

Exception EMS invests in IBL Vacuum m/c

During October 2016 Wiltshire based CEM **Exception EMS**, which is part of the **Fabrinet** Group took delivery of an **IBL VAC645 Vacuum Vapour phase System**. However, as with all technical sales, the evaluation process started some months before this; the project actually started in May of the same year. Engineering Manager Jiri Kucera explains why the decision was made to invest in this alternative reflow process. "The requirement for void free soldering was on our technology road map for 2016. It was seen as the only technology capable for some applications of delivering the high standards demanded by our customers for their complex PCB assemblies."

Initially, four m/cs from three manufacturers were identified to run application trials with.

A very complex multilayer test board was provided to all vendors and the requirement was to be able to achieve a soak profile to replicate their chosen solder paste parameters with regard to ramp, soak and time above liquidus, all whilst keeping the delta T to a minimum. Another desirable requirement was the ability to run both leaded and lead-free processes without changing the heat transfer fluid.

Key reasons for selecting IBL/Blundell were as follows:

- + Low Heat transfer fluid (Galden) consumption
- + Market leader with many installations
- + Best technology
- + Best profiling results (IBL's Intelligent Profiling System)
- + Flexibility (including the ability to achieve 225°C peak whilst matching all other parameters of leaded process with Galden 240)
- + PCBA size 635x444mm
- + After sales technical support from the UK

Following a pre-acceptance in September, the Blundell team installed the VAC645 mid-October.

Now six months on, Jiri commented "We are very pleased with the VAC 645 system and we were able to rapidly improved soldering quality of many assemblies, where PCB design and component selection required different soldering technology and more flexible process window than convection reflow. IBL concept gave us that extra technological edge that we needed for our prototyping business but also for our standard production requirement".

