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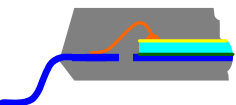
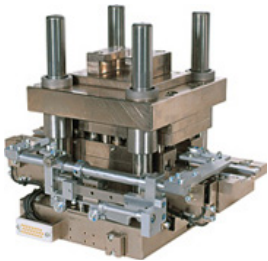
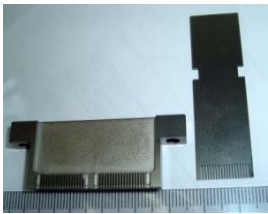
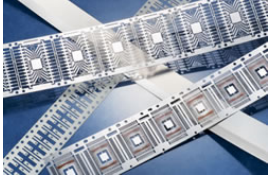
Semiconductor
Manufacturing
Technology

2-day In-House Technical Training Course

Trim-and-Form Quality and Leadframe Materials

By: William Lee

2-day course, SBL program, In-house training ONLY.



Course Overview

Today's semiconductor industry requires manufacturing at low costs and high quality. Rejects and tooling downtime are killing. Therefore, continuous productivity improvement throughout the IC packaging manufacturing process is essential to achieve production economy. Molding and trim & form process are critical manufacturing activities in plastic packaging than any other piece of equipment. This end of line process involves considerable amounts of investment in presses, tooling, floor space & labor. It has a major impact on packaging productivity & yield.

The evolution of the technology to higher lead counts, thinner leadframes, and closer lead spacing places greater emphasis on the engineering time devoted to mold, trim & form design, implementation, and problem solving. This 2-day in-house training for semiconductor industry will explain how the leadframe material, tooling, processing methods, preceding & existing operations control can impact the defects & problems in trim & form operations. Both practical and fundamental concepts are discussed in the training course.

Benefits

1. Study variables affecting trim & form package quality.
2. Understand leadframe material forming limit & characteristics that can affect the trim & form result.
3. Learn proper processing control to achieve consistent trim & form results.

Course Contents

1. Trim-and-Form Quality & Variables

IC assembly process flow, preceding conditions, existing process control, T&F defects inspection.

2. Leadframe Materials & Characteristics

Copper alloys (C151, C194, C7025), Alloy 42, hardness & temper properties, ductility & material quality (cleanliness, dimension), work hardening & springback effects.

3. Leadframe Sheared Edge Finish and Formability

Sheared edge study, clearance design, formability, stress strain measuring.

4. Trim & Form Process Control

Design, tooling, processing methods & press control.

Organized by:

Metalloy Technology Services (for in-house program)

Tel: 03-80751529, Fax: 03-80761434, Email: metalloy@tm.net.my

Course Instructor



William K.W. Lee

Dip. Tech (TARC), B.Eng (Hons) EC, UK

Full-time Technical Training Instructor for Metalloy Group of Companies (Malaysia)
Contract Speaker for Society of Manufacturing Engineers (SME, USA)
Contract Speaker for Tooling Industry Forum of Australia (TIFA, Australia)

William Lee - Malaysian, a materials engineer is currently technical training director & full time industry speaker for Metalloy Group of Companies. He is also a contract speaker for Society of Manufacturing Engineers (SME, USA) & Tooling Industry Forum of Australia (TIFA). He has instructed technical courses covering materials selection, tool processing, tooling improvement, manufacturing engineering, failure understanding, heat treatment process and advanced tooling materials and surface treatment technology for many organizations & technical colleges / universities since 1990. He will bring a wealth of teaching experience to these programs along with his strong industrial background as a former technical manager & heat treatment manager for tool steels & heat treatment companies in Malaysia.

Target Participants

This course is specially designed for semiconductor industry. Target audience can be those involved in IC package manufacturing from compound molding down to trim & form lines. Technical personnel such as production managers, molding engineers, T&F engineers, technicians, and specialists, supervisors, tooling engineers, tool makers, quality controllers and R&D researchers are encouraged to participate in this 2-day technical event.

Terms and Conditions for In-House Training

Return to [home page](#) & click **In-House Training Courses** then click **In-House Training Registration Form** for registration form and detailed terms and conditions.

Course Registration

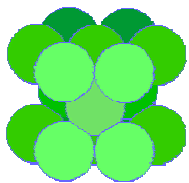
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Course Fees

Contact us for an official proposal and quotation for the above 2-day in-house training title.

Contact Person

Ms. Nancy Hee, Administrator – METALLOY Technical Training Unit (Tel: 03-80751529)



Knowledge for Productivity

◆ **We Provide The Missing Link Study for Manufacturing Improvement Program** ◆

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