

# **Doing Business in Asia - Equipment Safety and Liability Risk Management**

**Presented by:**

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This material is adapted from Lewis Bass, Products Liability: Design and Manufacturing Defects 2nd Edition (2002) published by the West Group and available on-line at: <http://www.westgroup.com> and searchable on [westlaw.com](http://westlaw.com)

# Lewis Bass International

## For All of Your Safety Needs

For over 25 years, LBI and its associates have provided Legal and Safety Engineering Consulting Services to large and small companies around the world. We work with companies in the construction, food processing, medical device, semiconductor equipment, consumer products and other industries to increase safety and reduce liability.

We evaluate construction sites, the workplace and products for regulatory compliance, potential hazards and liability. Based on our risk assessments, we recommend safety program improvement, safe product design, labels and manuals. We provide clients with recommendations for warning content, placement and methods of communication to reduce liability and accidents and increase profits.

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- ❖ Product Liability Reduction
- ❖ CE Mark Review
- ❖ Chemical Safety
- ❖ SEMI S2 Equipment Safety
- ❖ EMC Compliance
- ❖ Workplace Safety
- ❖ SEMI S8 Ergonomics
- ❖ Safety Consulting
- ❖ Hazard/Risk Analysis
- ❖ Electrical Field Labeling
- ❖ Fire/Electrical Safety
- ❖ Warnings/Manuals
- ❖ Training
- ❖ Construction Safety

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# Typical Projects



- ❖ Product liability audit
- ❖ Product safety and risk assessment training
- ❖ Legal/safety review of products
- ❖ Product liability reduction workshops and seminars.
- ❖ Strategy for defending product liability lawsuits
- ❖ Warnings and instructions review

# LBI Clients



- ❖ Alcoa Aluminum
- ❖ Air Products
- ❖ Johnson & Johnson
- ❖ Coleman Company
- ❖ Zurich Insurance Co.
- ❖ Chubb Insurance Co.
- ❖ Hitachi
- ❖ IBM
- ❖ Motorola
- ❖ AMD
- ❖ Canon
- ❖ Applied Materials
- ❖ Intel
- ❖ Hynex

# Typical LBI Projects



- ❖ Prepare product safety audit program for Alcoa.
- ❖ Product Liability training for AMAT.
- ❖ Product Liability benchmarking for AMAT.
- ❖ Warnings review for Unaxis.
- ❖ Hundreds of SEMI S2, CE Reviews and Electrical field label projects.
- ❖ Facility safety review for Motorola.
- ❖ Expert witness in risk assessment, equipment design and warnings.

# Doing Business in Asia - What are the risks to be managed?

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- ❖ New Product Liability Laws
- ❖ Equipment Safety Guidelines
- ❖ Asian Customer Requirements



# Asia - Equipment and Liability Issues

- ❖ There have been costly FAB fires in Taiwan that have resulted in lawsuits.
- ❖ Japan has a product liability act.
- ❖ Korea has a new product liability act.
- ❖ Samsung requires third party review of equipment.
- ❖ Seagate requires third party review of equipment headed to Asia.

# Third Party Liability in ASIA

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- ❖ Liability of those who may have caused damage (such as a fire) at the FAB or injury to an employee.
- ❖ Third parties may be
  - FAB Contractors
  - Equipment suppliers

# Product Liability

- ❖ Liability when a product causes injury or property damage
- ❖ Requires a defect in the product
  - inadequate design safety
  - manufacturing defect
  - lack of warnings or inadequate warnings

# Subrogation



When one party wants to be paid back by a third party for money paid to an injured person

Example: FAB insurance company seeks subrogation against manufacturer of Wet Bench that caused fire damage to FAB and/or injury to worker

# Product Safety and Risk Management in Asia

- ❖ PL laws are considered part of the purchase order.
- ❖ Asian customers are expecting safe equipment and adequate warnings.
- ❖ Asian customers expect the supplier to foresee risks and reduce them at supplier expense.
- ❖ Asian customers expect retrofits to be paid for by the supplier.

# What Does the Asian Customer Expect?

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- ❖ The equipment performs its intended and reasonably foreseeable tasks safely
- ❖ The equipment does not create a danger against which it was supposed to guard
- ❖ The equipment minimizes avoidable consequences if there is an accident
- ❖ There are adequate warnings and instructions on equipment operation and maintenance

# What must be foreseen to meet Product Liability expectations?



- ❖ Foreseeable use
- ❖ Foreseeable misuse
- ❖ Foreseeable environment
- ❖ Foreseeable users, maintainers
- ❖ Foreseeable malfunctions; emergencies

# Risk Management Process



- ❖ Risk Identification
- ❖ Risk Evaluation
- ❖ Risk Assessment or Judgement
- ❖ Risk Acceptability



# How to Decide if the Risk is Acceptable?

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- ❖ The severity of the danger
- ❖ Likelihood of the danger
- ❖ Feasibility of improved design safety and warnings to reduce the risk
- ❖ Do the product safety solutions introduce any new hazards?

# Hazard Analysis and Risk Assessment



- ❖ Risk assessment and hazard analysis are used to identify product hazards.
- ❖ Risk management decides how the hazards will be controlled.

# Risk Management



- ❖ Identify known and hidden hazards through hazard analysis.
- ❖ Implement countermeasures and controls that meet or exceed SEMI S2 guidelines, customer requirements and good safety engineering practice.
- ❖ Start as early as possible.

# Summary

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- ❖ Asia has adopted Product Liability laws.
- ❖ Compliance with PL requirements is considered to be part of the purchase order.
- ❖ PL requirements are met by risk assessment and risk management.
- ❖ PL requirements are met by designing safe equipment and adequate warnings.

# Next Step



- ❖ Call Debi Park at 408 374-4453 x109 to find out how we can help you.
- ❖ E-mail [Cheli.Hobson@lewisbass.com](mailto:Cheli.Hobson@lewisbass.com)
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