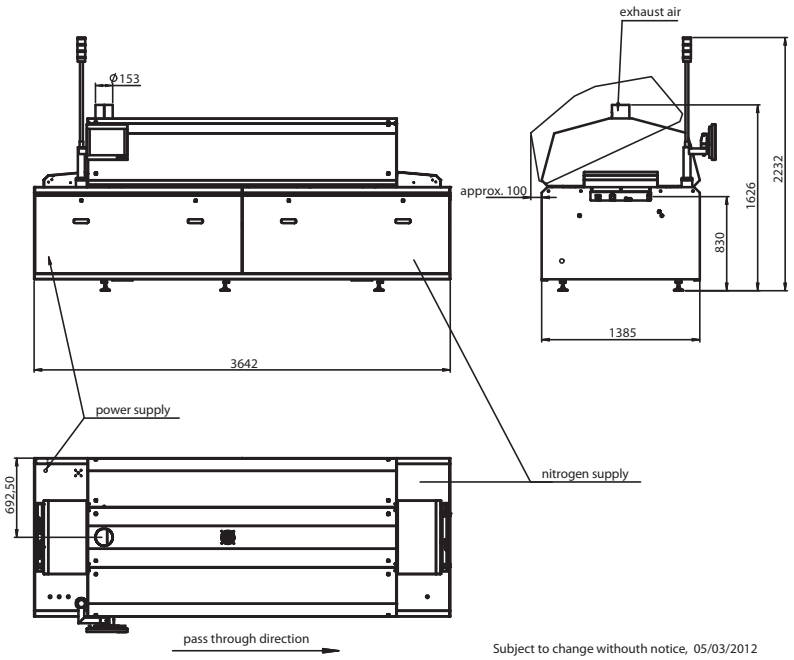
Know-how in Thermal Process

Forced Convection Reflow Soldering System
SMT XS (N_2)

The multiple proven
Forced Convection Reflow Soldering System SMT XS (N_2)

Perfect mid-range throughput performance oven in production. In has various fields of application because of high flexibility and high performance.



Important Similarities

All SMT reflow soldering systems assure an optimum of process stability by innovative technology and are equipped with the following advantages:

- Special power nozzle system for optimal heat transfer
- Sophisticated control concept for lowest possible energy and media consumption
- Multi-stage condensate filter at the cooling zone for efficient cleaning
- Process chamber made of stainless steel
- Suitable for temper and curing processes

All systems are available as air or nitrogen version and are suitable from small batch up to three shift operation.

Subject to change withouth notice, 05/03/2012

SMT
Maschinen- und Vertriebs GmbH & Co. KG

Technical Data SMT XS (N_2)

Overall dimensions	
Length:	3642 mm
Width:	1385 mm
Height (in delivery condition / incl. warning light): [2.]	1626 mm / 2232 mm
Inlet height, adjustable by customer: [2.]	830 ... 1030 ±20 mm
Weight	approx. 1400 kg
Number / diameter foot:	6 / 80 mm
Max. floor loading:	750 kg/m²
Process area	
Length:	3304 mm
Pre-heating zones:	3
Peak zone (top/bottom):	1 peak zone with 2 heating modules (1 top/1 bottom)
Bottom heating modules pre-heating zones (option):	3
Heated tunnel length, total:	2081 mm
Active convection length:	1533 mm
Length of cooling zone:	1223 mm
Temperature measurement:	NiCr-Ni sensors in the hot gas flow
Warm-up time:	approx. 30 min.
Heat transfer:	100% forced convection
Process temperature (pre-heating zone/peak zone):	max. 300 °C (pre-heating zone) / 350 °C (Peak)
Transport chain conveyor	
Working width usable with PCB support:	60 ... 460 mm
Pass through height (top/bottom):	30/30 mm
Max. loading:	3 kg/m
Transport mesh belt conveyor	
Usable working width:	500 mm
Pass through height (top):	30 mm
Max. loading:	3 kg/m
Conveyor speed	0.2 ... 3.0 m/min.
Average conveyor speed	0.3 ... 0.5 m/min.
Exhaustion [3.]	
Suction pipe:	1 x Ø 153 mm
Required exhaust air at pipe (inlet):	approx. 300 … 400 m³/h
Temperature of exhaust air at the pipe:	< 50 °C
Internal exhaust air resistance of oven:	3 - 8 mbar
Continuous sound pressure level	< 70 dB(A)
Control Unit	CDIAS with RT 7
Nitrogen supply * [4.]	
Connecting armature (clamped joint for Cu-pipe):	R 3/8" internal thread
Working pressure (at connecting armature):	6 ... 8 bar
N_2-consumption, steady state condition and transport width 220 mm: [6.]	approx. 9 m³/h
N_2-consumption, full load and transport width 220 mm: [7.]	approx. 15 m³/h
Readiness for the system (1000 ppm, N_2 < 5 ppm O_2):	approx. 15 min.
Power supply	
Connecting power supply:	3~N, PE 230 / 400 V, 50 Hz
Max. current consumption per phase:	50 A
Power consumption during heat-up:	34 kW
Power consumption steady state condition: [1.]	approx. 6 kW h

1.) Machine with chain conveyor 220 mm transport width, fan regulation and no other options
2.) Standard height 830 mm; corresponding to a changed inlet height the other heights of the reflow system are changing
3.) Connection of a flexible, heat resisting (at least 100 °C) hose (available by SMT) or tube. The waste air exhausting unit width adjustable throttle valve mounted after the suction sleeves has to be installed by the user
4.) Nitrogen supply with filters for solid and liquid parts has to be mounted by the user, recommended supply of nitrogen with oxygen content < 5 ppm
6.) 1000 ppm with option „intelligent nitrogen control" and „sleeping mode"; if 500 ppm then approx. 10 m³/h
7.) With PCBs (220 x 220 mm), one PCB length distance, 1000 ppm; if 500 ppm then approx. 17 m³/h
* with option nitrogen only

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