



IAQG供应链管理手册SCMH

SCMH是什么、有什么、从哪里获取？

由CAQG翻译

Translated by CAQG



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内容

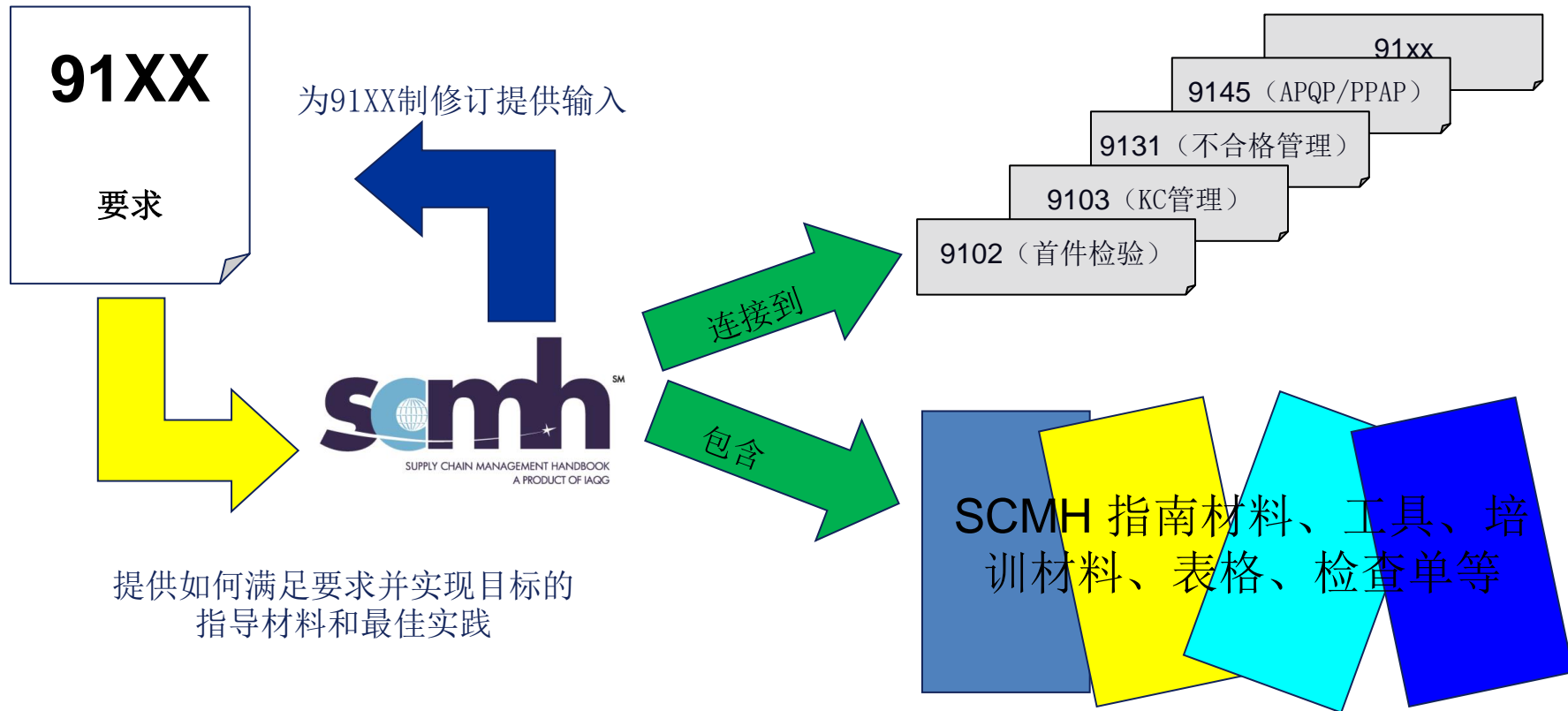
- 供应链管理手册（SCMH）是什么？
- SCMH材料样例
- SCMH主题内容
- 如何获取SCMH
- SCMH用户
- SCMH网络研讨会

通常而言，IAQG的输出物包括：

- IAQG 标准
 - 质量管理体系相关要求，例如：AS/EN/JISQ 9100/9110/9120
 - 产品和过程相关的标准，例如：AS/EN/JISQ 9102 《航空航天首件检验要求》、9103 《质量管理体系——关键特性波动管理》等
- 实施支撑材料（对一些IAQG标准）
- 被广泛认证认可的认证体系，9100/9110/9120标准认证
- 供应商改进指南材料➔ SCMII

- SCMh是由IAQG相关领域专家开发出的一套指导材料和工具，用于帮助整个供应链改进“按时按质”交付绩效：
 - 目的是帮助组织理解IAQG成员的要求并应用
 - 并不作为要求，因此不用于审核（除非顾客特殊指定）
 - SCMh章节的架构是标准的供应链业务流程
 - 使用SCMH指导材料并不能保证符合所引用的质量管理体系标准…但是很有帮助！

SCMH重点关注“如何”

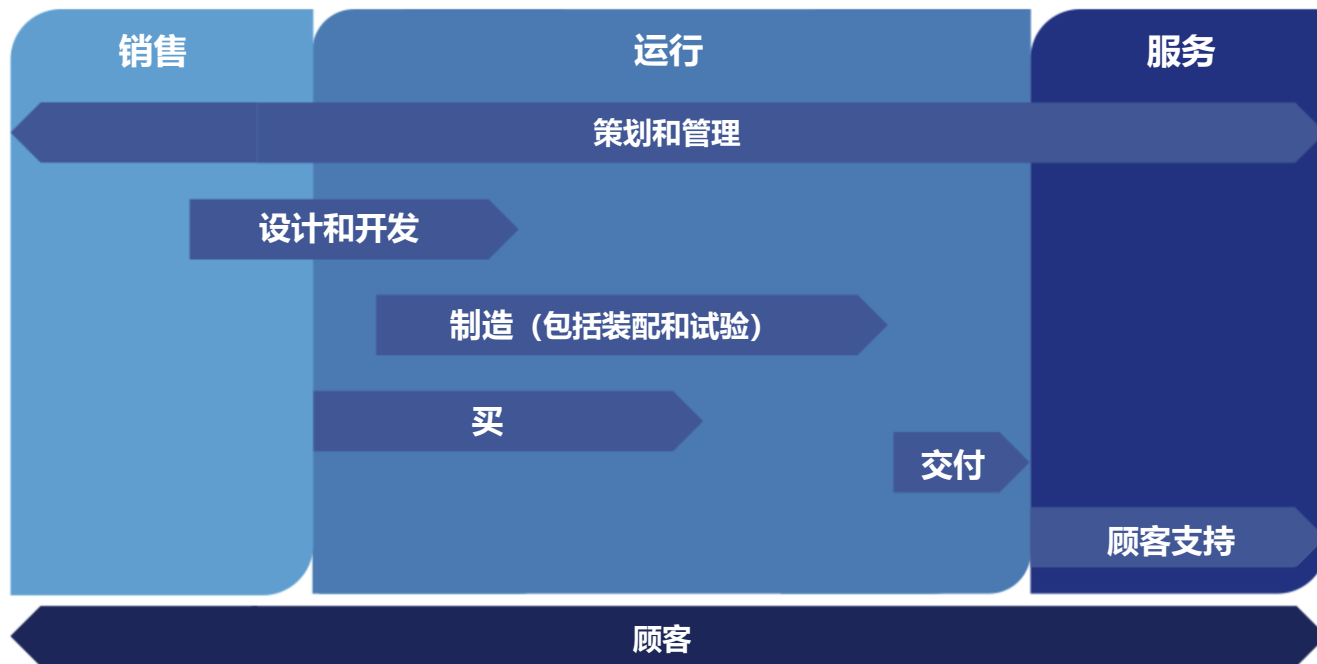


- SCMh材料是免费提供的，供应链的所有层级均可从IAQG官方网站上获得
- 注册方便，下载这些资料是完全免费的
- SCMh保持着持续更新并保持持续改进
- SCMh材料用英文发布，通常不被翻译成其他语言，但也有一些翻译版本的存在（例如日语、意大利语、中文）。英文版本一直保持最新状态。

SCMH 按照标准的供应链业务流程进行架构



供应链过程生命周期



策划&管理：

- 为了确保产品和服务能够达到期望的产品绩效水平（质量/进度/成本）和顾客要求，所要求的高层级跨职能业务活动。这包括：项目群和项目管理、对中长期顾客需求和运营&资源能力进行平衡和预测、活动的整体策划、风险/问题的识别和缓解、相关方关系和沟通。

公司的整体管理和
项目管理（横向）

设计和开发：

- 产品规范与设计、工艺开发与鉴定、产品关键特性的确定、面向制造的设计和过程设计、设计更改和过时管理、技术操作文件和手册、持续适航指令。

我一次设计正确，
并从工程角度支持
最终用户

SCMH 架构和内容 (续)



制造:

- 建立生产组织、新产品的生产实现、生产鉴定、在一系列制造过程中的制造和验证活动，以及生产活动变更管理。

我从最初就开始保持
按时、按质地生产，
并控制内部变更

买:

- 选择、确定、监视供应商及次级供应商以确保采购的产品满足最终顾客的要求，促进供应商持续提升绩效水平。

我拥有合适的供应商
并恰当地管理他们

SCMH 架构和内容 (续)



交付:

- 交付前和交付的活动、产品保护和交付文件、监视交付绩效以确保按时按质交付。这也包括在最终交付给最终顾客或运营商前于顾客生产场所进行实施活动的管理。

交付活动（包括文件）和在顾客处的活动能够保护我的产品和我的顾客

顾客支持:

- 支持最终顾客/运营商以保证顺利的产品服役和在役阶段最终客户的满意。包括了：维修、修理和大修，航材备件提供，技术支持，培训和运行文件，产品全生命周期监控（包括在役数据的反馈与分析），外场活动的管理。

最终产品的运营商能够被有效支持并有闭环管理

SCMH内容



策划&管理

- 工作转移
- 根本原因分析与问题解决
- 数据科学&人工智能
- 先期产品质量策划 - APQP 9145 标准
- 合同要求评审与管
- 能力管理
- 产能管理, 订货及物
- 构型管理
- 项目管理
- 销售、主计划和排程
- 价值流图
- 一体化管理体系 IMS
- 合规性教育
- 航天应用
- 特殊特性定义
- 风险管理
- 关键绩效指标KPI
- 应用远程技术
- 业务连续性管理

设计和开发

- 特殊要求与关键项控制
- 9115标准实施支持材料
- 变更通知 (NOC 工具)
- 设计风险分析
- 工程容差分析
- 波动敏感性分析
- KPI详细定义

制造 (包括装配和试验)

- 管理产品与过程波动 9103标准
- 首件检验9102标准
- 假冒件预防
- 不合格输出控制
- 多余物FOD
- 全新制造环境下的人为因素
- 接收授权媒介 (AAM)
- 收集和使用车间现场的输入与反馈
- 制造工作指令
- 产品安全意识
- 测量系统分析MSA
- 统计产品接收9138标准 (升版)
- 不可挽救件 9147标准
- KPI详细定义
- 操作者自我验证- 9162标准

买

- 供应商能力评估
- 次级供应商控制
- 共同要求的通用语言
- 供应商质量管理基础
- 关键绩效指标详细定义

交付

- 合格证
- KPI详细定义

顾客支持

- 产品服役
- KPI详细定义

顾客

50 个不同专题
- 超过 200 份不同的
的指南材料

关于 SCMH:

- 按字母索引
- 9100 关联到 SCMH
- SCMH 沟通包

SCMH 现有主题 (截止2022年9月)



策划&管理

- SCMH 7.1 工作转移管理
- SCMH 7.2 先期产品质量策划 (APQP)
- SCMH 7.3 风险管理
- SCMH 7.4 根本原因分析与问题解决
- SCMH 7.5 构型管理
- SCMH 7.6 价值流指南材料
- SCMH 7.7 产能管理、订货及物流
- SCMH 7.8 合规性教育
- SCMH 7.9 项目管理
- SCMH 7.10 合同要求评审与管理
- SCMH 7.11 关键绩效指标KPI及其定义
- SCMH 7.12 一体化管理体系
- SCMH 7.13 能力管理
- SCMH 7.14 业务连续性管理
- SCMH 7.15 在审核和产品验收中使用远程技术
- SCMH 7.16 销售、主计划和排程
- SCMH 7.17 航天应用
- SCMH 7.18 数据科学&人工智能

设计&开发

- SCMH 2.2 9115标准实施和支持材料
- SCMH 2.3 更改通知 NOC 工具
- SCMH 2.4 特殊要求和关键性控制
- SCMH 2.5 公差分析
- SCMH 2.6 设计/工程和产品开发关键绩效指标详细定义
- SCMH 2.7 波动敏感性分析

制造

- SCMH 3.1 管理产品与过程波动 9103
- SCMH 3.2 首件检验 (FAI)
- SCMH 3.3 不合格输出控制
- SCMH 3.4 外来物 (FOD)
- SCMH 3.5 假冒件预防
- SCMH 3.6 全新制造环境下的人为因素
- SCMH 3.7 统计产品接收
- SCMH 3.8 制造工作指令
- SCMH 3.9 产品安全意识
- SCMH 3.10 收集和使用车间现场的输入与反馈
- SCMH 3.11 测量系统分析 MSA
- SCMH 3.12 接收授权媒介介绍
- SCMH 3.13 不可挽救项管理
- SCMH 3.14 生产和制造 (造) 关键绩效指标详细定义
- SCMH 3.15 操作者自我验证

买

- SCMH 4.1 供应商能力评估 (SCA)
- SCMH 4.3 供应商质量管理基础 (SQMB)
- SCMH 4.4 次级供应商控制
- SCMH 4.6 供应商管理 (买) 关键绩效指标详细定义

交付

- SCMH 5.1 交付关键绩效指标详细定义
- SCMH 5.2 合格证 (CofC)

顾客支持

- SCMH 6.1 产品服役 (EIS)
- SCMH 6.2 顾客支持关键绩效指标详细定义

SCMH章节样例

3.4 多余物 (FOD)

- FOD 预防项目 - AS/EN/JSAC 9146 实施指导材料
- FOD 评估工具 - 三个层级的稳健性
- 可填写打印的在线检查单和表格



FOREIGN OBJECT DAMAGE (FOD)
PREVENTION PROGRAM –
GUIDANCE IN SUPPORT OF AS/EN/JSAC 9146

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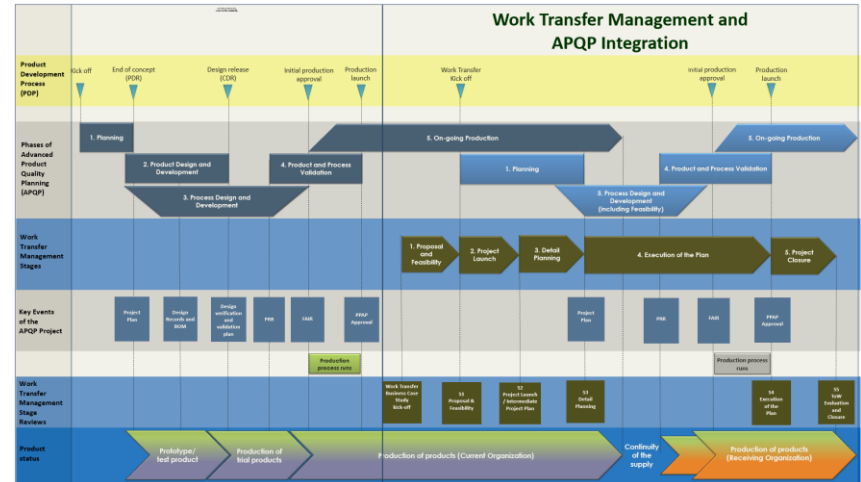
- FOD Prevention Program Requirements**
- Program Management
 - Operations
 - Area Designation
 - Training and Personnel Access
 - Product Protection
 - Housekeeping and Clean-As-You-Go
 - Consumables, Hardware, and Personal Items - Accountability
 - Tool Accountability and Control

Foreign Object Damage (FOD) Prevention Program Assessment	
AS/EN/JSAC 9146 Prevention Program Requirements	Assessment
Requirement	Objective Evidence / Comments
1.1 Program Management	
1.1.1 The organization shall implement and document the FOD prevention program to prevent and control FOD.	
1.1.2 The organization shall designate FOD prevention program implementation responsibilities to the responsible personnel throughout the entire life of the program.	
1.1.3 The organization shall establish, implement, and maintain a documented FOD prevention program that includes: <ul style="list-style-type: none"> a) The program shall be: <ul style="list-style-type: none"> • Documented • Approved and authorized by the organization • Approved and authorized by the customer • Approved and authorized by the community concerned (AS) 	
1.1.4 The organization shall establish documented objectives of the FOD prevention program and shall ensure that the objectives are measurable, achievable, and aligned with the organization's strategic direction.	
1.1.5 The organization shall ensure that the FOD prevention program is implemented and maintained throughout the entire life of the program.	
1.1.6 The organization shall ensure the identification of FOD prevention program requirements and shall ensure that the requirements are implemented and maintained throughout the entire life of the program.	
2.2 Operations	

Requirement	Requirement 1.1.1		Requirement 1.1.2		Requirement 1.1.3		Requirement 1.1.4		Requirement 1.1.5		Requirement 1.1.6	
	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
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1.1.2 The organization shall designate FOD prevention program implementation responsibilities to the responsible personnel throughout the entire life of the program.												
1.1.3 The organization shall establish, implement, and maintain a documented FOD prevention program that includes: <ul style="list-style-type: none"> a) The program shall be: <ul style="list-style-type: none"> • Documented • Approved and authorized by the organization • Approved and authorized by the customer • Approved and authorized by the community concerned (AS) 												
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1.1.6 The organization shall ensure the identification of FOD prevention program requirements and shall ensure that the requirements are implemented and maintained throughout the entire life of the program.												

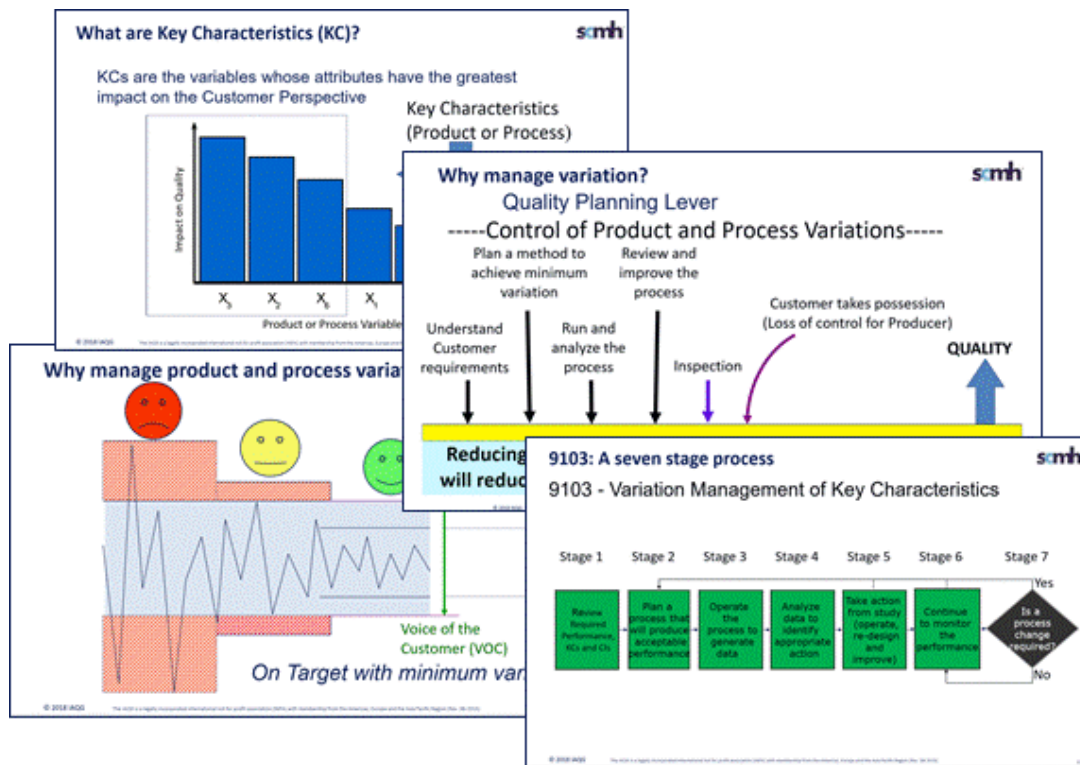
7.1 工作转移管理

- 在工作转移管理程序中整合应用APQP
- 5个阶段-4道门禁评审过程
- 可填写的表格：
 - 每道门禁评审
 - 项目建议
 - 风险评估&业务案例
 - 产品成熟度评审



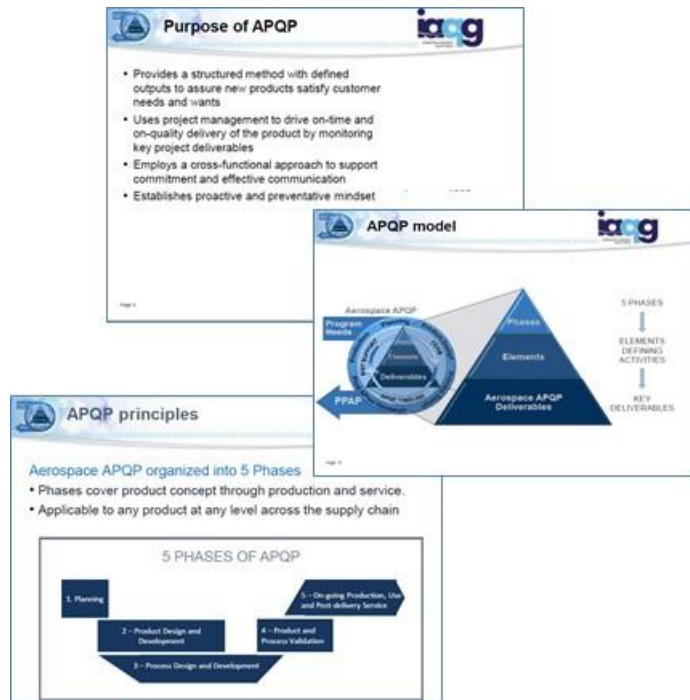
3.1 关键特性的波动管理 (9103)

- 提供关于关键特性的基本知识
- 解释波动管理的价值
- 详细介绍如何实施9103规定的七个阶段过程
- 当9103修订时对指导材料进行更新



7.2 先期产品质量策划 (APQP) IAQG 9145标准实施支持材料

- 解释APQP的目的和益处
- 描述了：
 - APQP的主要支柱
 - 1. 组织承诺和管理支持
 - 2. 跨职能团队
 - 3. 有效的项目策划
 - APQP 原则
 - APQP的5个阶段
 - APQP 要素和交付物
- 指导用户如何管理APQP过程以及新产品实施时的报告过程
- 提供了一些检查单、模板等



3.2 首件检验 (FAI)

- 9102标准的指导材料
- 包括了：
 - FAI 问答FAQ
 - 一步一步地指导如何填写9102 FAI报告表格
 - 表格 1 – 零件编号核查
 - 表格 2 – 产品核查
 - 表格 3 – 特性核查、验证和符合性评估

GUIDE FOR SUCCESSFUL COMPLETION OF FIRST ARTICLE INSPECTION (FAI) REPORTS

REV. B
17 OCT 2017
www.iaqg.org/scmh Section 3.2.3

SCMH Section 3.2.2
Revision Letter: C
Revision Date: 8 FEB 2021
<https://iaqg.org/books/scmh> Section 3.2

First Article Inspection 9102 FAQs

The following Frequently Asked Questions (FAQs) were reviewed on BFE

Introduction:
The 9102 standard is used to standardize the documentation of First Article Inspections. The standard covers processes from manufacturing small electrical assemblies. The standard does not cover every instance that may arise within a manufacturer's organization. These answers are to questions about the standard. While these questions provide guidance, an organization should interpret or unique circumstances that apply to the organization. The doc with the customer or flowed down to the suppliers as necessary.

Intro. 1. Question
What is the value of the FAI process?

Intro. 1. Response
The value of the First Article Inspection is to validate that the product realization processes are capable of producing parts and assemblies that meet engineering, design requirements.
The intent of First Article Inspection is to:

- Reduce future escapes, risks, and total costs
- Help ensure safety of flight
- Improve Quality, Delivery, and Customer Satisfaction
- Reduce costs and production delays associated with product non-conformances
- Identify non-capable production realization processes, initiate and validate corrective actions

A well planned and executed FAI will provide objective evidence that the manufacturer's processes can produce compliant product and that they have understood and incorporated requirements.

First Article Inspection (FAI) will:

- Provide confidence that the processes are capable of producing conforming product
- Demonstrate that the manufacturers of the product have an understanding of requirements
- Provide objective evidence of process capability as defined in this standard
- Provide assurance of product conformance at the start of series production and after changes as outlined in this standard.
- Reduce potential risks associated with production start-up and process changes

Linkage to other IAQG FAI documents:

Intro. 2. Question
When should an organization begin the First Article Inspection Process?

Intro. 2. Response
The Organization should have a process to plan for completion of First Article Inspection, or should plan First Article Inspection activities prior to the First Production Run. FAI planning should address the activities to be performed throughout the First Article Inspection process and the responsible organizations for those activities.

Intro. 3. Question
What steps are critical to developing a good first article?

Intro. 3. Response
The organization should consider the following activities during FAI planning, and if required, coordinate planning with customer.

- Determination of Design Characteristic inspection and sequencing for inspection of characteristics not measurable in the final product.
- Extraction of DPD (Digital Product Design) Characteristics required for product realization that are not fully defined on 2D drawings, from DPD, including tolerances for nominal dimensions.
- Determination of objective evidence to be included in the FAIR for each Design Characteristic.

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AS9102 B Form 1 – Part Number Accountability

Bold Font – MANDATORY information required.

Bold Italic Font – CONDITIONALLY REQUIRED. These fields must be completed when information is available.

Standard Font – OPTIONAL information required when available.

在IAQG官网网站获取SCMH

IAQG 链接到SCMH

IAQG.org



Home About IAQG Membership Sectors **IAQG Tools** Standards Certification Events News

OASIS AIMM **SCMH** DICTIONARY

IAQG Participant Portal

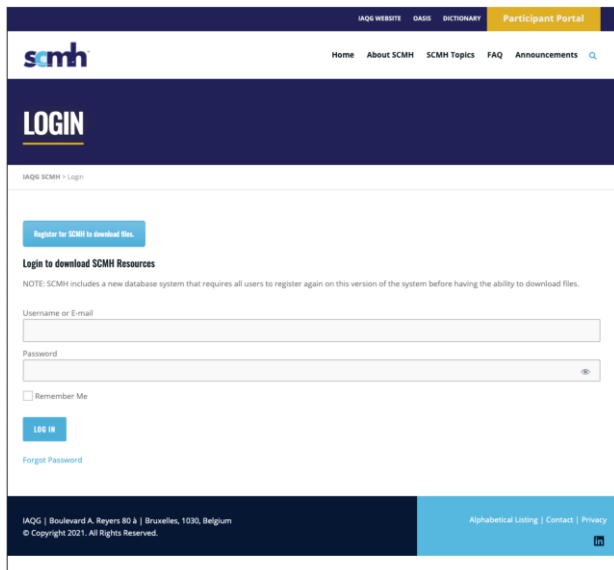
SUPPLY CHAIN MANAGEMENT HANDBOOK (SCMH)

Materials to assist with achieving best practices within the Aviation
Space and Defense Industries (AS&D).

LEARN MORE

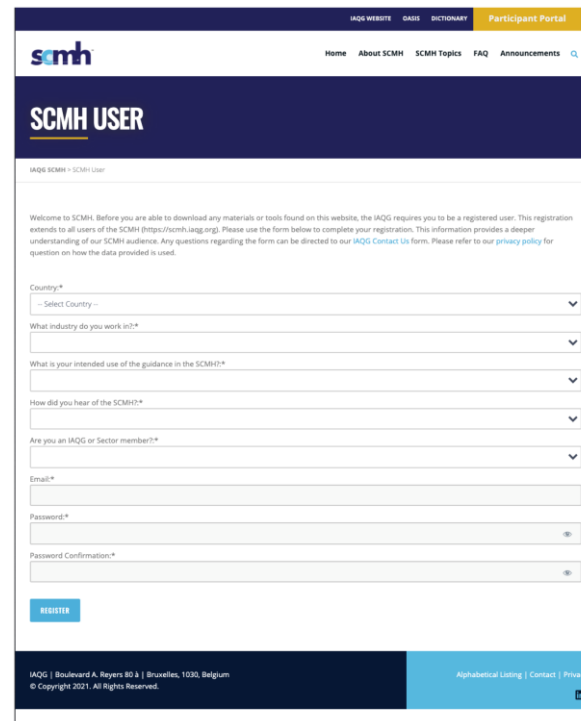
点击“SCMH”或者“IAQG tools – SCMH”或者供应链管理手册Supply Chain Management Handbook (SCMH)页面中“了解更多LEARN MORE”

SCMH注册



The screenshot shows the SCMH LOGIN page. At the top, there is a navigation bar with 'IAQG WEBSITE', 'DASH', 'DICTIONARY', and 'Participant Portal'. Below the navigation bar is the SCMH logo and a menu with 'Home', 'About SCMH', 'SCMH Topics', 'FAQ', and 'Announcements'. The main heading is 'LOGIN'. Below the heading, there is a 'Register to SCMH to download files.' button. A note states: 'Login to download SCMH Resources. NOTE: SCMH includes a new database system that requires all users to register again on this version of the system before having the ability to download files.' There are input fields for 'Username or E-mail' and 'Password', a 'Remember Me' checkbox, and a 'LOG IN' button. A 'Forgot Password' link is also present. At the bottom, there is footer information: 'IAQG | Boulevard A. Reyers 80 a | Bruxelles, 1030, Belgium © Copyright 2021. All Rights Reserved.' and 'Alphabetical Listing | Contact | Privacy'.

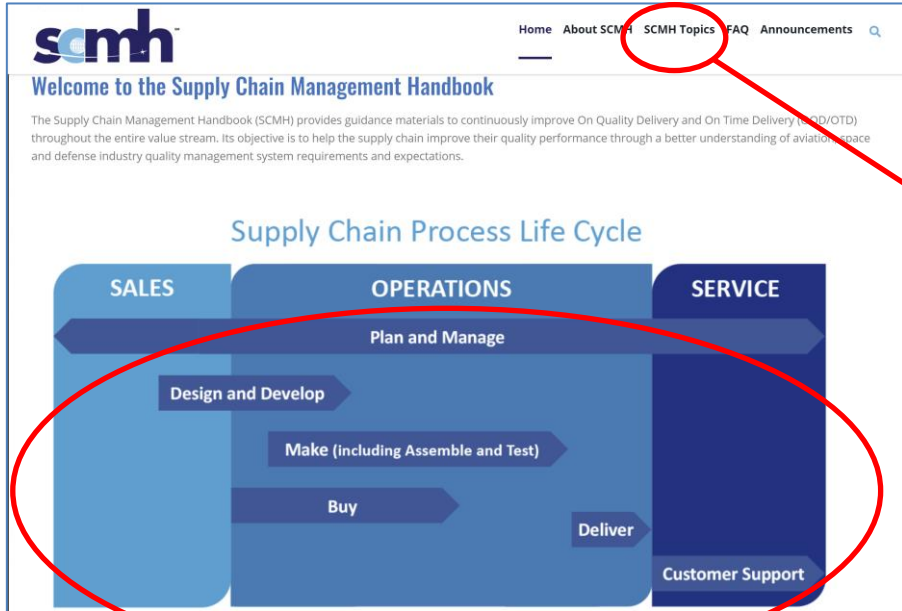
注册是免费的，只需要填写几个问题帮助我们确定SCMH的使用用途、以及SCMH在全球的使用范围



The screenshot shows the SCMH USER registration page. At the top, there is a navigation bar with 'IAQG WEBSITE', 'DASH', 'DICTIONARY', and 'Participant Portal'. Below the navigation bar is the SCMH logo and a menu with 'Home', 'About SCMH', 'SCMH Topics', 'FAQ', and 'Announcements'. The main heading is 'SCMH USER'. Below the heading, there is a 'Register to SCMH to download files.' button. A note states: 'Welcome to SCMH. Before you are able to download any materials or tools found on this website, the IAQG requires you to be a registered user. This registration extends to all users of the SCMH (https://scmh.iaqg.org). Please use the form below to complete your registration. This information provides a deeper understanding of our SCMH audience. Any questions regarding the form can be directed to our IAQG Contact Us form. Please refer to our privacy policy for question on how the data provided is used.' The form includes the following fields: 'Country*' (dropdown menu), 'What industry do you work in?*' (dropdown menu), 'What is your intended use of the guidance in the SCMH?*' (dropdown menu), 'How did you hear of the SCMH?*' (dropdown menu), 'Are you an IAQG or Sector member?*' (dropdown menu), 'Email*' (text input), 'Password*' (password input), and 'Password Confirmation*' (password input). There is a 'REGISTER' button at the bottom. At the bottom, there is footer information: 'IAQG | Boulevard A. Reyers 80 a | Bruxelles, 1030, Belgium © Copyright 2021. All Rights Reserved.' and 'Alphabetical Listing | Contact | Privacy'.

当你下载/浏览其中的材料或者工具箱内容时，会弹出注册框。如果需要使用忘记密码“forgot password”的功能，需要先在平台上进行注册。

获取SCMH



链接到SCMH主题

SCMH 主题是按照供应链过程划分的。
SCMH 主题在下方列出并可以扩展显示主题介绍、网络研讨会、核心指南材料和工具箱。

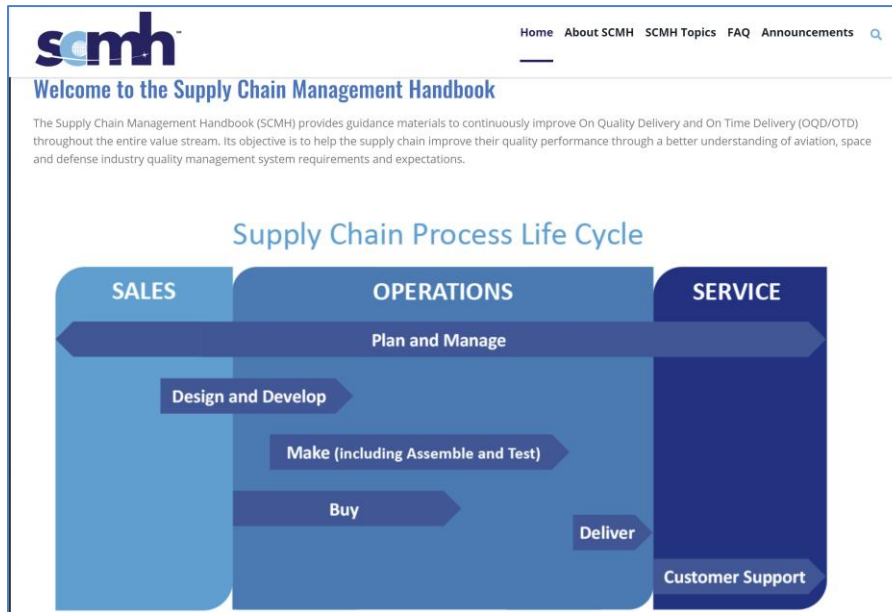
The screenshot shows the SCMH website's 'SCMH Guidance Topics' page. The navigation bar includes 'Home', 'About SCMH', 'SCMH Topics', 'FAQ', and 'Announcements'. The main content area is titled 'SCMH PLAN & MANAGE' and features a list of topics under the 'PLAN & MANAGE' category, which is circled in red. The topics listed are:

- SCMH 7.1 Work Transfer Management
- SCMH 7.2 Advanced Product Quality Planning (APQP) 9145
- SCMH 7.3 Risk Management
- SCMH 7.4 Root Cause Analysis and Problem Solving
- SCMH 7.5 Configuration Management
- SCMH 7.6 Process Mapping Guidance Material

快速浏览SCMH

直达链接:

scmh.iaqg.org



The screenshot shows the SCMh website interface. At the top, there is a navigation menu with links for Home, About SCMh, SCMh Topics, FAQ, and Announcements. Below the navigation is a welcome message: "Welcome to the Supply Chain Management Handbook". A brief description follows: "The Supply Chain Management Handbook (SCMH) provides guidance materials to continuously improve On Quality Delivery and On Time Delivery (OOD/OTD) throughout the entire value stream. Its objective is to help the supply chain improve their quality performance through a better understanding of aviation, space and defense industry quality management system requirements and expectations."

The main content area features a diagram titled "Supply Chain Process Life Cycle". The diagram is structured as follows:

- SALES** (left column)
- OPERATIONS** (middle column)
- SERVICE** (right column)

Processes are represented by arrows:

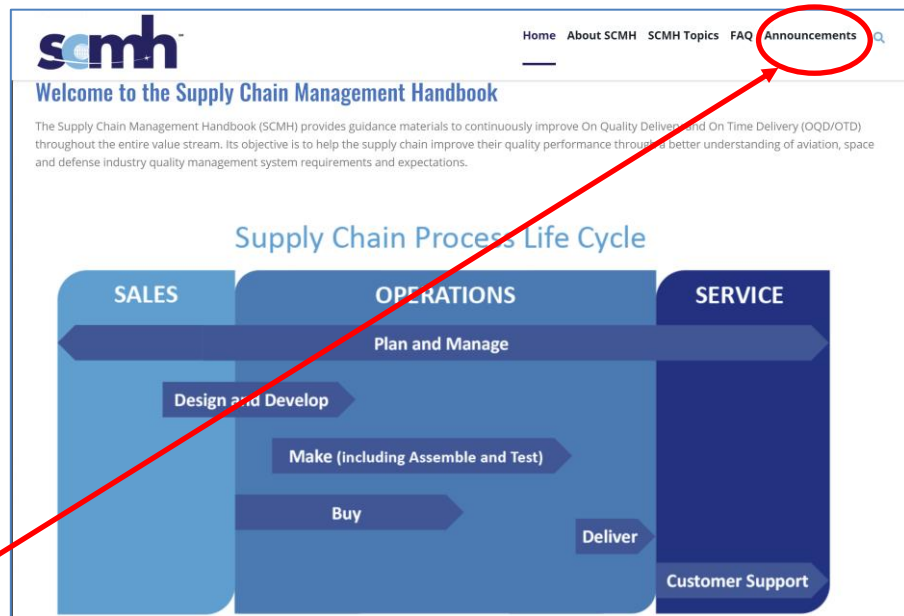
- Plan and Manage**: A long arrow spanning across SALES, OPERATIONS, and SERVICE.
- Design and Develop**: An arrow starting in SALES and ending in OPERATIONS.
- Make (including Assemble and Test)**: An arrow starting in OPERATIONS and ending in SERVICE.
- Buy**: An arrow starting in OPERATIONS and ending in SERVICE.
- Deliver**: An arrow starting in OPERATIONS and ending in SERVICE.
- Customer Support**: An arrow located at the bottom of the SERVICE column.

SCMH网络研讨会

SCMH网络研讨会

- IAQG引入了SCMH网络研讨会，在每个网络研讨会上介绍不同主题的SCMH专题

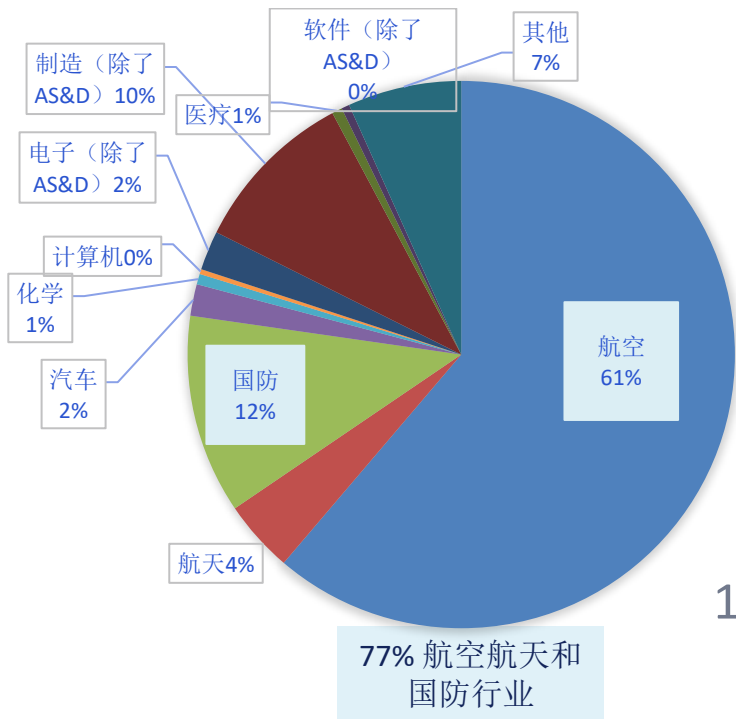
- 网络研讨会首先会介绍SCMH及其内容、如何获取这些指导材料。接着由一位来自SCMH特定专题指导材料编制组的成员向观众介绍这个专题主要的内容。
- 要参加接下来的网络研讨会，请先成为SCMH的注册用户
<https://scmh.iaqg.org>
- 请点击到通知“Announcement”页面，您会在接下来的网络研讨会计划中看到免费参加“FREE to Attend”的链接。



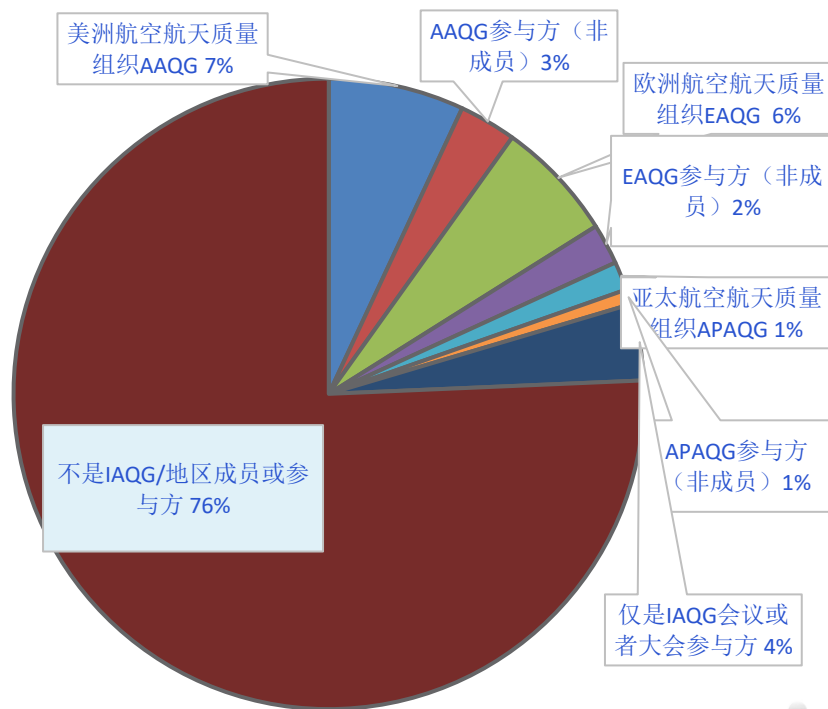
SCMH用戶

SCMH 使用KPIs

您在哪个行业工作？



您是IAQG或地区成员吗？



102个不同国家!

绝大多数SCMH用户来自航空航天和国防行业。
他们没有直接参与到IAQG中但是处于供应链中：我们达到了目标!



SCMH PLAN & MANAGE

Home About SCMh SCMh Topics FAQ Announcements

IAQG SCMh > SCMh - Plan & Manage

SCMH Guidance Topics

PLAN & MANAGE DESIGN & DEVELOP MAKE BUY DELIVER CUSTOMER SUPPORT

Plan and Manage

Cross-functional business activities required to ensure that products and services achieve the expected level of product performance (on quality / on time / on cost) and customer expectations. This includes program and project management, balancing and forecasting medium-long term customer demand with operational & resource capabilities, overall planning of activities, identification, and mitigation of risks and issues, stakeholders relationship, and communication.

- + SCMh 7.1 Work Transfer Management
- + SCMh 7.2 Advanced Product Quality Planning (APQP) 9145
- + SCMh 7.3 Risk Management
- + SCMh 7.4 Root Cause Analysis and Problem Solving
- + SCMh 7.5 Configuration Management
- + SCMh 7.6 Process Mapping Guidance Material

Contact SCMh

有疑问? 联系我们“Contact SCMh”.



SCMH 2015-2017

