1185	4.0 kW

Tube Furnaces 1200°C, 1400°C, 1500°C & 1600°C

TU 1200, TU 1400, TU 1500 & TU 1600

- Tubular electric furnace, for all applications.
- Robust construction made of bent plate.
- Interior in ceramic fibre and refractory bricks.
- Working chamber surrounded by heating elements.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Heated length**	**Tube dim** (Ø x lenght)	**Ext. Dim.** (WxHxD)	**Power**
TU 1200-20-250	250 mm	20 x 500	630 x 510 x 380	1.0 kW
TU 1200-38-250	250 mm	38 x 500	630 x 510 x 380	1.3 kW
TU 1200-50-250	250 mm	50 x 500	630 x 510 x 380	1.3 kW
TU 1200-20-400	400 mm	20 x 750	630 x 510 x 380	1.3 kW
TU 1200-38-450	450 mm	38 x 750	630 x 510 x 380	1.8 kW
TU 1200-50-450	450 mm	50 x 750	630 x 510 x 380	1.5 kW
TU 1200-105-500	500 mm	105 x 750	630 x 510 x 380	2.5 kW
TU 1200-75-600	600 mm	75 x 750	720 x 710 x 430	1.9 kW
TU 1200-105-700	700 mm	105 x 1000	720 x 710 x 430	3.7 kW
TU 1200-75-800	800 mm	75 x 1000	920 x 710 x 430	3.5 kW
TU 1200-105-900	900 mm	105 x 1200	920 x 710 x 430	3.5 kW

Model	**Heated length**	**Tube dim** (Ø x lenght)	**Ext. Dim.** (WxHxD)	**Power**
TU 1400-20-180	180 mm	20 x 800	630 x 510 x 380	3.5 kW
TU 1400-38-180	180 mm	38 x 800	630 x 510 x 380	3.5 kW
TU 1400-50-180	180 mm	50 x 800	630 x 510 x 380	3.5 kW
TU 1400-20-250	250 mm	20 x 900	630 x 510 x 380	3.0 kW
TU 1400-38-250	250 mm	38 x 900	630 x 510 x 380	3.6 kW
TU 1400-50-250	250 mm	50 x 900	630 x 510 x 380	4.0 kW
TU 1400-50-450	450 mm	50 x 1000	720 x 710 x 430	4.0 kW
TU 1400-75-450	450 mm	75 x 1000	720 x 710 x 430	4.5 kW
TU 1400-105-450	450 mm	105 x 1000	720 x 710 x 430	5.5 kW
TU 1400-105-610	610 mm	105 x 1300	920 x 710 x 430	6.2 kW
TU 1400-50-610	610 mm	50 x 1300	920 x 710 x 430	5.2 kW
TU 1400-75-610	610 mm	75 x 1300	920 x 710 x 430	5.5 kW

Model	**Heated length**	**Tube dim** (Ø x lenght)	**Ext. Dim.** (WxHxD)	**Power**
TU 1500-38-180	180 mm	38 x 800	720 x 710 x 430	3.6 kW
TU 1500-50-180	180 mm	50 x 800	720 x 710 x 430	3.9 kW
TU 1500-50-250	250 mm	50 x 900	720 x 710 x 430	3.1 kW
TU 1500-50-450	450 mm	50 x 1000	720 x 710 x 430	4.5 kW
TU 1500-75-450	450 mm	75 x 1000	720 x 710 x 430	6.0 kW
TU 1500-50-610	610 mm	50 x 1300	920 x 710 x 430	6.0 kW
TU 1500-75-610	610 mm	75 x 1300	920 x 710 x 430	6.2 kW

Model	**Heated length**	**Tube dim** (Ø x lenght)	**Ext. Dim.** (WxHxD)	**Power**
TU 1600-38-250	250 mm	38 x 900	720 x 710 x 430	4.5 kW
TU 1600-50-250	250 mm	50 x 900	720 x 710 x 430	4.5 kW
TU 1600-50-450	450 mm	50 x 1000	720 x 710 x 430	5.0 kW
TU 1600-75-450	450 mm	75 x 1000	720 x 710 x 430	6.0 kW
TU 1600-50-610	610 mm	50 x 1300	920 x 710 x 430	7.0 kW

Specifications subject to change. Photos for illustration purposes only

Retort Furnaces under inert gas 650°C

PO 650-P2

- For work under non flammable protective gas (nitrogen, argon etc.).
- Robust construction made of bent plate.
- Interior in ceramic fibre and refractory bricks.
- Air circulation by a turbine to improve homogeneity within furnace in M and L sizes.
- Battery of shielded electrical resistors.
- PID Axron Swiss digital temperature controller. Timer.
- CE marking and operating instructions.
- Delivered with Furnace + retort + inert gas equipment + retort support.

Model	**Int. Vol.**	**Retort dim** (ØxH)	**Int. Dim.** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
PO 650-S-P2	2.8 L	110 x 296	168 x 320	1310 x 950 x 630	3.5 kW
PO 650-M-P2	8.8 L	185 x 295	250 x 405	1620 x 1093 x 700	6.0 kW
PO 650-L-P2	35.6 L	318 x 448	377 x 570	2400 x 1400 x 850	9.0 kW

Retort Furnaces under flammable gas 650°C

PO 650-P3

- For work under flammable gas (hydrogen, cracked ammonia, forming gas etc.).
- Robust construction made of bent plate.
- Interior in ceramic fibre and refractory bricks.
- Air circulation by a turbine.
- Battery of shielded electrical resistors.
- PID Axron Swiss digital temperature controller. Timer.
- CE marking and operating instructions.
- Delivered with retort with burner + flammable gas equipment + retort support.

Model	**Int. Vol.**	**Retort dim** (ØxH)	**Int. Dim.** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
PO 650-S-P3	2.8 L	110 x 296	168 x 320	1310 x 950 x 660	3.5 kW
PO 650-M-P3	8.8 L	185 x 355	250 x 405	1730 x 1700 x 770	6.0 kW
PO 650-L-P3	35.6 L	318 x 448	377 x 570	2400 x 1400 x 1030	9.0 kW

Salt Bath Furnaces 1000°C

SE 1000

- Salt bath furnace for quenching up to 1000°C.
- Access to crucible from top, manual cover closing.
- Interior in ceramic fibre and refractory bricks.
- Electrical coil resistors all around the crucible. Resistors mounted on ceramic tubes.
- Thermocouple outside of crucible.
- CE marking and operating instructions.
- Delivered without crucible, customised manufacturing.

Model	**Int. Vol.**	**Crucible Dim** (Ø x h)	**Ext. Dim.** (WxHxD)	**Power**
SE 1000-20	19 L	Ø250 x 400	890 x 1300 x 1030	14 kW
SE 1000-45	50 L	Ø400 x 400	1020 x 1330 x 1190	21 kW
SE 1000-90	99 L	Ø530 x 450	1160 x 1400 x 1340	27 kW
SE 1000-200	154 L	Ø530 x 700	1160 x 1660 x 1340	50 kW
SE 1000-300	244 L	Ø720 x 600	1360 x 1600 x 1570	60 kW
SE 1000-350	285 L	Ø720 x 700	1360 x 1680 x 1570	66 kW
SE 1000-500	366 L	Ø720 x 900	1360 x 1880 x 1570	74 kW
SE 1000-600	407 L	Ø720 x 1000	1360 x 1970 x 1570	84 kW

Glass Furnaces 1000°C

FF 1000

- Electric furnace for glass work.
- Bell furnace has assisted opening by hydraulic cylinders.
- Interior in ceramic fibre and refractory bricks.
- Exhaust vent on top.
- Spiral wound resistors on the roof of the furnace.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.

Model	**Int. Vol.**	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Power**
FF 1000-100	N16316	100 L	400 x 500 x 500	8.0 kW
FF 1000-140	N16318	140 L	400 x 700 x 500	10 kW
FF 1000-180	N16319	180 L	400 x 900 x 500	10 kW
FF 1000-260	N16320	260 L	400 x 1100 x 600	12 kW
FF 1000-340	N16321	340 L	400 x 1200 x 700	15 kW
FF 1000-420	N16322	420 L	400 x 1500 x 700	18 kW
FF 1000-480	N16323	480 L	400 x 2000 x 600	18 kW
FF 1000-560	N16324	560 L	400 x 2000 x 700	22 kW

Retort Furnaces under Inert Gas 1050°C

CP 1050-P1

- For work under non flammable protective gas (nitrogen, argon etc.).
- Semi-automatic jib crane. Flat-bottomed airtight retort.
- Interior in ceramic fibre and refractory bricks.
- Working chamber surrounded by heating elements.
- Working with non-flammable gas (nitrogen, forming gas 95-5 etc.).
- PID Axron Swiss digital temperature controller. Timer.
- CE marking and operating instructions.
- Delivered with Furnace + retort + inert gas equipment + retort support (P2 version includes a forced cooling device of the retort).

Model	**Int. Vol.**	**Int. Dim** (ØxH)	**Ext. Dim.** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
CP 1050-3-P1	1.3 L	Ø108 x 145 mm	Ø150 x 190 mm	900 x 750 x 400	2 kW
CP 1050-3-P2	1.3 L	Ø108 x 145 mm	Ø150 x 190 mm	900 x 750 x 400	2 kW

Retort Furnaces under Flammable Gas 1050°C

CP 1050-P3

- For work under flammable gas (hydrogen, cracked ammonia, forming gas etc.).
- Semi-automatic jib crane. Flat-bottomed airtight retort.
- Interior in ceramic fibre and refractory bricks.
- Working chamber surrounded by heating elements.
- Nitrogen, hydrogen or gas mixture: forming gas, cracked ammonia.
- PID Axron Swiss digital temperature controller. Timer.
- CE marking and operating instructions.
- Delivered with Furnace + retort + flammable gas equipment + retort support + forced cooling device of the retort.

Model	**Int. Vol.**	**Int. Dim** (ØxH)	**Ext. Dim.** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
CP 1050-3-P3	1.3 L	Ø108 x 145mm	Ø150 x 190mm	900 x 750 x 400	2.1 kW

Specifications subject to change. Photos for illustration purposes only

Induction Melting Furnace 1350°C

FD 100

- Medium frequency fusion furnace for all applications.
- Mechanically welded frame.
- Interior in ceramic fibre and refractory bricks.
- Optimum energy efficiency (≥95%), reduced consumption.
- Digital microprocessor.
- CE marking and operating instructions.
- Delivered with 1 crucible, 1 handling tongs.
- -M, single-phase 230 VAC.

Model	**Int. Vol.**	**Ext. Dim.** (WxHxD)	**Power**
FD 100-3	2.8 L	430 x 905 x 450	4.5 kW
FD 100-3-M	2.8 L	430 x 905 x 450	4.5 kW
FD 100-5	8.6 L	575 x 905 x 580	7.0 kW
FD 100-5-M	8.6 L	575 x 905 x 580	7.0 kW
FD 100-9	13.5 L	575 x 905 x 580	9.5 kW
FD 100-9-M	13.5 L	575 x 905 x 580	9.5 kW
FD 100-12	17 L	575 x 905 x 580	12 kW

Melting Furnaces 1100°C

KP 1100

- Removable crucible furnace for melting of non-ferrous metals.
- Access to crucible from top, manual cover closing.
- Interior in ceramic fibre and refractory bricks.
- Working chamber surrounded by heating elements.
- Digital PID temperature controller.
- CE marking and operating instructions.
- Delivered with 1 crucible handling tongs, 1 crucible with pouring lip.

Model	**Int. Vol.**	**Crucible dim** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
KP 1100-1	0.11 L	Ø41 x 110	230 x 340 x 220	0.7 kW
KP 1100-3	0.33 L	Ø52 x 150	270 x 420 x 275	1.4 kW

Titling Crucible Furnaces 1200°C

CB 1200

- Tilting crucible furnace for melting and casting of non ferrous metals.
- Access to crucible from top, manual cover closing. Tilting by hydraulic jacks.
- Interior in ceramic fibre and refractory bricks.
- Electrical coil resistors all around the crucible.
- Thermocouple outside of crucible.
- CE marking and operating instructions.
- Delivered with hydraulic pump.

Model	**Int. Vol.**	**Crucible dim** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
CB 1200-165	18 L	Ø275 x 370	1610 x 1415/2100 x 1360	14 kW
CB 1200-430	48 L	Ø527 x 550	1500 x 1480/2700 x 1480	27 kW
CB 1200-1000	110 L	Ø616 x 800	1860 x 1850/3100 x 1590	50 kW

Fixed Crucible Melting Furnace 1200°C

CR 1200

- Fixed crucible furnace for melting.
- Access to crucible from top, manual cover closing.
- Interior in ceramic fibre and refractory bricks.
- Electrical coil resistors all around the crucible.
- Thermocouple outside of crucible. Axron Swiss PID temperature controller.
- CE marking and operating instruction.

Model	**Int. Vol.**	**Crucible Dim.** (Ø x h)	**Ext. Dim.** (WxHxD)	**Power**
CR 1200-65	9	Ø254 x 400	890 x 1300 x 1030	14
CR 1200-150	23	Ø397 x 394	1020 x 1330 x 1190	21
CR 1200-300	46	Ø527 x 451	1160 x 1400 x 1340	27
CR 1200-650	80	Ø527 x 710	1160 x 1660 x 1340	50
CR 1200-1000	127	Ø720 x 600	1360 x 1600 x 1570	60
CR 1200-1150	145	Ø720 x 670	1360 x 1680 x 1570	66
CR 1200-1600	167	Ø720 x 885	1360 x 1880 x 1570	74
CR 1200-2000	222	Ø720 x 975	1360 x 1970 x 1570	84

High Temperature Melting Furnaces 1350°C

RH 1350

- Removable crucible furnace for melting or maintaining in melted state of non-ferrous metals. Handling the crucible with 1 pair of tongs.
- Access to crucible from top, manual cover closing.
- Interior in ceramic fibre and refractory bricks.
- Electrical coil resistors on 4-6 sides of the furnace.
- Digital display PID Axron Swiss temperature controller.
- CE marking and operating instructions.
- Delivered with 1 crucible handling tongs, 1 crucible with pouring lip.

Model	**Int. Vol.**	**Crucible Dim. (Ø x h)**	**Ext. Dim.** (WxHxD)	**Power**
RH 1350-5	0.75 L	Ø114 x 141 mm	530 x 900 x 500	4.9 kW
RH 1350-10	1.2 L	Ø130 x 165 mm	560 x 950 x 500	7.4 kW

Melting Furnaces 1280°C

CA 1280

- Removable crucible furnace for melting or maintaining melted state of non-ferrous metals. Handling the crucible with 1 pair of tongs.
- Access to crucible from top, manual cover closing.
- Interior in ceramic fibre and refractory bricks.
- Axron Swiss PID temperature controller.
- CE marking and operating instructions.
- Delivered with 1 crucible, 1 pair of tongs and 1 crucible levelling sole.

Model	**Int. Vol.**	**Crucible dim** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
CA 1280-6	5 L	220 x 260	600 x 620 x 670	4.5 kW

Specifications subject to change. Photos for illustration purposes only

Air Cooler

RE 100

- Rapid cooling for refractory steel ladle to cool items, treated under protective gas, avoiding contact with air.
- Metal construction. Ventilator within housing. Closing cover to conduct hot air towards rear.
- CE marking and operating instructions.

Model	**Int. Dim** (WxHxD)	**Ext. Dim.** (WxHxD)	**Max Flow**	**Power**
RE 100-1	220 x 150 x 350	505 x 1100 x 670	1500 m^3 / hour	1.1 kW

Flammable Gas Safety Kits for Muffle Furnaces

KG 100

- Flammable gas safety kit for muffle furnaces. Pack for protective gas piloting for metal muffle furnaces. Ideal for RetroFit and safety compliance of old furnaces.
- Built in 2 parts. The gas safety unit includes the control, the electrical and pneumatic equipment and the burner.
- CE marking and operating instructions.
- Nitrogen, hydrogen or gas mixture: forming gas, cracked ammonia.

Model	**SOLO Furnaces**	**Borel Furnaces**
KG 100-C - Kit for retort/muffle of 4.5 liters	-	Cube 400
KG 100-S - Kit for retort/muffle of 4.5 liters	221-15/25	4.5/650S
KG 100-M - Kit for retort/muffle of 12.5 liters	221-15/35	17/650M
KG 100-L - Kit for retort/muffle of 48 liters	221-15/50	48/650L

Quenching Tanks 90°C

BA 90

- Quenching tank for stirring oil quenching.
- Cover, removable basket with handles for quenching and draining of the parts.
- Metallic housing is insulated from quenching tank.
- 2 immersed heating elements. Stirring device for optimal homogeneity.
- CE marking and operating instructions.
- Delivered with furnace basket.

Model	**Int. Vol.**	**Int. Dim.** (ØxH)	**Ext. Dim.** (WxHxD)	**Power**
BA 90-90	90 L	255 x 300 x 320	525 x 1000 x 800	3.5 kW

Specifications subject to change. Photos for illustration purposes only

Electronic Welding Table

SO 100

- For delicate equipment, jewellery instruments, clock mechanisms, electronic components, cutlery, optics.
- Can be used to assemble most parts in silver.
- Fine adjustment system to adapt the pulses.
- Highly sensitive mobile trigger pedal.

Heating Plate

PC 200

- Heating plate in rectified duraluminium, covered with PTFE (Polytetrafluoroethylene, Teflon). Exterior housing in stainless steel.
- Heating components distributed throughout the heating surface.
- PID temperature controller.

Quenching tanks 200°C

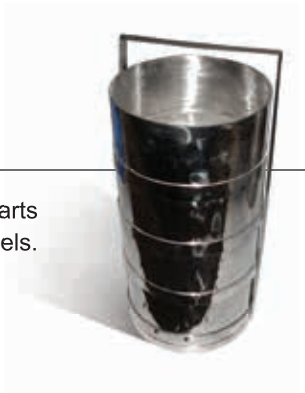
BT 200

- Metallic housing insulated from quenching tank.
- Heating components immersed in Incoloy.
- Digital temperature controller.

Crucibles

- Crucibles for holding, melting or casting non-ferrous metals.
- Manipulation with tongs.
- Can be used in standard chamber furnaces.
- Various dimensions on demand.

Loading Baskets



- Wire mesh loading basket for holding parts in furnace. Numerous standard models. Can be stacked.

Protections

Axron Temperature Controllers

ECO300

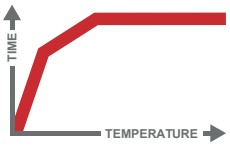
The controller is used to set the desired furnace (or oven) temperature. The furnace heats up to this temperature then heats intermittently to maintain it. With a programmable controller, the desired temperature can be associated with the time desired to reach it.

• Dual display, measured temperature, target temperature.
• Memorisation of set temperatures and programmes.

Type	A	B	C	D	E	F
Function	Single-loop controller	Controller with ramp	Programmable controller	Programmable controller	Programmable controller	Programmable controller
Number of programs	-	-	1	10	30	10
Available size	Several	Several	48x96	48x96	96x96	96x96

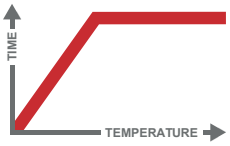
Type **A**

Controller : The AXRON ECO 300Y-N controller is simple to use. Temperature rise/fall by the action of incrementing/decrementing arrows. Once the temperature is entered, the furnace heats up to reach it and maintain it.
• Advanced PID.



Type **B**

Controller with ramp : Temperature rise/fall by the action of incrementing/decrementing arrows. Once the temperature is entered, the furnace heats according to a ramp to reach it and maintain it.
• Advanced PID or standard PID.
• Ramp function.

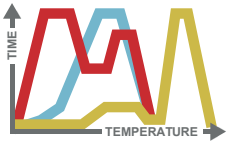


Type **C**

3 segments programmable controller : Programmable controller AXRON ECO 308H-P1, programming a waiting time, a ramp and a dwell.
• Advanced PID or standard PID.
• Number of programs: 1
• Number of segments per program: 3
• A waiting time, a ramp and then a dwell.

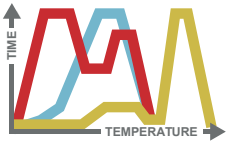
Type **D/E**

150 / 450 segments programmable controller : Programmable controller with 20 / 30 recordable programs of 15 steps. The programs can generate ramps and dwells.
• Advanced PID.
• Number of programs: 10 or 30.
• Number of segments per program: 15.
• Ramp or dwell function for each segment.
• Delayed start.



Type **F**

500 segments programmable controller with paperless recorder and touchscreen:
• Flexible through modular hardware.
• Number of programs: 10.
• Simple recorder integrated.



Axron Touchscreen Temperature Recorders

ECO3000 Series

Paperless Secure and Adaptable Data Recording.
To monitor and optimize energy consumption, monitoring and analysis of production performance (Manufacturing Execution System) and to manage predictive maintenance. Each instrument has an intuitive touch screen display to enable operators to clearly view process data.

Model	ECO-3057	ECO-3121
Screen type	5.7"	12,1"
Communication	Modbus RTU/TCP Siemens - S7 TCP	Modbus RTU/TCP Siemens S7/TCP
Inputs channels (min/max)	4/16	4/32
Equipments / Groups (max)	4 / -	8/32
Connection with ERP	Yes	Yes
Chassis support for desk		REC-TL-042
Kit for wall mounting		REC-TL-043

Features :
- Touchscreen LCD display, 5.7'' or 12.1''.
- RS485, TCP/IP and USB.
- Possible connection of bar-code readers.
- Local and network printing.
- Audit trail with time stamp (21CFR P11 and Nadcap).
- Modbus TCP and RTU master and slave.
- TCP/IP communication with Siemens S7 (TCP/IP).
- FTP client and server.
- Fanless & slim design.
- Custom graphic display.
- Adaptive recording
- Batch function : start-stop program function.
- Concept of equipment, data groups.
- Electronic signatures.
- Time synchronization (SNTP).
- Event inputs.
- Web server.
- Totalizers, counters, timers.
- Technology functions available (%C, kN, kO, ...)
- User functions easy to attach.

Benefits :
- User-friendly and intuitive.
- Extensible and modular hardware/software.
- Open, easily integrated with ERP.
- 100% secure data.

Options :
- Back-up and remote data archiving.
- Integration with ERP.
- Remote visualization and data archive.
- Specific screens for capturing production monitoring information.
- Barcode reader.

Axron Temperature Recorders

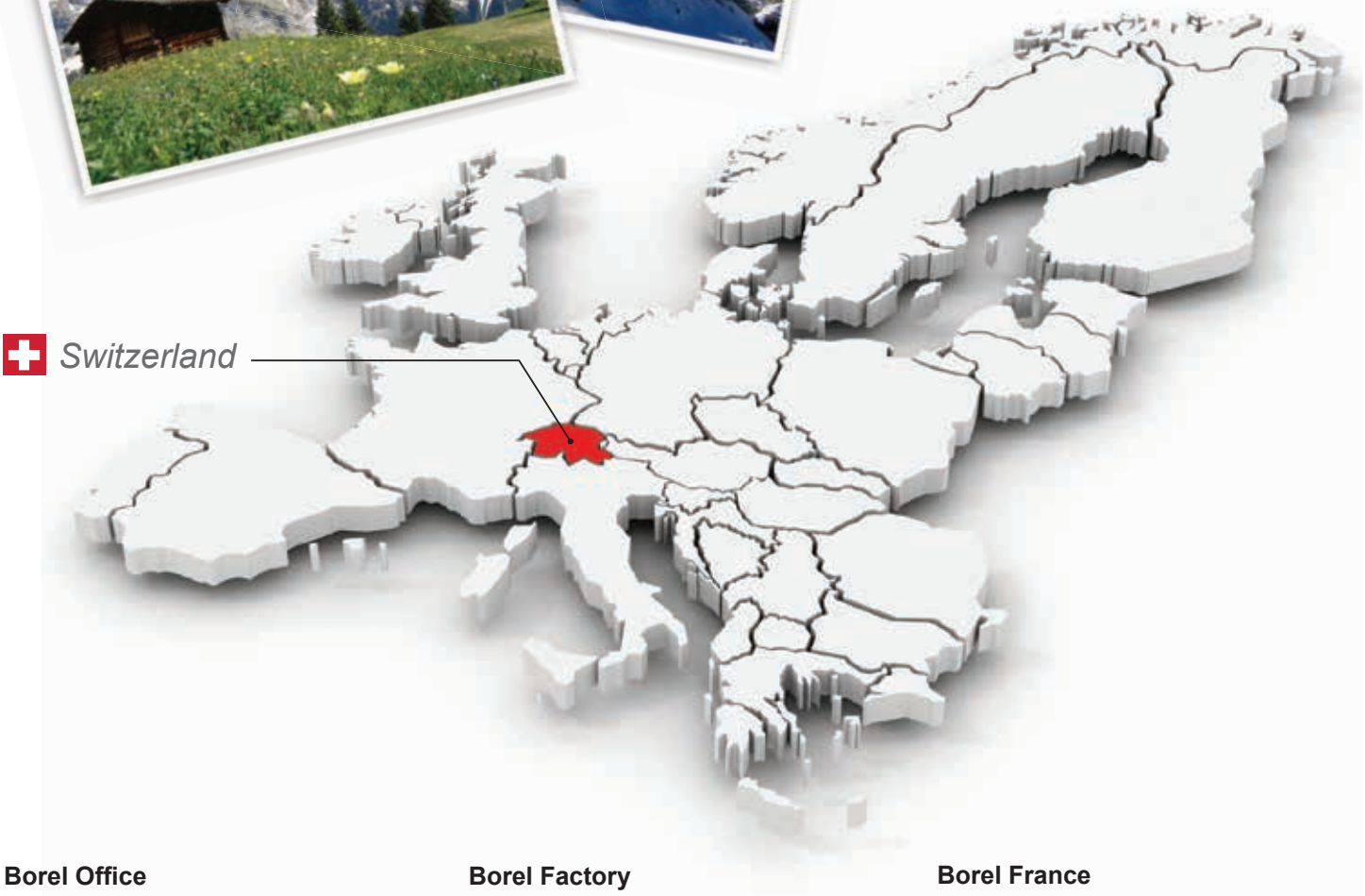
ECO3500 Series

Paperless Secure and Adaptable Data Recording.
Data can be visualized as measurement curves, as a bar graph or in alphanumerical form. Powerful PC programs are available for analyzing and evaluating the archived data.

Model	ECO-3500-J-B
Screen type	5.5" TFT color screen
Communication	Modbus, TCP, IP
Inputs channels (min/max)	3/18

Features :
- Interface: Ethernet, USB, RS232/485, Profibus (option)
- Possible connection of bar-code readers.
- Easy operation by control knob.
- Data saving: USB sticks, Memory card.
- Integrated Web server.
- Batch control.
- Automatic read-out data trough Communications Software (option).

Borel
Standard Furnaces & Ovens
Switzerland



Borel Office

Borel Swiss SA

Place Pury, 3
CH-2000 Neuchâtel - Switzerland

Tel. +41 32 756 64 00
mail@borel.eu - www.borel.eu

Borel Factory

Borel Swiss SA

Grandes-Vies, 25
CH-2900 Porrentruy - Switzerland

Tel. +41 32 756 64 00
mail@borel.eu - www.borel.eu

Borel France

Copatech SAS

213 rue Pierre Marti
F-25460 Etupes - France

Tel. +33 (0)3 81 91 83 17
borel@copatech.eu - www.borelswiss.fr

Reseller :