

# **Conveyor Belt furnaces**

## **Type** S0L0<sup>®</sup> 322



Heating and cooling under protective atmosphere. All SOLO Swiss furnaces are equipped with refractory steel muffles to provide precision heat treatment.



## **FURNACE**

- Muffle designed to resist high temperatures and to allow a rapid conditioning of atmosphere
- Several possible heating and/or cooling zones according to the production
- Electrical heating
- Chimneys for burning gas for environmental protection
- Choice in gas supply (cracker, generator, mixers, bottles, tank, etc.)
- Double control by thermocouples of the automatic ignition of the protective gas and the flame presence
- Flat, mesh or waved belt, with edges or rims according to the type of the parts
- Easy replacement of the heating elements
- AMS 2750, CQI9 & Industry 4.0 (upon request)

## **MATERIALS PROCESSED**

- Stainless steel
- Precious metal
- Ceramics
- Steel

- Alloys
- Copper alloys
- Copper
- Glass

## **PROCESSES**

- Brazing
- Hardening of stainless steel with 13% chromium
- Annealing
- Tempering
- Sintering
- Recrystalisation

Models	10/80C	20/160C	Up to 8000
Maximum temperature (°C)	1150	1150	1150
Usefull width of the belt (mm)	100	200	Up to 800
Height (mm)	45	70	Up to 200
Length of the heated zone (mm)	800	1600	Up to 8000
Section of the channel (mm)	120 x 50	220 x 75	

## **PROCESS CONTROL**

#### **Hardware**

- Siemens S7 Logic Controller (PLC) and I/O (hot swap)
- Siemens Operator Panel, color touch screen 9" to 15"
- eWon router for remote control

#### Software

- Furnace security management
- Automatic process, controlled by the PLC
- Visualisation of process parameters (curves and numerical values)
- Alarms and events management
- Animated synoptic of the machine
- Centralized management of the recipes
- Setpoint modification during the process
- Process value archiving (.csv format) on removable storage medium

## **ATMOSPHERES**

- Nitrogen
- Hydrogen
- Argon
- Air

- Cracked ammonia
- Ajustable N<sub>2</sub>+H<sub>2</sub> mixture
- Endothermic gas

## **PROCESS SECURITY**

- N<sub>2</sub> purging, safety and cycle
- Automatic purge in case of lack of: protective gas, power breakdown or absence of flame at furnace entry/exit
- Flow control for each gas and cooling water
- All security for gas injection
- Safety double valves for dangerous gases

#### ADDITIONAL EQUIPMENT

- N<sub>2</sub> + H<sub>2</sub> mixer with mass flow meter
- Water chiller
- Supervision with PC

- Automatic feeder
- Integrated water cooler
- Integrated NH<sub>3</sub> cracker
- Dewpoint analyser
- O<sub>2</sub> oxymeter analyser
- H₂ analyser



Medical & Dental



Watchmaking & Jewelry



Electrical and Electronic components



**Fasteners** 



Coins & Medals



Valves & Fittings



Needles



Cutlery

## **DIFFERENT SIZES**



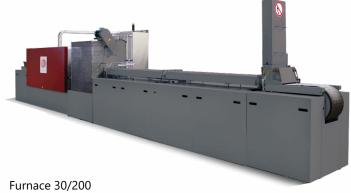
Furnace 10/80



Furnace 50/300

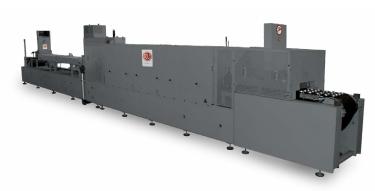


Furnace 30/200





Furnace 20/200



Furnace 80/400

## CONTACT



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