



General Brochure



Furnaces and Ovens manufacturers from Barcelona, Spain since 1946





Providing heating solutions since 1946 75th Anniversary

Manufactured in
Barcelona, Spain
Since 1946

More than 75 years of experience

- Manufactured under **CE**
- 2 years warranty
- After sales service
- Calibration Certificates
- Maintenance contracts

FORNS HOBERSAL, S.L. is a family-owned company founded in 1946 and located in Caldes de Montbui, 30 km from Barcelona. A leader in the manufacture of furnaces and ovens, HOBERSAL provides high-quality equipment for laboratories and industries, with a presence in over 70 countries through a network of carefully selected distributors chosen for their technical expertise and customer support.

Committed to innovation, we ensure advanced technology and reliable technical assistance, backed by decades of experience. Explore our catalogs to discover a wide range of equipment designed to meet the highest standards.



HOBERSAL

FURNACES & OVENS TECHNOLOGY

APPLICATIONS



Laboratory



Industry



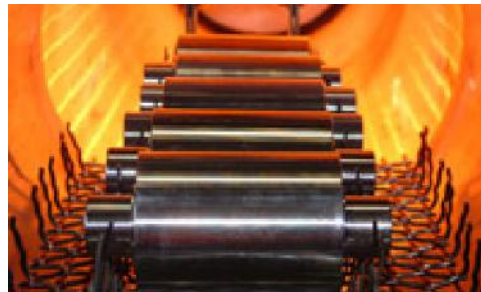
Aerospace



Research



Automotive



Heat Treatment



Advanced Ceramic



Metal/Ceramic sintering (3D)



Jewelry



Dental



Arts and Crafts



Incineration

- Economy chamber furnace drop down & side door 1000°C – 1200°C
- Muffle furnaces vertical parallel lift door 1000°C - 1200°C - 1300°C - 1400°C
- Muffle furnaces pantograph side door 1000°C - 1200°C - 1300°C-1400°C
- Muffle furnaces up to 1600°C (Kanthal SiC)
- High temperature chamber furnaces 1650°C - 1800°C - 1900°C (MoSi2 Kanthal Super 1800 and 1900)
- Bottom loading furnaces
- Ashing and burn - out furnaces
- Horizontal tube furnaces from 1200°C to 1900°C
- Vertical tube furnaces from 1200°C to 1900°C
- Split tube furnaces (vertical - horizontal)
- Three and five zones tube furnaces (Up to 12 zones)
- Vacuum tube and muffle furnaces
- Rotating tube furnaces
- Portable thermocouple calibration furnaces
- Dewaxing furnaces
- Cupellation furnaces - Bogie heath furnaces
- Vacuum muffle furnaces
- Continuous furnaces
- Gradient furnaces
- Universal tube furnaces with stand for horizontal or vertical operation
- Ovens to 300°C - 500°C - 600°C - 800°C
- Crucible furnaces (Static or Tilting)
- Vacuum ovens
- Accessories in a broad assortment



MF Series

From 3L to 40 litres
1000°C-1200°C - 1300°C -1400°C
Vertical lift door
4 heated sides



PR Series

From 3L to 40 litres
1000°C-1200°C - 1300°C -1400°C
Pantograph side door
4 heated sides



GB Series

Economic chamber furnace
From 1,3,7,10 and 15 litres
1200°C
Side door
2 heated sides



HD Series

Economic chamber furnace
From 1.6 to 40 litres
1200°C
Side door and drop down door
3 heated sides



JMM (Economical Series)

High Temp. Muffle furnace
1,3 and 6 litres
Temperature 1600°C
SiC Kanthal elements



JM Series

High Temp. Muffle furnace
From 3L to 30 litres
Temperature 1600°C
SiC Kanthal elements



XG Series

High Temp. Muffle furnace
From 3L to 30 litres
Temperatures from 1650°C up to 1900°C
Vertical lift door
MoSi2 Kanthal super elements



ST11 - ST100
Universal tube furnaces
 Max. Temperature 1200°C
 Heated length: 200 to 600mm
 Diameters: 20mm to 120mm



ST SP series
Split tube furnaces
 Max. Temperature 1200°C
 Heated length: 200 to 2000mm



TR series
Vertical split tube furnaces
 Max. Temperature 1300°C
 Heated length: 50 to 2000mm
 Diameters: 20mm to 225mm



HTF SP
Vertical / horizontal tube furnaces
 Temperature 1600°C
 Heated length: 200 to 3000mm
 Diameters: 20mm to 450mm



HTF series
Universal tube furnaces
Horizontal or vertical operation
 Max. Temperature 1600°C
 Heated length: 200 to 2000mm
 Diameters: 20mm to 450mm



ST16SC series
High temperature furnaces
 Max. Temperature 1600°C
 Heated length: 200 to 600mm
 SiC Kanthal elements
 Diameters: 20mm to 225mm



ST16 / 18 / 19 series
High temperature tube furnaces
 Temperature 1650°C to 1900
 Heated length: 200 to 600mm
 MoSi2 Superkanthal elements
 Diameters: 20mm to 225mm



ST VC series (Vertical)
High temperature tube furnaces
 Temperature 1650°C to 1900°C
 Heated length: 200 to 600mm
 MoSi2 Superkanthal elements
 Diameters: 20mm to 225mm

ACCESSORIES



Stainless steel water cooled vacuum flanges
gas inlet and outlet, vacuum entry DN15/ 25(up to x10-5 mbar) Custom design



Leybold - Vacuum kit up to x10-2 mbar,
vacuum meter and complete set of accessories



Leybold - Vacuum kit up to x10-5 (vacuum pump + turbo station + vacuum meter integrated) + complete set of accessories



Gas supply system 1
Automatic flow meters



Gas supply system 2
Manual flow meters



Quartz tubes, Alumina tubes
1400°C to 1800°C and APM



Ceramic plugs



Mass Flow Controllers (MFC)
with Modbus (Optional)



Gas reactive safety system
Hydrogen (H₂) atmospheres



Heat radiation Shields

HEAT TREATMENT

3D additive manufacturing and sintering

VACUUM AND MODIFIED ATMOSPHERE FURNACES

Vacuum and modified atmosphere furnaces PR-V Series

These furnaces feature gas-tight and vacuum-tight hot-wall retorts, making them ideal for heat treatment and sintering processes that require a controlled protective or reactive gas atmosphere. They are capable of operating under slight overpressure, vacuum conditions down to 10^{-2} mbar, and high vacuum levels as low as 10^{-5} mbar. The compact design allows for vacuum heat treatment applications up to 1200 °C, covering the full temperature range. The furnace chamber is equipped with a sealed, gas- and vacuum-tight retort, which includes water-cooling mechanisms around the door and front frame to safeguard the specialized sealing system. Additionally, with appropriate safety features, these furnaces are suitable for use with reactive gases like hydrogen, thanks to their integrated gas-reactive safety system.

Suitable for metal and ceramic sintering for 3D printing, implants, welding... any heat treatment that requires the absence of oxygen to avoid oxidation.

Special applications such as inert debinding or sintering processes.

Custom specifications

1. MFC's
2. **Hobersal Control Center (HCC)**
3. Vacuum equipment x10-2mbar and x10-5mbar
4. Fast cooling system
5. Gas reactive safety system (Hydrogen)
6. Chiller
7. Electro magnetic closing
8. Dew-point
9. O2 sensors



Hobersal Control Center (HCC)



INDUSTRIAL FURNACES



CRN Series
From 42litres to 512 litres
Temp. from 1600°C to 1900°C
Sintering applications



HCV Series
From 56 litres to 2000 litres
Temp. from 1200°C to 1400°C
Heat treatment applications



ATF Series (Static)
Fast cooling
Temp. up to 1150°C
Tempering and annealing applications



HB Series (Tilting)
Fast cooling
Temp. up to 1150°C
Tempering and annealing applications



HCV CCH Series
Retort furnaces
Temp. up to 1150°C
Heat treatment under controlled atmosphere



HBC Series (Continuous)
Conveyor belt furnac
Temp. up to 1150°C
annealing, brazing, enameling, glass sealings



HCV Series
Loading and unloading kits

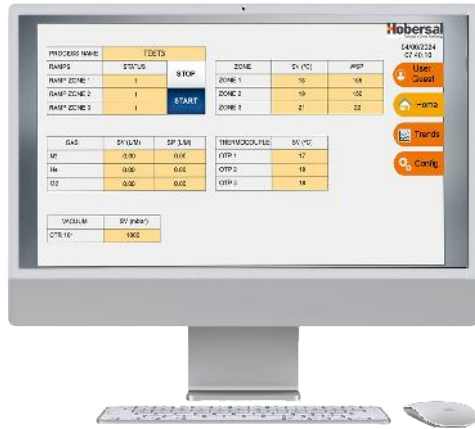


Industrial Incinerators
Electric or gas fired



NEW PROCESS CONTROL AND DOCUMENTATION

NEW
PRODUCTS



Hobersal Control Center (HCC)

Standard features

- Central user interface with modern design
- Centralized overview and operation
- Convenient program management with 10 programmes of 24 segments
- Simple and intuitive operation of the PC user interface
- Access management with 2 user levels and as many users as required
- Heating and cooling ramp control
- 3 independent zones
- Vacuum mbar and overpressure visualization
- Control of MFC's in L/min and visualization
- Possibility to specify start times for pre-planning of heat treatment cycles
- Real-time visualization of current furnace operation
- Data download
- Report function for process evaluation as PDF or printout



Touch Screen controller EasyControl 10+

Standard features

- Touch Panel 4.3"
- Intuitive Operation (Easy Programming)
- Ramp programmer 8 programs (8 steps – ramp time + dwell)
- Manual mode
- Real time visualization – Clear graphical representation of temperature curves)
- Recording process curves onto a USB device in .csv format
- Timer (Delayed start)
- Alarm
- Autotuning function
- Smart control via Wi-Fi for phones, tables or PCs (Optional)

SPECIAL APPLICATIONS



HOB series
Bottom loading furnaces
Max. Temperature 1900°C
Vacuum, controlled atmosphere
Sintering applications



PR - C Series
Cupellation furnaces
Max. Temperature 1200°C
Volumes: 3L to 512L
Gold assay and cupellation



PR + Annealing boxes
Max. Temperature 1200°C
Volumes: 3L to 512L
Controlled atmosphere



MF-TGA (Loss of ignition)
Thermo Gravimetric Analysis
Max. Temperature 1200°C
Volumes: 3L to 30 L



Crucible furnaces
Max. Temperature 1900°C
Electric or gas fired



Incinerators
Max. Temperature 1300°C
Gas fired / Electric
Medical and industrial waste

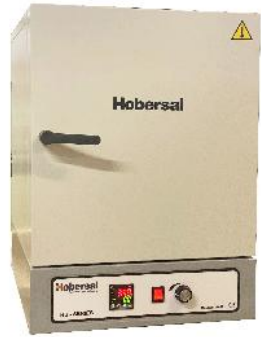


Graphite furnaces
Max. Temperature 2.200°C
Vacuum and modified atmosphere
Sintering applications



Double door furnaces
Max. Temperature 1400°C
Custom dimensions

LAB. AND INDUSTRIAL OVENS



HS - CF
Laboratory Oven
Max. Temperature 300°C
Volumes: 20L to 720 litres



EHT
Industrial Oven
Max. Temperature up to 800°C
Volumes: 13L to 1000 litres



Industrial Ovens
Up to 300°C
Walk-in type
Up to 12.000 litres



High temperature ovens
High vacuum up to x10-6 mbar
Up to 600°C
Custom dimension



Vacuum ovens
Max. vacuum up to x10-2mbar
Up to 200°C
From 20 litres to 512 litres

SPECIAL APPLICATIONS



PR + Afterburner
 From 3L to 30 litres
 1000°C, 1200°C, 1300°C, 1400°C
 4 heated sides
 Ashing applications



PR Fast Series
 From 3L to 30 litres
 1000°C-1200°C - 1300°C -1400°C
 Fast and controlled cooling



HM Series
 Dewaxing furnaces
 Up to 1200°C



HCV - HIE
 Electric Incinerators
 Up to 1000°C
 Urban and industrial waste



Hobersal
 Professional Electric Technology

XB Series
 From 13L to 2000 litres
 From 1150°C to 1400°C
 Heat treatment and Industrial pottery



TCF
Tilting Crucible furnaces
 Melting applications
 Temperatures up to 1600°C
 Electric or gas fired



Pottery furnaces
 Up to 1300°C
 Arts and crafts



Rotary tube furnaces
 Batch and continuous operation
 Up to 1500°C

CUSTOMIZED FURNACES



HCV AC Series
Air Forced Circulation furnace
 Max. Temperature 1000°C
 According AMS2750E



HCV42/13 3CX
Heat treatment Furnace
 Max. Temperature 1300°C
 3 chamber in 1



ST16115603Z - Tube furnace
 Vacuum up to x10-2mbar
 3 MFC's
 1600°C - 3 heated zones
HCC (Hobersal Control Center)



TR15XL
Vertical and Horizontal operation
Automatic Opening
 Beams testings



HCVSeries
Pneumatic lift door
 Max. Temperature 1400°C
 Volumes: 54l to 2.000L



Industrial Hot plates
6 heated zones
 Max. Temperature 600°C
 Heavy loads



HTF Customized
Vertical and split tube furnaces
According reactor dimensions
 Max. Temperature 1150°C



Pharma Oven HS270CF 2D
Double door
 Max. Temperature 300°C
 Clean room
 According 21CFR Part 11

PROCESS CONTROL AND DOCUMENTATION



The Hobersal Control Centre (HCC) offers a PC based control system as an ideal extension to control vacuum, modified atmosphere, MFC's as well as data logging via USB and real time monitoring. Efficient and intuitive system, meeting the highest demands as in automotive, aviation, sintering sectors



Hobersal EasyControl 10+ Touch Screen Controller 4,3" Ramp programmer (8 programs – 16 steps), Real time visualization, Clear graphical representation of temperature curves, Recording of process curves onto a USB device in .csv format, Smart control via Wi-Fi for phones, Pcs and Tablets



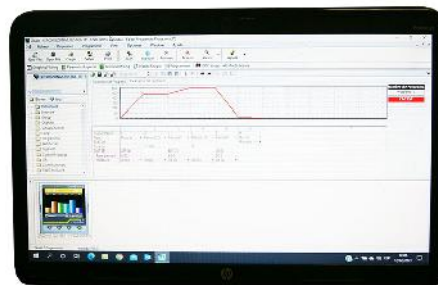
Eurotherm EPC3016
10 progs - 24 segments
Ethernet connection



Eurotherm EPC3004
10 progs - 24 segments
Suitable for Vacuum and controlled atmosphere furnaces
Ethernet connection



Fuji PXF-4
Ramp programmer
Up to 64 segments



Eurotherm Itools Software
100% control from by PC
Programable controller and data logger
Curves downloadable in CSV Excel



Eurotherm Nanodac
Programmer/Recorder
100 progs - 25 segments
According AMS2750 and 21CFR
Ethernet connection



Fuji PXE-4
Digital controller
Suitable for OTP

ACCESSORIES / SPARE PARTS



Forced cooling systems



Graphite boxes



Heat resistant gloves 900°C



Crucible tongs 450mm



Forced exhaust ventilation and chimneys



Ceramic and steel racks and plates



Aluminised Equipment



Cooling tables



All kind of crucibles



All kind of working tubes



Vacuum and controlled atmosphere SS flanges x10-5 mbar



Heating elements Kanthal MoSi2 and Sic



Vacuum kits x10-2mbar and x10-5 mbar

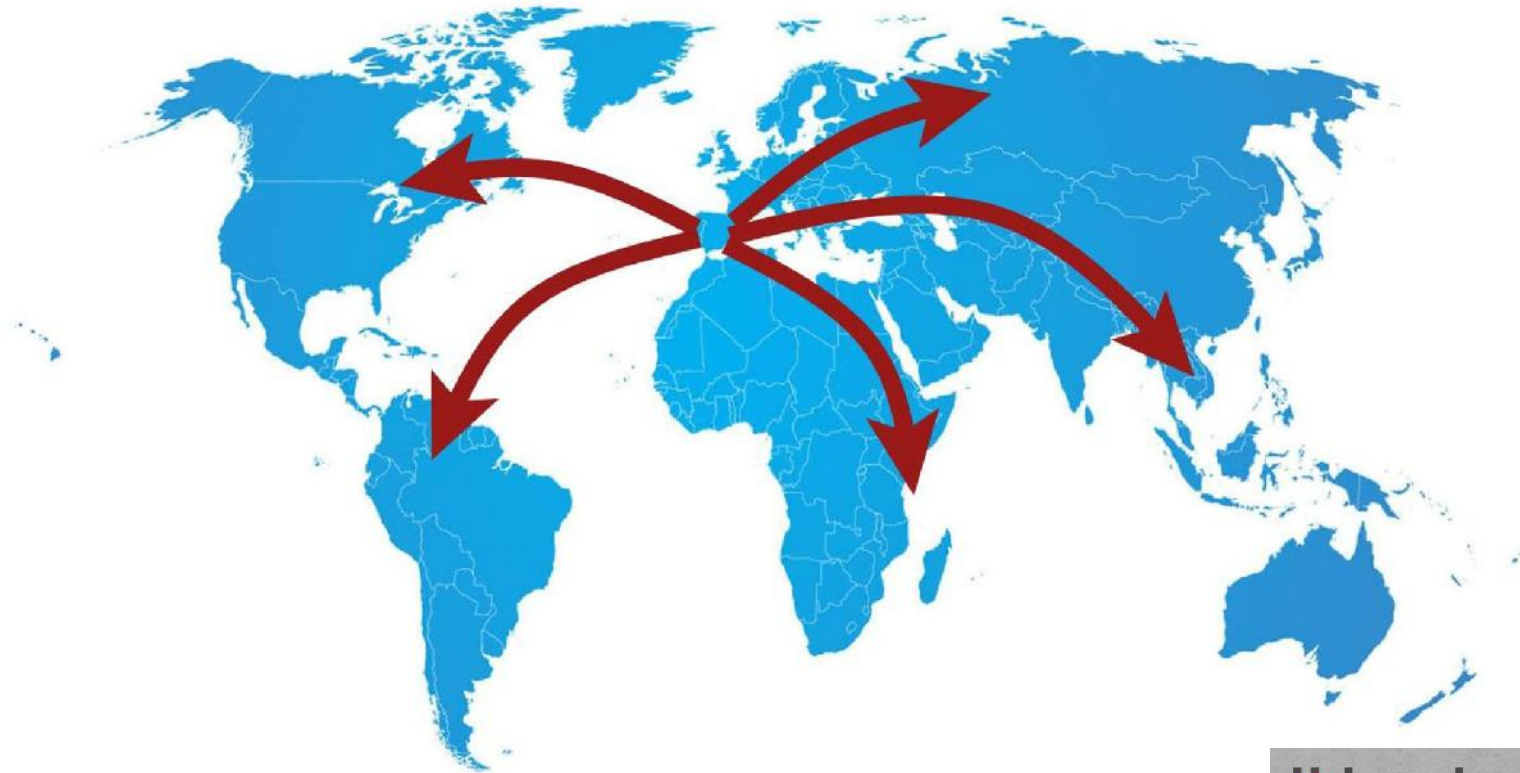


Annealing and nitriding boxes




All kind of thermocouples

and more, ask for our full assortment!!!



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FURNACES & OVENS TECHNOLOGY

30°C - 2000°C · 1L - 2000L

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