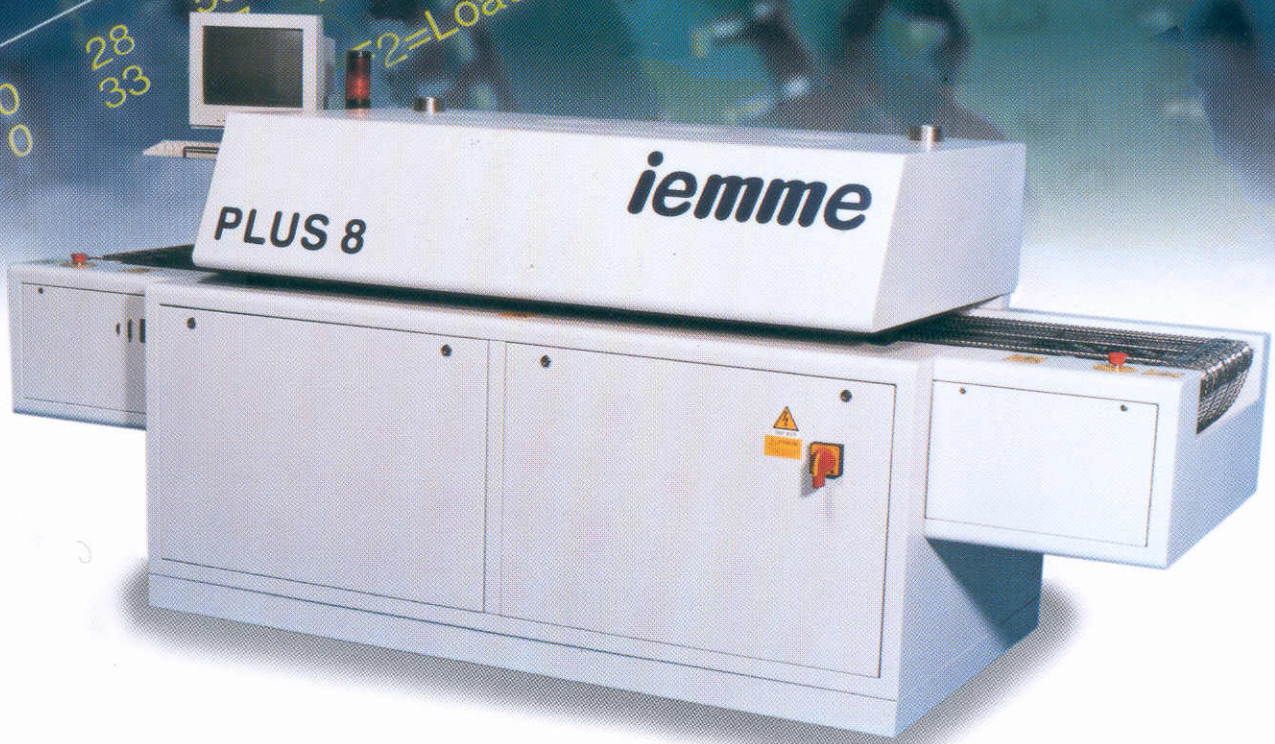
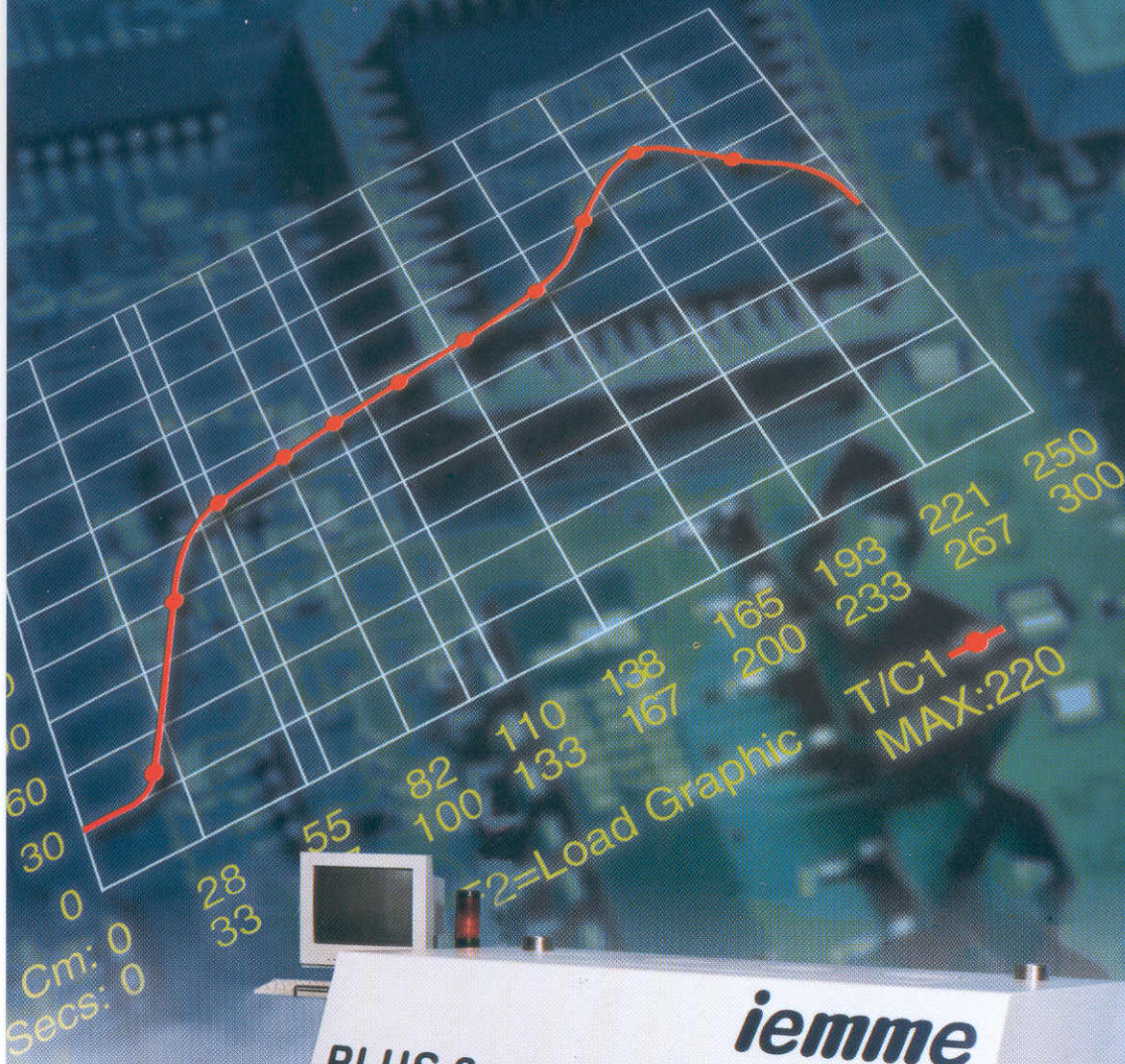


**Plus 8. Oven with forced convection air**



## Plus 8. Oven with forced convection air

Perfect reflowing SMD components, easy operations, minimum maintenance and long life are the basic criteria we had in mind when designing PLUS 8, the new full convection hot air oven, in which we find the same high performance technology than our bigger models, in small dimensions and with reduced energy consumption. Optimum control of air flow and temperature prevents the lighter components from being moved, thus facilitating fine pitch and ultra fine pitch soldering too.

Special attention was focused on designing flow distribution that eliminates the shadow areas of components, and on offering easy access to every joint to be soldered.

When using Plus ovens, differences in thermal mass, colour and surface finish have no influence on soldering quality. The cooling zone downline of the reflowing

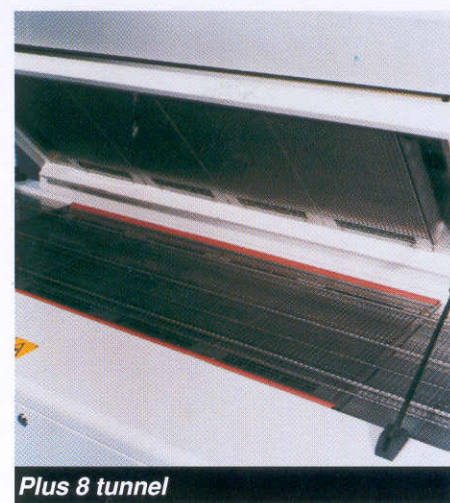
zone is also optimized to lower temperature to the required level without causing unwanted thermal shocks either to soldering joints or to components.

The process is controlled by a dedicated industrial PC.

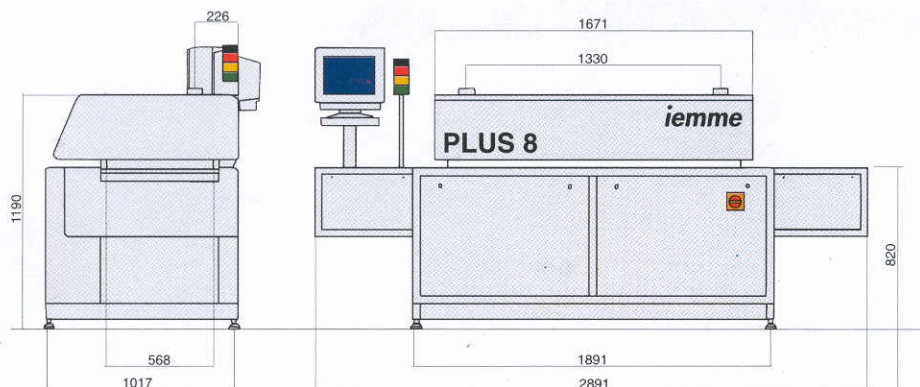
A graphic operator interface is provided, with a SVGA colour monitor.

During the reflowing cycle, the operator can observe on the monitor the temperature values reached in each zone, comparing them in real-time with the set values. The parallel interface enables connection to a printer, and the serial interface enables connection to a barcode reader or a host computer (optional). 99 different soldering programs can be stored, and there is a facility for retrieving and analysing the thermal profiles that were input.

Absolute safety is guaranteed for operators by protective devices if these are violated with, the entire system goes into alarm status.



Plus 8 tunnel



The process tunnel is 1.6 metres in length and is split into four lower zones, four upper zones, plus a cooling zone at the tunnel exit. Every convection zone generates air flow at a temperature that can reach maximum 280° C. The conveyor is equipped with a stain-less steel mesh with a width of 457 mm. The maximum width of processed PCBs is 400 mm. The power supply to the oven is 380 V 50 Hz, with peak power of 21KVA, and power consumption of about 8KVA at normal duty.

### Technical specifications

Power supply	380 V 3-phase 50Hz
Total Power	21 KVA
UPS	Optional
Conveying	Stainless steel conveyor belt with narrow mesh, 457 mm width, suitable for PCBs with maximum width of 407 mm and with components with maximum height of 40 mm. Speed can be adjusted in range 0 to 100 cm/min - optional chain conveyor available
Process unit	8 heating zones with hot forced convection air (four upper, four lower). Independent temperature control for each zone. Cooling device at oven exit
Control unit	Industrial PC with Real Time Operating system. 14" graphic colour monitor
Total air flow	3400 m <sup>3</sup> /h
Weight	Approx. 350 Kg

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