

Wave Soldering - Process and Practice

(one day program)



Course Contents :

1. **Soldering Process.**
 - Soldering process, in-depth understanding on Wettability theory
 - Composition of solder, leaded and lead free
 - Metallurgy of solders
 - Solder joint microstructure, intermetallics.

2. **Introduction to wave soldering**
 - Advantages of wave soldering.
 - Wave soldering equipment overview

3. **Wave soldering equipment**
 - Major features
 - Functions of various kind of wave, turbulent and Flat wave.
 - Keys parameters for quality and reliability
 - Fluxing technology, and its control parameters.

4. **Factors affecting yield and quality of wave soldering**
 - Board handling control, Importance of Preheating
 - Fluxing control, wettability and testability
 - Solder wave control, contact/dwell time, Immersion Depth
 - Dross Control.
 - Temperature Profiling, methodology, requirement
 - Wave board Interaction.

5. **Common problems encountered on wave soldering**
 - Design related problem
 - Detail discussion on Barrel Fill issue.
 - Suggested solutions for some common problems, bridging, opens, insufficient barrel fill
 - Discussion of problem encountered, providing and brainstorming of possible solutions.

6. **Wave soldering equipment development**
 - Selective soldering
 - Selective debridging.

7. **Lead Free Wave Soldering Consideration.**
 - Corrosion, dross, fillet lifting, preheatings.
 - Solder Alloy selection. MP, wettability, reliability.
 - Barrel Fill and Wettability

REGISTRATION

please call Miss Teo at Tel: 04-6433817

or email at : afng@techment.com.my or admin@techment.com.my

or website registration : www.techment.com.my

Course Leader :

AF.Ng, a full-time consultant with TechMent Consultancy has conducted many in-house and public technical programmes for manufacturing sector, and currently a consultant for SMT line set up, process yield improvement and other engineering consultancy projects. Mr. Ng has a total of 30 years of Engineering experience in various disciplines namely equipment, process and maintenance. He has a total of more than 16 years of exposures in SMT industry, which includes employment, consultancy and training. He has been running the similar program since 1995, they have been very well received by the participants, with good feedback. His expertise in SMT includes maintenance, process control and equipment selection. More than 80 companies have used his training service since its inception and more than 1000 participants attended the course. He has been conducting the similar program throughout Malaysia and Overseas. He is also a Frequent Course Development Trainer under IPC US EXPO Conferences.

Who Should attend :

Managers, Engineers, Technicians and Technical Supervisors from various discipline such as Process, Manufacturing, Quality and Equipment Engineering in OEM and CEM industry.

Course Fee :

RM 780 per participant. (Inclusive of notes, coffee and tea break, Lunch and Certificates).

Group discount of 5% for more than 3 participants from the same organisation.

Cheque : Payment by cheques should be crossed and made payable to Techment Consultancy Sdn Bhd

ORGANISER :

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