



IECQ QC 080000 Specification & IECQ HSPM Overview

Presented By:

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Agenda

- 1. Understanding the Need**
- 2. Explore Alternatives**
- 3. The Best Solution - IECQ QC 080000 IECQ HSPM**
- 4. Questions & Answers**
- 5. Next Steps**



Understanding the Need

1. Customer demand for Hazardous Substance Free (HSF) products is changing the global market
2. Regulators are creating HSF technical requirements and regulations
3. Significant penalties may be imposed for failure to comply:
 - Loss of market access in China
 - Fines and/or imprisonment in the EU
4. Testing components and products for compliance is inefficient and costly



Understanding the Need

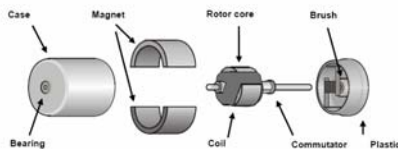
6. EU Directives and the China RoHS regulations are designed to address specific product level technical HS/HSF requirements
 - EU RoHS, Battery, Packaging, EuP, ELV, WEEE and REACH, China MII #39
7. Small and Medium Size Enterprises (SME) often lack infrastructure required to learn, understand and/or reliably meet new and emerging requirements
8. SME customers often can't afford to provide tier 1 through tier n supply chain technical compliance management



Understanding the Need

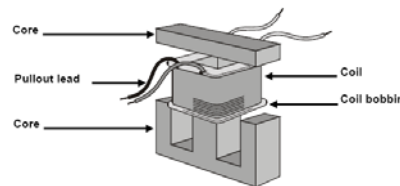
Not all SME's understand what they must do.
 "They don't know what they don't know!"

[Component Part Example 7] DC motors
 Component parts: Part case (molded plastic, etc.), metal parts (shaft, rotor core, terminal, frame, etc.) brush, magnet, coil, and other



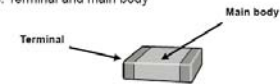
* Pay particular attention to special metals (alloys) used for flame retardants in plastic, and electrical characteristics and lubrication in commutators, as well as grease in bearings.
 * Calculate the amount contained per part from the amounts contained in each of the part components, when the substance is contained in lead wire and electronic circuits.

[Component Part Example 6] Transformers and inductors
 Component parts: Core, coil, bobbin, lead wire, insulator, case frame, etc.



* Pay particular attention to flame retardants in plastic materials or insulating parts, impregnant in the coil, PVCs or flame retardants in the lead wire.

[Component Part Example 4] Surface-mounted chip parts
 Component parts: Terminal and main body



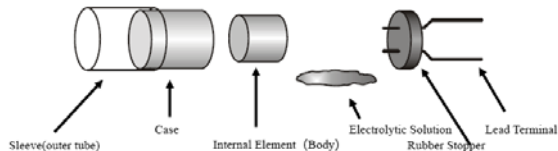
* The main body of the part is made of multiple materials and the substance concerned is present, break it down e.g. Part (main body) → ceramic and internal electrode

Exhibit 4. Examples of Application Areas

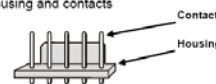
The following are example names of application areas that serve as references when completing the "application area" column of the survey.
 Note: These examples do not represent all the application areas.

If using Format 2, enter the name of the application area so that the homogeneous material is clearly stated. E.g. lead terminal plating (see Component Part Example 5).

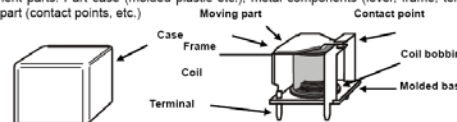
[Component Part Example 1] Aluminum electrolytic capacitor
 Component parts: Sleeve, Case, Internal Element, Electrolytic Solution, Lead Terminal



[Component Part Example 2] Connectors
 Component parts: Housing and contacts

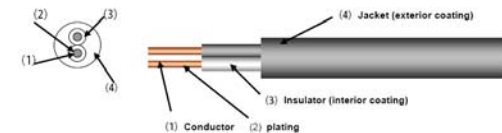


[Component Part Example 3] Switches, relays, and other parts with mechanical components
 Component parts: Part case (molded plastic etc.), metal components (lever, frame, terminals, etc.), moving part (contact points, etc.)



* Please pay particular attention to special metals (alloys) used for plastic flame retardants, and electrical characteristics and lubrication of contact points.

[Component Part Example 8] Electrical cable (power cord)
 Component parts: Conductor, plating, insulator (interior coating), and jacket (exterior coating)

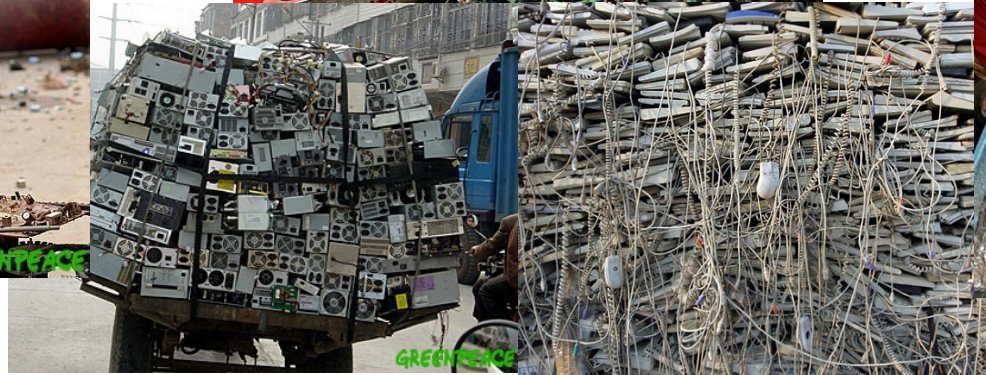


Note: The pictures above are taken from the JGPSSI Manual



Understanding the Need

Possibly one of the greatest risks is the undeclared re-manufacturing and resale of e-waste components



Explore Alternatives

1. HS/HSF Chemical Analysis/Testing
2. ISO 9001:2000 or equivalent QMS
3. ISO 14001:2005 or equivalent EMS
4. IPC Lead Free Initiative
5. JGPSSI Initiative
6. Chinese Taipei GPMS Certification
7. Customer Specific GPMS
8. IECQ QC 080000 IECQ HSPM

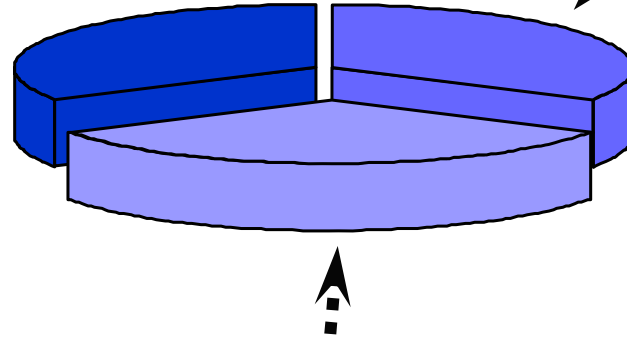


The Best Solution

- IECQ QC 080000 IECQ HSPM Core Elements

Single International set of Requirements

Single International System to Assess and Certify manufacturers

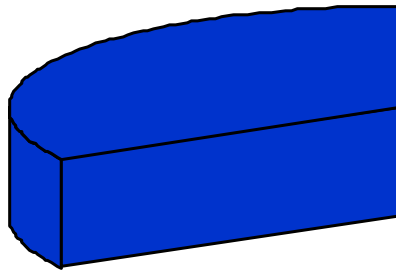


Single International System to Assess Certification Bodies



IECQ HSPM Core Elements

Single
International set
of Requirements



INTERNATIONAL QC
ELECTROTECHNICAL 080000
COMMISSION (IECQ HSPM)

Second edition
2005-10

IEC Quality Assessment System for Electronic
Components (IECQ)

Electrical and Electronic Components and Products
Hazardous Substance Process Management System
Requirements (HSPM)

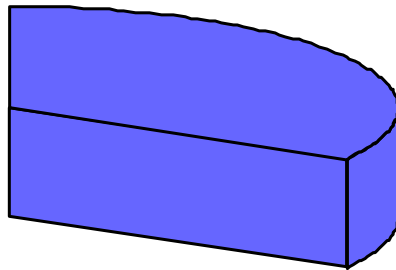
IECQ QC 080000 Addresses

- Regulatory Requirements, eg RoHS, WEEE, BAD, PKG, ELV, EuP, REACH, EPEAT, China RoHS
- Specific and/or additional customer and market requirements



IECQ HSPM Elements

Single International system to assess and certify manufacturers



- All IECQ certifiers conduct assessments the same way
- Single format international IECQ certificate
- Dedicated area on IECQ website for instant checking of certified companies



IEC **IECQ**

Certificate No.	Issued:	March 28, 2007
PRC-HSPM-1113	Revision:	N/A
	Expiration:	March 27, 2010

IECQ Certificate of Hazardous Substance Process Management (HSPM)
applicable to the European Directive 2002/95/EC ("RoHS") requirements.

The Supervising Inspectorate (SGS-CSTC Standards Technical Services Co., Ltd.), sponsored by the United States National Authorized Institution, ECCB certify that

GE Hardware & Plastic Factory
Zhenhua Industrial Park,
Shangsha, Changan,
Dongguan, Guangdong, P.R. China

Has developed and implemented Hazardous Substances Process Management, procedures, and related processes in compliance with the applicable requirements for HSPM organization approval which is in accordance with the Basic Rules IECQ-01 and Rules of Procedure QC 001002-5 "IECQ Hazardous Substance Process Management" of the IEC Quality Assessment System for Electronic Components (IECQ), and with respect to the Specification QC 080000 IECQ HSPM.

This certification is applicable to all electronic components and related materials and processes for the manufacture of plastic parts of fans for electronic equipments.

Issued by Certification Authorities:

Electronic Component Certification Board
Signed: *Stanley H. Salot Jr.*
Stanley H. Salot Jr. - President, ECCB
ECCB
PO Box 9041,
Midland, Texas 79708
Tel: (432) 697-9970 Fax: (361) 260-6181
Web Site: www.eccb.org

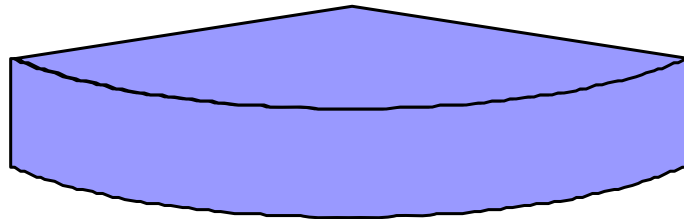
SGS-CSTC Standards Technical Services Co., Ltd
16F Century Yuhui Mansion
73 Fucheng Road
Beijing, China
Web Site: www.sgs.com

The validity of this certificate is maintained through on-going surveillance inspections.
Note: This certificate is valid only in conjunction with the approval document(s). This approval and this certificate may be suspended or withdrawn in accordance with the Rules of Procedure of the IECQ. This certificate remains the property of the body which granted it.



IECQ HSPM Elements

Single International System to Assess Certification Bodies



- Single global set of rules and assessment procedures
- Based on proven peer assessment method
- On-going surveillance of approved IECQ certifiers

INTERNATIONAL ELECTROTECHNICAL COMMISSION **QC 001002-5**

Second edition
2005-10

IEC Quality Assessment System for Electronic Components (IECQ) –

Rules of Procedure –

Part 5:
Hazardous Substance Process Management Requirements

**QC
001002-3**

Fourth edition
2005-08

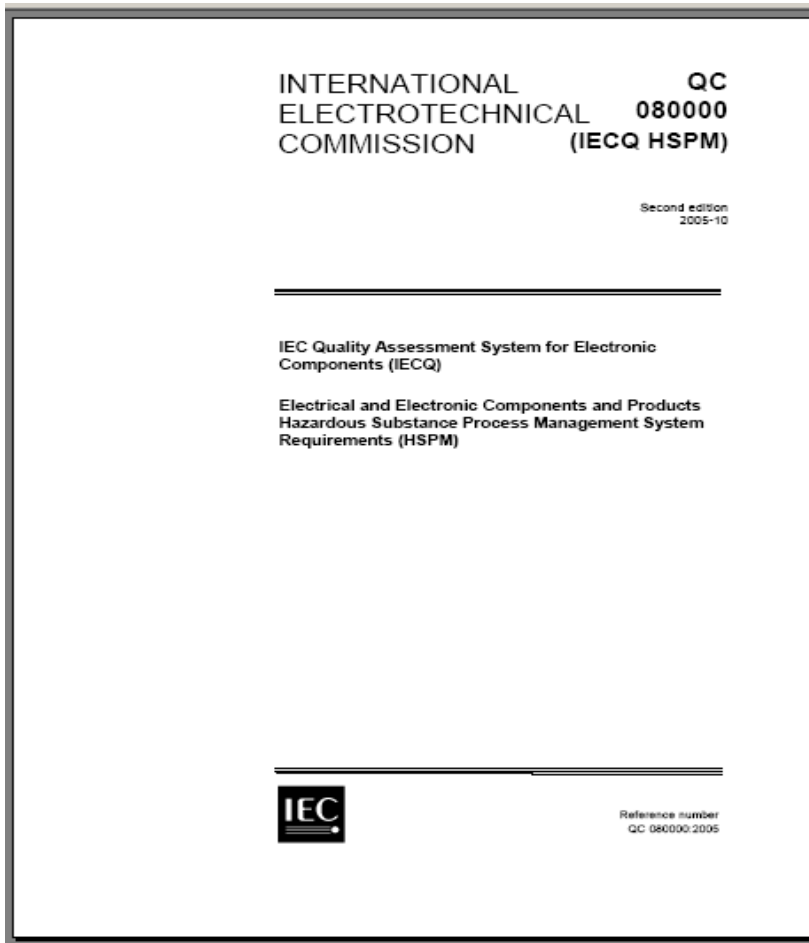
IEC Quality Assessment System for Electronic Components (IECQ)

Rules of Procedure

Part 3: Approval procedures



IECQ QC 080000 – in 5 Languages



Currently Available Versions:

1. Chinese
2. English
3. French
4. Japanese
5. Korean

Available for purchase from
the IEC web store www.iec.ch



IECQ QC 080000 IECQ HSPM - Why?

ISO 9001 Certification alone?

Extract: 1.2 Application

All requirements of this International Standard are generic and are intended to be applicable to all organizations, regardless of type, size and product provided.

Where any requirement(s) of this International Standard cannot be applied due to the nature of an organization and its product, this can be considered for exclusion.

Where exclusions are made, claims of conformity to this International Standard are not acceptable unless these exclusions are limited to requirements within clause 7, and such exclusions do not affect the organization's ability, or responsibility, to provide product that meets customer and applicable regulatory requirements.



IECQ QC 080000 - Why?

ISO 14001 Certification alone?

Extract from Introduction:

This International Standard does not establish absolute requirements for environmental performance beyond the commitments, in the environmental policy, to comply with applicable legal requirements and with other requirements to which the organization subscribes, to prevention of pollution and to continual improvement.

Thus, two organizations carrying out similar operations but having different environmental performance can both conform to its requirements.



IECQ QC 080000 IECQ HSPM ADDS to ISO 9001

- IECQ QC 080000 builds on the existing generic quality management system requirements of ISO 9001
- ISO 9001 **MUST** be read in conjunction with IECQ QC 080000
- IECQ QC 080000 includes Hazardous Substances requirements that are additive to the “base line” quality management system requirements of ISO 9001
- To assist implementers and assessors, IECQ QC 080000 uses the same clause numbering as ISO 9001



IECQ QC 080000 IECQ HSPM refers to ISO 9001

Extract from IECQ QC 080000

1 Scope

This Specification defines the requirements for establishing process to identify and control the introduction of hazardous substances (HS) into its products. In the event that hazardous substances are introduced into the products, this Specification defines the requirements for implementing processes to test, analyze, or otherwise ascertain the HS content, and to make it available to the customer. Documented processes shall be within the organization's business and quality management systems.

The requirements of this Specification are in addition to those contained within ISO 9001.



IECQ QC 080000 IECQ HSPM refers to ISO 9001

Extract from IECQ QC 080000

4.2 Documentation requirements

The requirements of ISO 9001 shall apply along with the additional requirements below:

4.2.1 General

The quality management system documentation shall include

- a) The HSF requirements shall be an integral part of the organization's quality management system and shall include
- b) a list of all hazardous substances used within the organization.
- c) statements of HSF policy and objectives with inclusion of a timeline for elimination of use of all hazardous substances, as appropriate
- d) in the organization's quality manual a section on the HSF process management plan and objectives and reference to HSF documented procedures
- e) documented procedures as required by the organization's HSF process management plan with control of all such documents executed as required by section 4.2.4 of the ISO 9001:2000 international Standard.
- f) records of the organization's HSF process management performance.



IECQ HSPM Certificates Issued

- IECQ QC 080000 IECQ HSPM certificates issued as of October 12, 2007

- 2007 = 449
- 2006 = 138
- 2005 = 3

590 Total



IECQ HSPM Approved CB's



Management Service



Countries with IECQ HSPM operating IECQ Approved CB's

- **Canada**
- **China (inc Hong Kong)**
- **Czech-Republic**
- **France**
- **India**
- **Indonesia**
- **Italy**
- **Japan**
- **Rep of Korea**
- **Malaysia**
- **Mexico**
- **Philippines**
- **Poland**
- **Sweden**
- **Chinese Taipei**
- **Singapore**
- **Spain**
- **Thailand**
- **United Kingdom**
- **United States**



Q & A

- Questions and Answers



Next Steps

- Identify the next steps for industry support



Questions

Thank You

