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# PURPOSE

This standard establishes the minimum environmental, safety, health and ergonomic requirements for the negotiation, acquisition and delivery of semiconductor manufacturing equipment (SME) at TI sites worldwide.

TI’s policy is to purchase only safe and environmentally responsible semiconductor manufacturing equipment. TI requires that all SME comply with applicable ESH regulatory requirements, TI ESH Standards and TI-designated consensus standards on environmental, safety, health, ergonomic, fire protection and energy (such as those from Semiconductor Equipment and Materials International – SEMI).

# SCOPE

The provisions of this Standard apply to all TI employees, suppliers, vendors, and visitors at TI sites worldwide. All persons authorized to request quotations, place purchase orders, make contracts or otherwise commit TI to the acquisition or receipt of an SME must adhere to the requirements of this standard.

This standard applies to equipment used to manufacture, measure, assemble, test, analyze or package TI semiconductor product, including SME that will be a TI asset to be used outside of a TI facility (e.g. a 3rd Party foundry). It applies to all TI SME including new, evaluation, used, zero-cost, rentals, traded, leased equipment and repeat purchases (i.e. purchases of SME of the same machine model as previously or currently in use at a TI facility).

This Standard does not apply to building infrastructure equipment such as exhaust systems, drain systems or bulk gas delivery systems except when included in the configuration of an SME.

Machines already owned by TI and moving within a site or from one TI site to another are not subject to the requirements of this Standard (but are subject to the requirements of TI ESH Standard 06.12 Movement of Equipment and Parts).

Low risk tabletop machines that do not contain any of the risks noted in 5.1.1. are exempt from the requirements of this Standard.

# reference documents

## TI ESH Standard 06.13 Equipment Installation

## TI ESH Standard 06.12 Movement of Equipment and Parts

## TI ESH Standards Program Document

# Definitions

[TI ESH Standards Glossary of Definitions](https://sps01.itg.ti.com/sites/wwf/esh/standards/Knowledge_Bank/00.01.xlsx)

# Requirements

## Site Equipment Acquisition Approval Process

### Sites shall establish a process to verify WWESH approval of all SME that uses, creates or contains any of the following:

#### Any chemicals (solid, liquid or gas),

#### Ionizing and non-ionizing radiation,

#### Hazardous waste and/or hazardous materials,

#### Exposure to hazardous energy during normal use/operation,

#### Moving parts which require guarding to prevent injury, or

#### Ergonomic conditions which require two-person or assisted lift and/or clearance.

### Sites shall identify roles and responsibilities for implementing the requirements of this Standard.

### Sites shall have a process owner responsible for ensuring all affected personnel understand the equipment ESH acquisition requirements.

### Sites shall ensure that all applicable site machine acquisitions are submitted for WWESH approval at the time of (or prior to) capital approval.

### NOTE: Machines not following the usual capital approval process (e.g., evaluation, rental, zero dollar, etc.), must still be submitted to WWESH and receive approval prior to closing any agreement to accept delivery to a TI location.

### Requests submitted for WWESH approval shall be submitted and tracked using the online Equipment ESH Approval Form (see Appendix).

### Sites shall verify that equipment acquisitions have met WWESH requirements *prior to* completion of the TI ESH Standard 06.13 Equipment Installation Checklist and prior to release of the SME for use.

### Sites shall ensure that upgrades and modifications to existing machines (including, but not limited to) alterations in design, chemistries, processes, and/or best known methods (BKMs) are evaluated by site ESH and verified as meeting applicable ESH requirements.

#### When significant modifications (i.e. changes that can introduce new hazards and/or risks in the design) are initiated by the equipment manufacturer, sites may require new or updated SEMI S2/S8 evaluation reports to verify conformance.

#### Post-delivery upgrades and modifications that can introduce new hazards and/or risks shall be documented in English within the Equipment ESH Documentation Database located on the Equipment ESH SharePoint (see Appendix).

### Sites shall ensure equipment that is designed and constructed by TI is designed according to applicable requirements.

#### NOTE: TI-designed machines do not require 3rd Party SEMI S2/S8 evaluation.

## WWESH Equipment Acquisition Approval – Criteria and Process Overview

WWESH shall maintain and administer a process that provides oversight and approval of the acquisition of applicable SME. WWESH will review completed site Equipment ESH Approval requests (See 5.1.4 above). Criteria for WWESH approval shall include:

### New Machines. WWESH shall confirm that the equipment supplier:

#### Has given third party verification that the equipment conforms to SEMI S2 and S8.

#### NOTE: TI will not receive or authorize the delivery or startup of any SME with identified Major or Potentially Major SEMI S2/S8 non-conformance issues.

#### Has completed a TI ESH TECHNEGO document.

### Evaluation, Zero Dollar, Rent, Lease, and Loaner Machines. WWESH shall confirm:

#### The equipment has no identified Major ESH nonconformance items.

#### The supplier has completed a TI ESH TECHNEGO document, including:

##### A supplier roadmap to obtain third party verification of SEMI S2/S8 conformance (or WWESH-approved alternative) and

##### Supplier confirmation that any changes or modifications that are necessary to meet WWESH requirements will be applied to the equipment.

### Used and Refurbished Machine Acquisition. WWESH shall confirm:

#### The equipment has no identified Major ESH nonconformance items,

#### Proper machine decontamination, and

#### Seller has been provided the Asbestos-free declaration.

### Any applicable alternative and/or protective measures. On a case by case basis, the equipment seller may be permitted to provide alternative information or protective measures. This must be approved by WWESH prior to acquisition agreement, implementation and delivery.

## Business Leadership Team: The business leadership team may be requested to review and make decisions on the procurement and/or delivery of any equipment not meeting the WWESH requirements for acquisition.

## Training Requirements: The site shall ensure all persons who have responsibility for implementing the equipment acquisition process have received proper training, understand their roles and are competent to perform them.

## Records: Equipment-related documentation and information shall be archived in the WWESH Equipment Documentation Database.

# STANDARD Approval

This standard has been approved by David Thomas, TI Vice President.

# Revision history

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rev#** | **Date** | **Nature of Revision** | **Author/Editor** | **Approver** |
| A | 5/25/2016 | New Standard | Matt Jones | ELC |
| B |  |  |  |  |
| C |  |  |  |  |
|  |  |  |  |  |

**APPENDIX A**

**KEY RESOURCES**

*Links are provided here for convenience purposes and may not be up-to-date.*

*Contact the Standard Owner for any URL issues.*

1. **Equipment ESH Approval Form** <https://sps09.itg.ti.com/sites/wplwfp/wfepro/Lists/Equipment%20ESH%20Approval%20Form/NewForm.aspx>

#### **Equipment ESH Documentation Database** [https://sps09.itg.ti.com/sites/equipesh/Reports/default.aspx?RootFolder=%2Fsites%2Fequipesh%2FReports%2FDocumentation%2FEquipment%5FESH%5FDatabase&FolderCTID=0x012000A508A488455E1245953E889F0530D5D8&View={D57746C9-CDB8-4F63-B24C-D0DC0CC6C2B5}](https://sps09.itg.ti.com/sites/equipesh/Reports/default.aspx?RootFolder=%2Fsites%2Fequipesh%2FReports%2FDocumentation%2FEquipment%5FESH%5FDatabase&FolderCTID=0x012000A508A488455E1245953E889F0530D5D8&View=%7bD57746C9-CDB8-4F63-B24C-D0DC0CC6C2B5%7d)