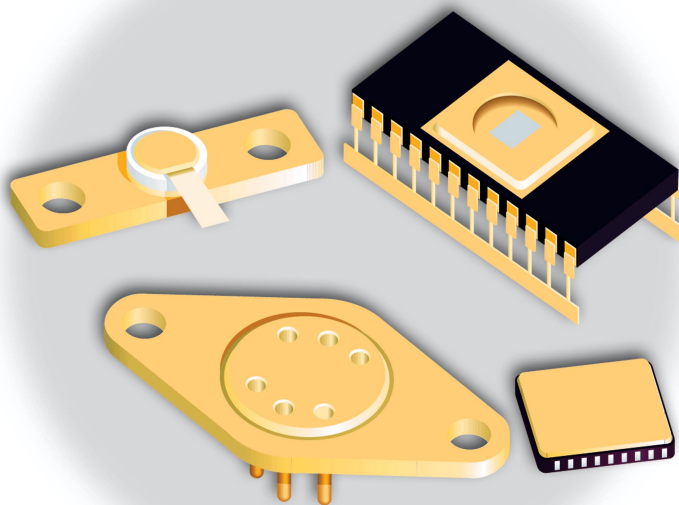


FB range Brazing oven



- Soft brazing from 100 to 600 °C.
- Low temperature glass sealing from 200°C
- Curing from 100 to 600°C,
with controlled atmosphere:
air, N₂, N₂H₂, H₂.



- Metallic belt conveyor with tight treatment muffle.
- Modular design. Low inertia heating to have a better response to high load variations ($\pm 2^{\circ}\text{C}$),
- Process under controlled atmosphere (N_2 , N_2H_2 or H_2 atmosphere upon request. Dew point ($- 60^{\circ}\text{C}$) - O_2 level: 10 ppm)
- Product easily adjustable to customer process / profile.
- Designed to fit various type of packaging process.
- CE standards compliant, designed for clean rooms (1000 or 5000).
- This equipment complies with the standards regulations for process under H_2 or forming gas atmosphere.



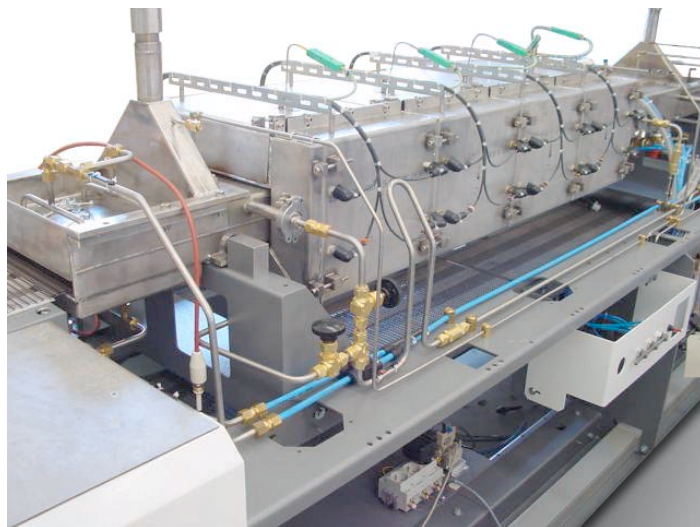
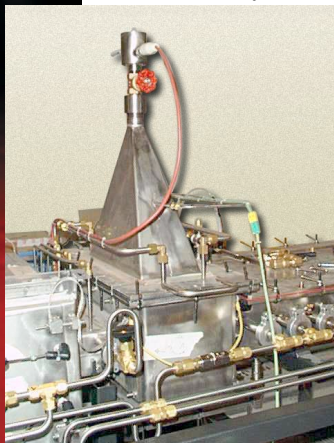
Belt Conveyor.



Gas Flow controls thanks to flowmeters.

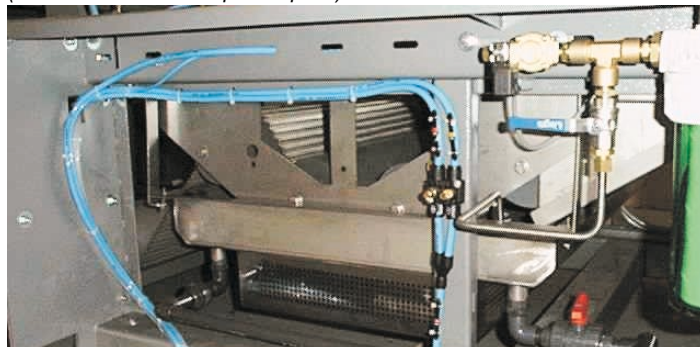


Thermal segregation with exhaust chimney.



- Entrance and Exit gas barriers with laminar flows above / below the load to maintain gas purity within the furnace.
- Heating Zone with low thermal inertia to allow high load variations.
- Heating on any side of the muffle thanks to easily removable heating shield.
- Thermal segregation thanks to exhaust chimney between the muffle and the water-jacket ; Flux management system upon request.
- Cooling zone made of a double wrapped water jacket for water circulation

Ultrasonic belt cleaning system recycled (demineralised water upon request).



Designation

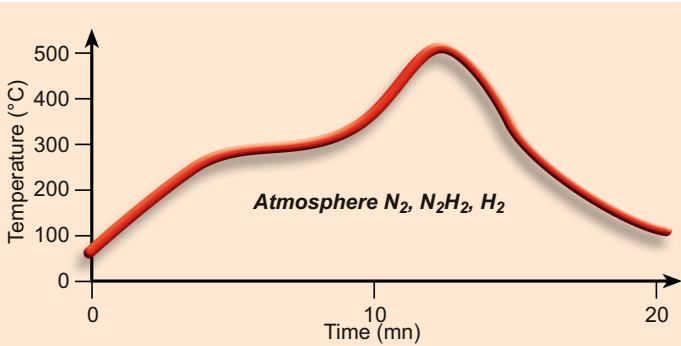
Oven range **FB 240 SP6 / 3.6**
 Belt width
 Number of heating zones
 Overall length of the oven

The user-friendly software offers an advanced graphic interface.

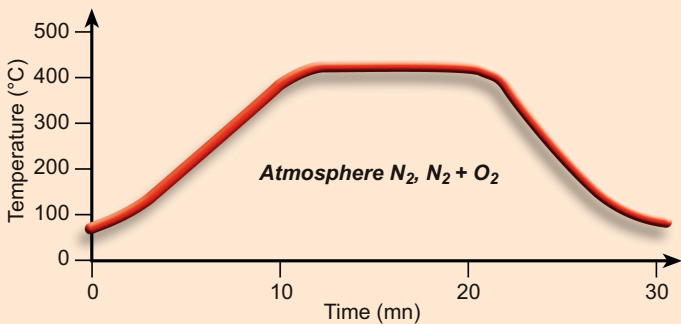


FB range

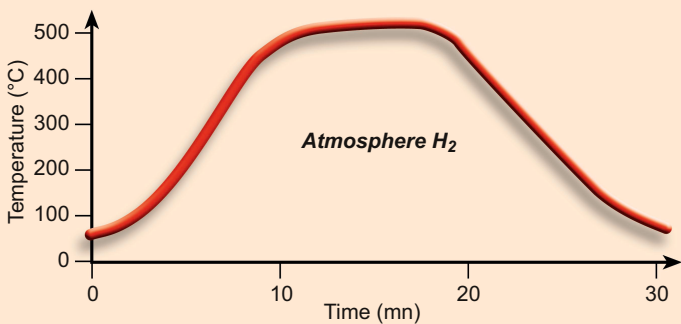
Process



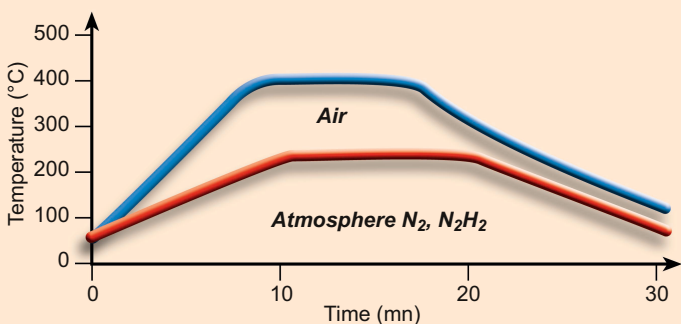
Packaging sealing furnace, leadless carrier, side brazed.



Packaging sealing furnace, cerclip.

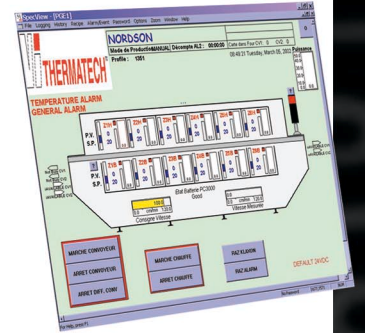


Firing.

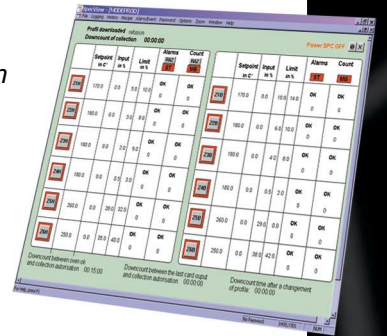


Die attach, glob top curing, silver to glass attach.

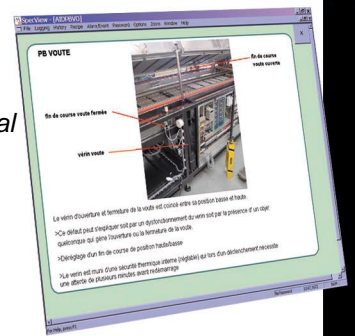
The production screen enables to run the oven through icons.



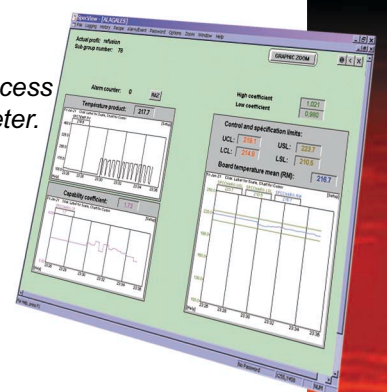
The oven is monitored thanks to a SPC software to anticipate oven evolution and help maintenance operations (process data recording, automatic set of the oven...)



Computer aided maintenance with on line assistance (modem connection to the technical support department), event logging printing.



Monitoring and tracing of the thermal profile on the board during the process thanks to an optical pyrometer.



Technical specifications

Dimensions																		
Heating tunnel length	2500 mm*		4300 mm*		6100 mm*		7300 mm*											
Loading/unloading zones length	350 mm	550 mm	1150 mm	550 mm	1150 mm	550 mm	1150 mm	550 mm	1150 mm									
Overall length	3200 mm		3600 mm		4800 mm		5400 mm		6600 mm		7200 mm		8400 mm		8400 mm		9600 mm	
Overall width	1100 mm				1100/1340 mm				1340/1440 mm				1340/1440 mm					
Height	1300 mm																	
Conveyor																		
Belt width	240 mm		240/350 mm		350/450 mm		350/450 mm											
Metallic belt	AISI 330																	
Max. temperature of the belt	600 °C																	
Conveying height	950 +/- 25 mm																	
Product clearance	10 à 50 mm																	
Left to right conveyor flow	S																	
Conveyor speed accuracy	+/- 1%																	
Conveyor stop safety and speed display	S																	
Torque control	S																	
Speed ratio	De 1 à 5																	
Process atmosphere																		
Nitrogen atmosphere	S																	
Oxygen level	10 to 50 ppm (5 ppm in option)																	
Heating tunnel																		
Composition	Entrance barrier		350 mm*		600 mm*		850 mm*		1000 mm*									
tunnel	Heating module		1200 mm*		2100 mm*		3000 mm*		3600 mm*									
Heating on the four sides of the muffle	S																	
Number of zones	8				10				10				10					
Heating zones length	4 boxes of 300 mm				7 boxes of 300 mm				10 boxes of 300 mm				12 boxes of 300 mm					
Stabilisation time from ambient to process temperature	30 min																	
Temperature monitoring																		
Process temperature	600 °C																	
Regulation accuracy	+/- 2 °C																	
Overall heating power	20 kW				35 to 39 kW				55 to 70 kW				66 to 84 kW					
Cross belt homogeneity	+/- 3 °C																	
Control type	PID																	
Number of thermocouples	1 TC per zone																	
Cooling																		
Water jacket	600 mm*		1000 mm*		1400 mm*		1700 mm*											
Exit Barrier	350 mm		600 mm		850 mm		1000 mm											
Control																		
Type of control	Industrial Automate for regulation																	
Supervisor	Portable PC Windows 98																	
Main power																		
Standard installed power	25 kW				40 to 44 kW				60 to 75 kW				71 to 89 kW					
Electrical supply	400 V tri + phase + neutre																	
Frequency	50/60 Hz																	
Options																		
Conveyor	Belt cleaning device, close loop speed control, manual emergency operation, board counting cell, left to right conveyor flow, belt structure																	
Atmosphere	Process control atmosphere (N ₂ H ₂ or H ₂), flow management box, O ₂ analyser, H ₂ analyser, low nitrogen consumption, H ₂ O analyser, humidity controm, entrance / exit sason barrière)																	
Cooling water supply, ESD protection, suited for clean room (1000 to 5000 classes), thermal signature, SPC equipment																		

S : Standard equipment

* Over length upon request

Specifications subject to change without notice.

The factory that manufactures thermal products is certified ISO 9001.

France

Tel. : + 01 60 19 34 22

Fax : + 01 60 19 04 54

Europe

Tel. : + 41 24 4239200

Fax : + 41 24 4239201

Asia / Pacific Rim

Tel. : + 65 7476550

Fax : + 65 7476558

The Americas

Tel. : + 1 978 372 1230

Fax : + 1 978 372 1767

E-mail : info@vitechnology.com - Internet : www.vitechnology.com