INDUSTRIAL BATTERY GROUP VALDOSTA	QM – 01
QUALITY MANAGEMENT SYSTEM	
QUALITY MANUAL	Revision: **E** Date: November 2015

QUALITY POLICY

Using the appropriate technology, Saft Industrial Battery Group is committed to satisfying our customers with error free solutions, products and services…

on time, every time.

This policy includes a commitment to continuous improvement and meeting regulatory and legal requirements.

Rev E : Quality Change Notice 000594

AUTHOR: P. Bourg, QM-01 Rewritten by J. Pinkard

CREATION DATE		RESPONSIBLE AUTHORITY
August 2010	Function:	Saft Valdosta General Manager
CANCEL AND REPLACE NS 1 001 004 af	Date:	November 2015
	Name & signature:	J. Beasley

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LETTER	DESCRIPTION OF REVISION	DATE	APPROVED
--	New Release	07/01/10	Jim Pinkard
A	See QCN-	05/01/11	Jim Pinkard
B	See QCR-1836	01/07/13	Jim Pinkard
C	See CR-000522	09/14/15	Jody Beasley
D	See CR-000562	10/23/15	Jody Beasley
E	See CR-000594		

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The Industrial Battery Group (IBG) in Valdosta Georgia is committed to defining, developing and maintaining a quality policy in compliance with the international standards ISO 9001 and AS9100.

By signing hereunder, the following members of the Saft Valdosta management team approve this manual, the quality policy, and the quality objectives. They undertake to inform each employee about the quality policy and the objectives of Saft. They make it their duty to ensure that all employees know and understand the requirements defined in this manual.

JODY BEASLEY
General Manager

ANNE LENNARD
Vice President Finance and Administration

John Adeimy
Vice President Sales & Marketing

John Jones
Production Director

Tony Cafarchio
Quality Assurance Manager

Eddie Johnson
Logistics Manager

Mike Coker
Purchasing Manager

Joseph Harrison
Manufacturing Engineering Director

Position Open
Technical Engineering Department Manager

Terry Cooper
Human Resources Manager

Charlie Cline
Information Technology Manager

Jim Pinkard
Safety/ World Class Manager

1. PRESENTATION OF SAFT

SAFT ranks among the world leaders in the design and production of electrochemical generators.

SAFT today is a key player in following fields:

Industrial accumulators,

Specialty batteries,

SAFT, created in 1918 as a French company, is present in 18 countries.

SAFT is also present in Western and Eastern Europe with a subsidiary in the Czech Republic.

SAFT's presence in North America dates back to 1954 when it entered the aviation market by transferring the Gulton and General Electric licenses.

SAFT is also present in the Asia-Pacific zone since the middle of the 1980s.

SAFT employs approximately 4,000 persons.

The head office is located at 12, rue Sadi Carnot - 93170 BAGNOLET (France).

SAFT is divided into 2 groups:

Industrial Battery Group (IBG)

Specialty Battery Group (SBG)

The organization of SAFT Valdosta is described in the following

http://aww-intrasaft.saft.org/human_resources/htm/organization_charts_valdosta.htm

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2. PRESENTATION OF THE INDUSTRIAL BATTERY GROUP (Valdosta)

The INDUSTRIAL BATTERY GROUP has production units in France in Bordeaux and Nersac. Production units in the United States of America are in Valdosta, Georgia and Jacksonville, Florida. The headquarters is located in Bagnolet France.

These facilities design and manufacture several kinds of electrical accumulators used for making different models of batteries [Nickel-Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), and Lithium-ion], Nickel Capacitors and integrated battery systems.

The manufacturing process of these batteries is described in the paragraph 7-5.

These batteries are used in the following fields:

- Aviation: for start-up and emergency applications that require high instantaneous power under severe environmental conditions.
- Railways: for start-up, emergency braking and lighting applications requiring considerable energy sources in difficult operating conditions and also for propulsion.
- Stand-by: for application related to energy, power, and photovoltaic.
- Electric Propulsion: for traction applications and special vehicles.
- Telecommunications: for emergency application in telephone communication links.
- Others: Grid Management Power, Hybrid and Electric Vehicles and Engine Starting

	Production facility in Valdosta
Year of construction	1974
Number of employees	260*
Development and Production	Alkaline Batteries and Nickel Capacitors

* Includes Cockeysville Sales Office

Contact information for the Valdosta facility and the Cockeysville Sales Office:

Facility in VALDOSTA
Saft America, Inc.
711 Gil Harbin Industrial Blvd
VALDOSTA, GA 31601
Tel: 229-247-2331
Fax: 229-247-2810

Sales Office in COCKEYSVILLE
Saft America, Inc.
109 Beaver Court
COCKEYSVILLE, MD 21030
Tel: 229-247-2331
Fax: 410-329-9802

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PRESENTATION OF THE IBG PRODUCT RANGE

Nickel-Cadmium Batteries for Aviation applications

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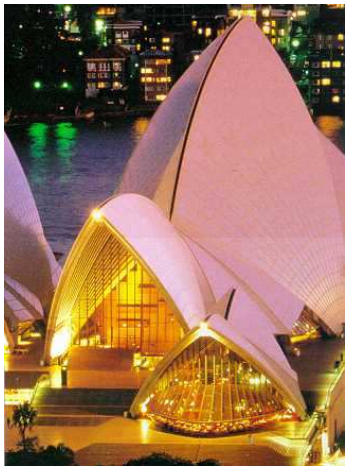
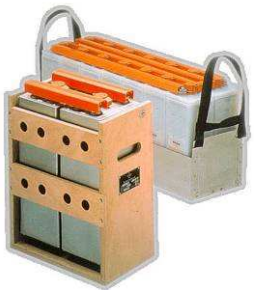
Nickel-Cadmium Batteries for Stand-by applications





Nickel-Cadmium Batteries for Railways applications



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Nickel-Cadmium Batteries for Telecom applications

Tel.X

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Nickel Capacitors for Engine Starting

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4. QUALITY MANAGEMENT SYSTEM (QMS)

4.1. GENERAL REQUIREMENTS

The quality management system is based on the requirements of the ISO 9001, and/or AS9100. This system is geared towards customer satisfaction and continuous improvement.

To this end, the organization establishes, documents, implements, maintains and continuously improves the system.

The application of this system is based on the process approach, specifically a methodical identification of processes, their interaction and their management.

The processes have been determined for product realization and are defined in the diagram on pages 14-15.

The quality management system also meets the requirements of the following statutory and regulatory quality standards:

- **FAA (Federal Aviation Administration) CFR, Title 14, Part 21.137 for batteries for Commercial Aviation.**
- **CFR, Title 14, PART 145 for the maintenance of batteries meant for Civil Aviation.**
- **AS 9100: for civilian aviation batteries.**

These specific requirements are defined in the following documents:

- **FAA Supplement # MS002 for FAA PMA.**
- **FAA Supplement # MS004 for CFR, Title 14, PART 145.**
- **OP-02 The Quality System**

and included in the appropriate document for AS9100.

Access to quality management system documentation is available to customers and/or regulatory authority's representatives upon request.

In addition, document changes are coordinated with customers and/or regulatory authorities in accordance with contract or regulatory requirements.

The records created by and/or retained by suppliers that are considered quality records are available for review by customers of Saft and/or regulatory authorities as described in the applicable documents.

Some activities required for customer satisfaction (in particular AOG's [Aircraft-On-Ground] and battery maintenance) are performed as close as possible to the customer and are regularly audited in order to ensure quality and promote continuous improvement.

If the organization chooses to outsource any processes that affect product conformity to requirements, the organization will ensure control over such processes. The type and extent of control to be applied to these outsourced processes is defined within the quality management system and, when processes are outsourced, the company retains responsibility for conformity to all customer, statutory and regulatory requirements

Applicable documents:

OP-02, The Quality System

Q-691, Activity Transfer

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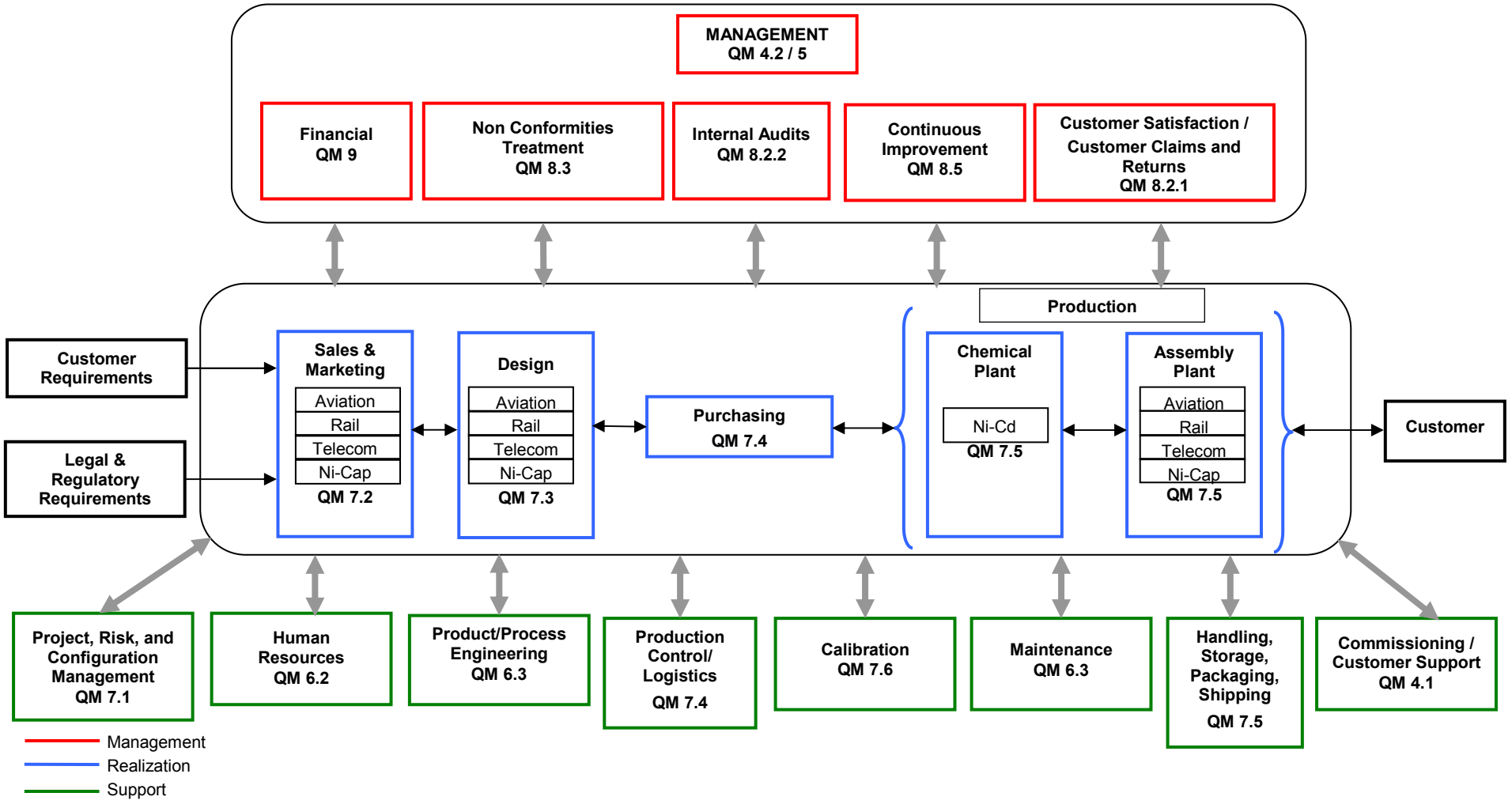

Sub-processes are defined in Q-661, AS9100 Requirements to Saft documentation Cross Reference and Sub-Process Identification

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	R				S								M
	SALES & MARKETING	ESIGN	URCHASING	RODUCTION	OGISTICS / PROD. CONTROL	ATERIAL HANDLING	USTRIA-LIZATION	AINTENANCE	HUMAN RESOURCES	ALIBRATION	ONFIGURATION MANAGEMENT	USTOMER SUPPORT	ANAGEMENT
ES & MARKETING		X		X	X				X		X	X	X
DESIGN	X		X	X	X	X	X		X	X	X		X
PURCHASING		X		X	X	X			X		X	X	X
PRODUCTION	X	X	X		X	X	X	X	X	X	X	X	X
GISCTICS / PROD. CONTROL	X	X	X	X		X	X		X		X	X	X
ERIAL HANDLING		X	X	X	X				X			X	X
USTRIA-LIZATION		X		X	X			X	X	X	X		X
MAINTENANCE				X			X		X	X			X
MAN RESOURCES	X	X	X	X	X	X	X	X					X
CALIBRATION		X		X			X	X					
ONFIGURATION MANAGEMENT	X	X	X	X	X		X					X	X
TOMER SUPPORT	X		X	X	X	X					X		X
MANAGEMENT	X	X	X	X	X	X	X	X	X		X	X	

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4.2. DESCRIPTION OF THE SYSTEM

4.2.1. General

The document architecture of the quality management system conforms to the following structure:

Level 1: Quality Manual, quality plans in accordance with customers requirements

- **QM-01**

Level 2: operating procedures

- **OP-xx**.

Level 3: operational procedures

- **E-xxx, Q-xxx, MFG-xxx, OMS and WI…**

Level 4: documents of record

The Quality Policy is stated on Page 1 of this document and in Clause 5.3. The Quality Objectives are stated in Clause 5.4.1.

Access to quality management system documentation and changes is provided to Saft personnel through the use of controlled release documents as described in **OP-05, Document and Data Control.** Employee awareness of relevant procedures is ensured as described in **OP-18**, Training.

Applicable documents

OP-05, Document and Data Control
OP-18, Training
Q-036, Document Control System

4.2.2. Quality Manual

OBJECTIVES

The objectives of this quality manual are:

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To define and make known the rules for ensuring the continuity of the quality management system.

To communicate the quality policy and objectives as well as the organization's commitment to customers and employees.

To achieve and maintain the quality level sought at optimal cost levels through a planned and effective use of technological, human and physical resources.

To build the confidence of customers in the capacity of Saft to supply products and services that meet their specifications.

SCOPE AND FIELD OF APPLICATION

This quality manual applies to the Saft Valdosta Organization.

The scope of this quality manual is to describe the general provisions implemented by the organization to ensure and constantly enhance the quality of its products and services in the following fields of activity:

ISO 9001:2008

Design, development, production, sale and after-sales support of secondary batteries for rail transit, telecommunications and aircraft industries.

AS9100 Rev C

Design, development, production, sale and after-sale support of secondary batteries for aircraft industries.

It is a source of information for customers on the measures taken by the organization to meet all the requirements of the international standard ISO 9001 and AS9100.

The interaction between the Quality Manual and referenced documented procedures is shown in the last two pages of this Quality Manual.

CONTROL OF THE MANUAL: MODIFICATION, APPROVAL AND DISTRIBUTION

The General Manager and Management team of Saft Valdosta approve the Quality Manual.

The Quality Assurance Department publishes, distributes, maintains and controls the quality manual.

The quality manual is a controlled document and as such, an updated record of distribution is maintained.

Modification of the manual is coordinated through the controlled document change process. Any proposal to improve the manual must be approved by the Site General Manager and the Management team shown on the approval page in this document.

The revision level and the date of application are indicated on the cover page of the manual and reproduced on each page. The modifications are indicated in the margin next to the changed paragraphs (except for major rewrites).

Copies of this manual given to customers or any other person not included on the distribution list are non-controlled documents and may not be used as official documents.

Applicable documents:

OP-05, Document and Data Control
Q-036, Document Control System

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4.2.3. Document control

Quality Management System documents are created or revised in accordance with the appropriate procedures according to the document type. They are managed according to the numbering system defined in the procedure and are indexed by document number.

The documents are reviewed and approved by the authorized persons before distribution.

A reference list or an equivalent procedure for controlled documents, identifying the status of the current edition, is established and made available in order to prevent the use of invalid and/or outdated documents.

The document control system ensures that the appropriate editions are available at all the stations where the essential operations for the proper functioning of the quality system are carried out.

Outdated documents are withdrawn from all points of distribution and use, or are controlled, in order to prevent any accidental use. The previous editions may be kept in the archives, if they have been clearly marked and protected against accidental use.

The documents are revised as and when required. Except in special specified cases, they are reviewed and approved by the same level of responsibility as the original document.

Documents of external origin (specifications, etc.) are identified and their distribution controlled according to E-342, Control of Standards and Specifications.

Applicable documents

OP-04, Design
OP-05, Document and Data Control
E-188, Engineering Release Notice (ERN) Procedure
E-342, Control of Standards and Specifications.
E-351, Engineering Change Control
Q-036, Document Control System

4.2.4. CONTROL OF QUALITY RECORDS

In compliance with the operational procedures and specified requirements, the records relating to quality are maintained and controlled to prove compliance with the specified requirements.

Written procedures indicate the rules for identification, collection, indexing, access, classification, storage, retention and disposal of records relating to quality.

The records are readable, stored and preserved in such a way that they are easily retrievable in facilities that guarantee a suitable environment minimizing deterioration and damage and protecting against their loss.

The records are preserved for a duration conforming to the requirements specified and/or for the retention periods defined. The contractual records are available for periodic evaluations by the customer subject to the conditions accepted in the contracts.

The records may be paper-based, electronic or in any other format.

The records created by and/or retained by suppliers that are considered quality records shall be maintained and available for review by representatives of Saft as described in the applicable documents.

Applicable documents

OP-16, Control of Quality Records
Q-588, Supplier Quality Requirements

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5. MANAGEMENT RESPONSIBILITY

5.1 LETTER OF COMMITMENT FROM THE MANAGEMENT

The mission of the INDUSTRIAL BATTERY GROUP (VALDOSTA & Cockeysville Sales Office) of SAFT is to design, develop, produce and sell electric accumulators used in the manufacture of various models of Nickel-Cadmium batteries, battery systems and Nickel Capacitors. These products are meant for the Aviation, Railways, Industry, Telecommunications, Military and heavy vehicles.

In an enterprise such as ours, where cutting-edge technology products are manufactured, the total and long-term satisfaction of the customer is one of the objectives that we have set for ourselves.

That is why we must constantly ensure the quality control and assurance of our products and our services, including the commitment to meet the regulatory and legal requirements, in order to secure the total confidence of our customers.

To do so, quality must not remain only a concept but become a state of mind, in other words, everyone's business. It is only by working together that the enterprise can constantly enhance its performance, in particular its capacity to offer ever-increasing satisfaction to its customers.

The safety of the products supplied is at the center of our commitment, it is ensured from designing through appropriate tools and this all the way to application support with for example, providing training to maintain batteries.

The Industrial Battery Group will seek the participation and involvement of every one to attain the stated objectives and to set up and maintain an efficient quality management system.

For my part, I hereby undertake to make available all resources and means necessary for the implementation and the communication of the quality policy and objectives.

For a quality management system to be efficient, it must constantly evolve. That is why I also undertake to ensure its continuous improvement.

Jody Beasley,

General Manager, Valdosta

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5.2 CUSTOMER FOCUS

The evaluation of the customer needs and expectations is performed at different stages of the process.

First, the needs and expectations of the customer are collected by IBG Marketing. The needs are analyzed by the Marketing function and are established as input data in order to define the product policy. The MPDP (Master Product Development Plan) is included in the strategic plan.

During the design planning stages, and at the latest, during contract review, the customer needs are refined and formalized.

Finally, the customer satisfaction is analyzed.

This is achieved by continually measuring product conformity, on time delivery, and other metrics, as defined by management. If the objectives are not being achieved, action is taken to determine the root cause and then implement a corrective action to eliminate the root cause.

The sales, quality, logistic and production representatives define the corrective actions required to improve customer satisfaction, mainly for on time delivery.

Applicable documents

OP-01, Management Responsibility
OP-14, Corrective/Preventive Action
Q-680, Customer Satisfaction Process

5.3 QUALITY POLICY

It is essential that this quality policy be known and understood by everyone in order to attain the stated objectives. To this end, notice boards have been installed in various areas throughout the facility to remind everyone of the quality policy and the customer-oriented system in which the enterprise works.

The quality policy of the Industrial Battery Group is as follows:

Using the appropriate technology, Saft Industrial Battery Group is committed to satisfying our customers with error free solutions, products and services… on time, every time.

This policy includes the commitment to continuous improvement and meeting regulatory and legal requirements.

The quality policy is reviewed at each Management Review in order to verify its suitability with overall Saft objectives. The result is included in one of the Valdosta management reviews.

Applicable Documents

OP-01, Management Responsibility

5.4 PLANNING

5.4.1 Quality Objectives

The quality objectives arising from the policy are established by the Directors of the Industrial Battery Group annually. They are reviewed at each Management Review to

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keep abreast of developments in market expectations and to enhance the quality management system on a continual basis.

For this purpose, the results obtained on the indicators set up for each process are analyzed.

The objectives are as follows:

Measurably improve customer satisfaction.

Pursue continuous improvement through a team approach

Maintain quality driven relationships with suppliers.

Develop and maintain certification required by the Division activities.

Master quality cost.

Pursue "World Class" status.

Applicable documents

OP-01, Management Responsibility

5.4.2 Quality planning

In order to ensure the efficiency and effectiveness of the Quality Management System, planning is part of the standard activity of the Saft Valdosta Organization. That is why several meetings (apart from the Management Review) are held. This includes but is not limited to Monthly Valdosta Management Committee Meetings, budget planning & strategic planning sessions, business planning meetings, and weekly operations meetings.

Applicable documents

OP-02, The Quality System

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5.5 RESPONSIBILITY, AUTHORITY, and COMMUNICATION

5.5.1 Responsibility and Authority

The management of the Industrial Battery Group shall establish an effective organization and define the operational responsibilities.

The managers must define, implement and enforce the various procedures and maintain records in order to meet the requirements of this manual.

The overall mission of the various managers is the following (for further details, please refer to the job descriptions):

⇨Valdosta Site General Manager

- **At the facility level, the General Manager represents Saft and has the legal and administrative obligations in accordance with the responsibilities delegated to the position by the Saft IBG General Manager and Saft America Inc. President.**
- **The responsibilities of the Valdosta Site General Manager include:**
- **Leading, coordinating, and managing the Valdosta production unit and improving its efficiency in order to consistently meet the customer needs in terms of quality, cost and delivery.**
- **Organize the activities of the unit to pursue World Class Status through continuous improvement.**
- **Manage and optimize the human, material and financial resources of the Valdosta site within the budget and set priorities to respond to changing demands.**
- **Insure all legal and regulatory requirements are met concerning security and safety of personnel and materials, employment mandates, environmental and property owner obligations and ITAR requirements.**
- **Promote an awareness of Saft customers by the employees.**
- **Strive for reduced costs of purchased parts while maintaining required quality levels.**
- **Contribute to enhanced qualification, competency and motivation of personnel.**
- **Within the framework of the product strategy, initiate development studies and projects for the definition of new products according to the design rules, marketing and customer requirements.**
- **Represent Saft within the local community, to governmental agencies and to the employee union.**

⇨Vice President of Finance and Administration

Responsible for the general and administrative activities and for coordination of non-operational site actions. More specifically for the Valdosta site, this individual:

- **Ensures compliance with established policies and procedures in order to safeguard company assets;**

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- **Manages analysis, reporting and budgeting of financial data in order to evaluate performance of operations and provide protection against business risks;**
- **Evaluates and recommends allocation of financial and human resources to support business strategies;**
- **Evaluates high-quality recruiting, training, employee evaluation and development in order to sustain a stable, professional workforce;**
- **Promotes high-quality recruiting, training, employee evaluation and development in order to sustain a stable, professional workforce;**
- **Leads the site management committee that is authorized to make non-operational decisions and promotes accord between site functions.**

⇨Vice President of Sales and Marketing

Responsible for achieving the sales and margin objectives of the Group.

- **Prepares the annual budget turnover proposals.**
- **Responsible for providing information and technical assistance to clients.**
- **Ensures that a product meets the customer requirements**

⇨Quality Manager of Valdosta

Responsible for the operations of quality management and organization of management quality reviews;

- **Manage the operations of quality assurance, from product design to product use by our customers;**
  - give his agreement to new products and new processes developed by IBG (Development and Industrialization), after examination of the documents and results,
  - control conformity at all steps of the process, either directly or by delegation according to the inspection and self-inspection plans that he defines,
  - empower the personnel assigned for operations of inspection, self-inspection and quality,
  - suspend the circulation or delivery of non-complying products,
  - Certify conformity during the final inspection and to issue, on request, a compliance certificate and an authorization certificate for delivery – the airworthiness label for products meant for civil aeronautics,
  - Negotiate specific quality requirements of customers during contracts,
  - Follow-up returns from clients to the factory and investigate claims,
  - Ensure the application of the quality rules defined through audits,
  - Train the personnel to the quality system.

5.5.2 Management Representative

The general manager defines the comprehensive strategy of the organization that is in line with the objectives of control and total quality assurance.

The Management Representative is a member of the Saft Management Team. In Valdosta, the Quality Assurance Manager is the Management Representative.

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The responsibility and authority of the Management Representative is as follows:

- **Ensuring that the quality requirements of the Group/facilities and its objectives are known and applied in each unit.**
- **Informing the Management of the Group about the effectiveness of the quality management system set up in the facilities and of their coherence with the quality objectives of the group.**
- **Enhancing awareness about customer requirements at all the levels.**
- **Ensuring that customer satisfaction is at the heart of the system.**
- **Training personnel to quality tools.**
- **Ensuring that the processes required by the Quality Management System are established, implemented and maintained.**
- **Informing the direction of the Quality Management System effectiveness and any improvement required.**
- **Ensuring that awareness of the customer requirements is promoted throughout the entire organization.**
- **The Management Representative has the organizational freedom and unrestricted access to top management to resolve quality management issues.**

5.5.3 Internal Communication

Several means have been put into place for ensuring communication between the different levels and functions within the factory itself.

Periodic meetings are held with all employees.

Several information bulletins are circulated:

- **INSIGHT**, distributed in Valdosta to the management team, presents general information about the company**.**
- **A periodic newsletter is** distributed to all employees within the Saft Valdosta organization.

There are several displays in the facility:

- **Autonomous Team boards displaying various team and organizational information. Typical types of information are as follows: Team meeting minutes, action items, and indicators as well as results of problem solving activities.**
- **Electronic means of communication are also used extensively to distribute organizational announcements and information through email and through Intra-Saft.**
- **In addition, there is a website: www.saftbatteries.com**

Applicable documents

OP-01, Management Responsibility

5.6 MANAGEMENT REVIEW

5.6.1 General Requirements

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Saft Management organizes a Management Review twice each year in order to ensure the continued suitability, adequacy and effectiveness of the Quality Management System.

During the Management Review, appropriate departments are represented as stated in OP-01, Management Responsibility.

5.6.2 Review Input

The summary table of the various points analyzed during this review is shown below:

POINTS ANALYSED	OBJECTIVES
Follow-up of the objectives and actions arising from the previous reviews	To ensure that objectives are met and to put in place suitable corrective actions and verify their effectiveness
Results of the internal and external audits	To ensure that the requirements of the standard are met and to improve the system
Claims and returns from customers	To make sure that the needs of the customers are taken into consideration
Customer satisfaction evaluation	Evaluate customer satisfaction and define improvement plans
Non-conformities, Corrective actions	To verify the effectiveness of the actions carried out to avoid the recurrence of non-conformities.
Status of preventive and corrective actions	Implement preventive actions (such as FMECA, capability measurement, process/ product/ equipment agreements…)
Monitoring of the indicators	To ensure the smooth functioning of the processes
Give the status of the QMS (effectiveness and efficiency)	To ensure that it remains relevant and suitable To ensure a continuous improvement To rule on global efficiency of the system
Process performance Product conformity	Conformance to objectives Correction if gaps are identified
Modifications that could have an impact on the QMS	Ensure that the impact on quality is taken in consideration during organizational modifications
Recommendations for improvement	To provide input for continual improvement

Applicable documents:

OP-01, Management Responsibility

5.6.3 Review Output

A complete report is published after each management review. This report includes the decisions and actions related to improvement of the quality management system, improvement of product related to customer requirements, and resource needs. During each management review, the indicators are studied and modified as necessary.

6 RESOURCE MANAGEMENT

The management defines the human and physical means necessary for ensuring customer satisfaction.

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Regular meetings allow for manpower adjustment, (weekly and monthly).

6.1 PROVISION OF RESOURCES

The evaluation of the resources necessary for the group activities, including the implementation of the Quality System and the continuous improvement is done yearly during the budget process.

The budget is prepared by the responsible managers and presented to Senior Management for approval. It is proposed in the third quarter and accepted in the fourth quarter.

After validation, the budget is the framework that defines the financial, material and human resources that are necessary.

The budget is updated in the course of the year. The controller provides a monthly follow-up report.

Applicable documents

OP-01, Management Responsibility

6.2 HUMAN RESOURCES

During the recruiting process, the required competencies are defined and formalized with the job description or recruiting request by the person making the personnel request. The Human Resources department is in charge of recruiting according to the defined personnel request.

Training needs are identified and all employees doing work that affects process or product conformity are trained to achieve the necessary competence. Personnel carrying out specific tasks must be qualified according to the appropriate level of education, training and/or experience. Training needs are evaluated and updated at least once a year. The effectiveness of the training courses given is evaluated periodically, depending on the kind of training.

Records on initial and professional training, experience, training and qualifications are maintained.

Applicable documents:

OP-18, Training

6.3 INFRASTRUCTURE

Saft determines the appropriate infrastructure needed to achieve conformity to product requirements during the product design phase. Maintenance is addressed by the Manufacturing, Process Engineering and Maintenance Groups to ensure continued conformity.

In accordance with the budget and the cost-reduction program, operating costs and investments are planned by the department heads and presented to the General Manager for approval.

The various managers and supervisors within the organization establish the guidelines for ensuring the supply of tools and equipment for product manufacturing purposes.

Applicable Documents

OP-09, Process Control

6.4 WORK ENVIRONMENT

The facility work environment requirements are specified in the following corporate policies:

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Policy No. 2.7 (Safety and Health)

Policy No. 2.6 (Safety & Hazard Communication Standard)

7 PRODUCT REALIZATION

7.1 PLANNING FOR PRODUCT REALIZATION

The planning of the production includes:

The anticipation of the quality requirements (APQP – Advanced Product Quality Planning) for the projects and products/process design activities. During these activities consideration is given to product and personal safety; reliability, availability and maintainability; producibility and inspectability; suitability of parts and materials used n the product; selection and development of embedded software, if required; recycling and final disposal of the product; required verification, validation, monitoring, measuring, inspection and tests specific to the product and acceptance criteria; and configuration management. This step includes the identification of resources to support operation and maintenance of the product.

Applicable documents

OP-02, The Quality System

OP-03, Contract Review

OP-04, Design Control

7.1.1 Project Management

Within resource and schedule constraints, product realization is planned and managed in a controlled and structured manner to meet requirements at acceptable risks as appropriate to the product and organization.

Applicable documents

OP-04, Design Control

7.1.2 Risk Management

The organization has established and implemented procedures for managing risk that include assignment of responsibilities for risk management; definition of risk criteria; identification, assessment and communication of risk throughout product realization; identification, implementation and management of actions to mitigate risks that exceed acceptance criteria; and acceptance of risks remaining after implementation of mitigating actions.

Applicable documents

OP-03, Contract Review
OP-04, Design Control
OP-06, Purchasing
OP-09, Process Control

7.1.3 CONFIGURATION MANAGEMENT

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Written procedures describe the organization's configuration management process that include configuration management planning, identification, change control, status accounting and audit.

Applicable documents

E-197, Configuration Management Plan
E-351, Engineering Change Control
E-364, Technical Department Design Concept: Statement of Work (SOW), Statement of Requirements (SOR), Coordination Memos (CM)

7.1.4 Control of Work Transferred, on a Temporary Basis, Outside The Organization's Facilities

In the event that Saft deems it necessary to transfer work outside the facility on a temporary basis, the process to control and validate the quality of the work shall be defined.

Applicable Documents

Q-691, Activity Transfer

7.2 CUSTOMER RELATED PROCESS

7.2.1 Identification of Customer Requirements

The specified and non-specified customer requirements, including special requirements, are defined in the process of building the MPDP (Master Product Development Plan), contract reviews and order reviews. Legal, regulatory and necessary Saft requirements are included.

The post delivery activities are defined as required by contract with the customers.

For example:

Maintenance Manuals and training may be required by the contract. Maintenance manuals are available at or website as follows:

- For aviation batteries Maintenance Manuals (CMM and OMM):
http://www.saftbatteries.com/MarketSegments/Aircraft/TechnicalDocumentation.com
- Training Course:
www.saftbatteries.com/MarketSegments/Aircraft/Training.com
- Repair Stations:
www.saftbatteries.com/MarketSegments/Aircraft/Repairstations.com
- For other batteries through our I&OI also at:
www.saftbatteries.com/MarketSegments/.com

Recycling and final destruction:

- Our recycling policy can be found at:
www.saftbatteries.com/TheSaftGroup/Environment/Collectionpoints.com
- The recycling can be done at the facility identified at:
www.saftbatteries.com/TheSaftGroup/Environment/Recycling.com

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7.2.2 Review of Product Requirements

Contract review

A contract review must be done for every offer, contract, or order in order to ensure that:

a) The requirements (including regulatory and legal) are suitably defined and documented for delivery and post delivery activities.

b) The discrepancies between the offer or the contract and the order are resolved.

c) The capacity to meet the requirements of the contract or the order is present.

d) Errors, contradictions or ambiguities are eliminated; the problems of the Unit's capability are resolved; the requirements of the customer have been completely understood, and special requirements of the product have been determined.

e) Risks have been identified. Examples of possible risks are short delivery time, delivery time from suppliers, new technology, etc.

f) Post-delivery activities such as warranty provisions, contractual obligations such as maintenance services and supplementary services such as recycling or final disposal shall be documented and defined.

The results of the contract review as well as the actions are recorded in line with the procedures of the units. The number of the records required depends on the exceptional character or the complexity of the contract or the order.

In case of amendment of the contract or the order, a new review must be conducted according to the type of modification desired. The operational procedures describe these reviews and their implementation.

Servicing

When servicing is a specified requirement, written procedures are established and maintained for the implementation of these services.

Reports and audits are carried out according to the specific requirements and existing procedures.

Factored Items

a. Definition: Factored items are those items that are procured by an ISO Certified company from a supplier that is not certified to ISO, and then resold to customers with little or no alteration or value added.
    (1) Such items, which are procured by an ISO certified company from a supplier that is certified to ISO by an accredited registrar, are not considered factored items.
    (2) Raw material, parts, components, and sub-assemblies, which are procured by the company and incorporated into higher-level assemblies before being sold to customers as end-items, are not factored items.

b. If factored items are to be delivered to customers, those customers must be aware of the fact. This is to avoid any implication by the company that the items were manufactured or significantly altered under the controls of an ISO-Certified Quality System.

c. Procedures addressing factored items will be developed and implemented. This will include identification of factored items and methods for notification of customers receiving such items.

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d. Notification may be given on a one-time basis, where a customer places regular order; or on a case-by-case basis, where on-time or sporadic orders are received.

Applicable documents:

OP-03, Contract Review
OP-19, Servicing

7.2.3 Communication with Customers

As far as the external communication is concerned, it is accomplished mainly through the sales representatives. In addition, a web site exists: http//www.saftbatteries.com that along with other information, gives access to Installation and Operating Instruction (I&OI) for cells and batteries, Aviation Maintenance Manuals, etc.

7.3 DESIGN and DEVELOPMENT

7.3.1 Design and Development Planning

When the design of the product involves innovative characteristics (elements generic to a range, use of new processes, etc.), the units of the Group organize the design following a project structure.

Written procedures with respect to the development, control and audit of the product design are established, put in place and maintained.

Each design and development activity is carefully planned to ensure that the design and development stages are identified and that the project is structured into significant elements as appropriate given the project's complexity. The overall purpose is to ensure the ability to produce, inspect, test and maintain the product and that the specified customer, statutory, and regulatory requirements are met.

Qualified personnel with suitable resources are assigned to take care of design and audit activities. The organizational and technical interfaces between groups that participated in the design process are defined and documented.

7.3.2 Design and Development Input

The design input specifications related to the product, including regulatory and statutory specifications are identified, documented and reviewed. A solution is found for ambiguous, incomplete or contradictory specifications with the managers who impose these specifications.

7.3.3 Design and Development Output Elements

Design output data are documented and expressed in terms of specifications that can be verified. The design output data shall:

a) Meet the input requirements for design and development,

b) Provide appropriate information for purchasing, production and for service provision,

c) Contain or refer to acceptance criteria

d) Identify the development characteristics that are crucial for the safety and the proper functioning of the product.

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e) Specify, as applicable, any critical items, including key characteristics, and specific actions to be taken for these items.

All pertinent data required to allow the product to be identified, manufactured, inspected, used and maintained are defined through the use of drawings, parts lists, and specifications necessary to define the configuration and design features of the product. Product conformity is ensured through the use of material, process, manufacturing and assembly data, including product preservation.

7.3.4 Design and Development Reviews

At suitable phases in the design process, formal and documented reviews are planned and carried out. The participants of these reviews include the managers of all the functions concerned by development at this level. The purpose of these reviews is to evaluate the ability of the results of design and development to meet requirements, to identify any problems and propose necessary actions, and to authorize progression to the next stage. Records of these reviews are created and maintained.

7.3.5 Design and Development Verification

The design audit is carried out at suitable phases in the design process in order to ensure that the output data of that phase meet the input specifications. The design audit is recorded.

7.3.6 Design and Development Validation

The validation of the design is done to ensure that the product complies with the needs and/or specifications of the users. Specific test programs are planned for this purpose. Validation is normally carried out on the finished product, but it may be done upstream if this is more appropriate.

7.3.6.1 Design and Development Verification and Validation Testing

When tests are used for verification and validation, the tests shall be planned, controlled, reviewed, and documented to clearly identify the product being tested, resources used, objectives and condition of the tests, parameters to be recorded, and acceptance criteria. The test documentation shall also be used to verify correct configuration of the test subjects and that the acceptance criteria are met.

7.3.6.2 Design and Development Verification and Validation Documentation

Reports, calculations, test results, etc. are reviewed at the completion of the design/development stage to ensure that the product definition meets the specification requirements for all identified operational conditions.

7.3.7 Control of Design and Development Changes

Changes in the design or modifications are identified, documented, reviewed and approved by the authorized persons before their implementation and are controlled in accordance with the configuration management process

Applicable documents

OP-04, Design Control

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E-197, Configuration Management Plan
E-351, Engineering Change Control E-364, Technical Department Design Concept: Statement of Work (SOW), Statement of Requirement (SOR) Coordination Memos (CM)

7.4 PURCHASING

7.4.1 Purchasing Process

Starting from the issue of internal orders, the production control department evaluates the needs regarding hours of manufacturing (see paragraph 7.5) and products using a production management system and launches:

- the manufacturing orders and their follow-up

- the process of obtaining supplies from suppliers.

The suppliers are chosen on the basis of their capacity to meet the requirements of the sub-contracts, including quality system and quality assurance requirements. The process of selecting a supplier, including supplier risk analysis, and authority for approval status are defined in OP-06, Purchasing. The status of a supplier is found in MFG-094, Approved Supplier List (ASL)

The type and the extent of control exercised on the suppliers depend on factors such as the type and criticality of the component ordered, the quality system of the supplier, the history and existence of quality objectives with this supplier. Saft retains responsibility for the conformity of all products purchased from suppliers, including customer-designated sources.

Records of qualified suppliers are preserved.

Applicable documents

OP-06, Purchasing
MFG-094, Approved Supplier List (ASL)

7.4.2 Purchasing Information

The purchase documents clearly describe the component or service to be delivered. Technical documentation such as plans, specifications, audit and test instructions as well as process requirements, is identified. “Un-controlled” copies are provided with the purchase order.

A record of documents addressed to suppliers is preserved. Each supplier acknowledges the receipt of documents; the acknowledgements are archived.

The applicable requirements (per AS 9100 such as key characteristics if required) are requested from the suppliers and from their subcontractors.

In addition, specific quality clauses related to the product and required in Q-588, Supplier Quality Requirements, are identified on the purchase order.

Applicable document

OP-06, Purchasing
Q-588, Supplier Quality Requirements

7.4.3 Verification of Purchased Product

The inspection of components is performed upon delivery to Saft. The scope of the audit depends on the type of component and/or of the service and of its criticality, on the quality

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system of the supplier and the objective evidence of quality given by the supplier and finally on the quality history of the latter.

In the event a purchased part is required for production prior to completion of all required verification procedures, Logistics shall initiate a Q-253, Release of Material Prior to Incoming Inspection, form to provide positive control of the product until the product is released by Incoming Inspection.

Applicable documents

Q-001, Incoming Inspection Plan
Q-253, Release of Material Prior to Incoming Inspection

7.5 PRODUCTION and SERVICE OPERATION

- **The manufacturing process of Nickel-Cadmium batteries and Nickel Capacitors (described in page 34-36) is sub-divided into two processes:**
  - **Chemical process: Production of active strips**
  - **Assembly process: Production of electrodes, cells and/or batteries**

Applicable documents

OP-07, Customer Supplied Product

OP-09, Process Control

OP-10, Inspection and Test

OP-12, Inspection and Test Status

OP-19, Servicing

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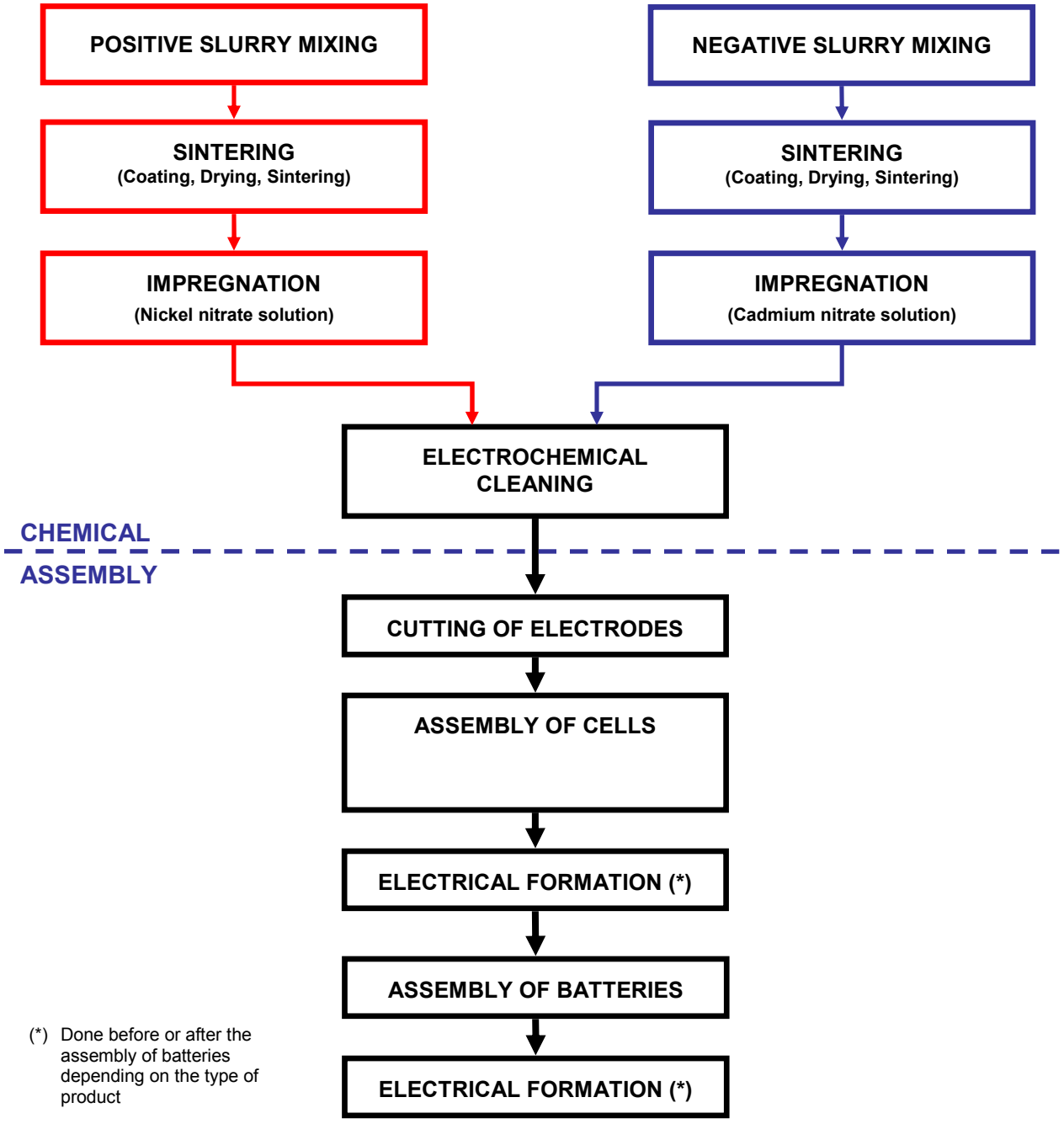
- ALKALINE PRODUCTS -

REALIZATION PROCESS FOR NICKEL-CADMIUM CELLS AND BATTERIES
SINTER / SINTER



(*) Done before or after the assembly of batteries depending on the type of product

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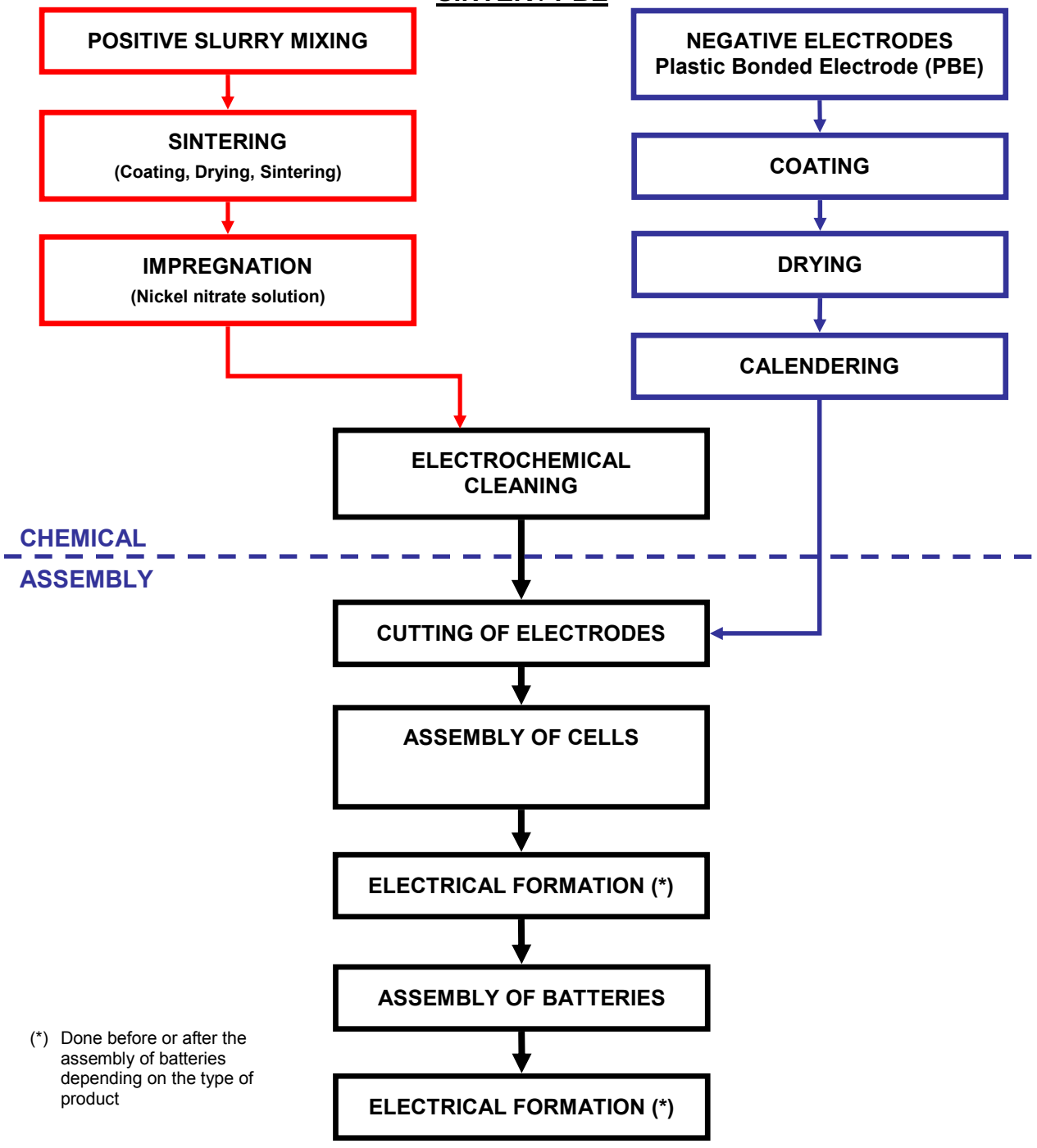
INDUSTRIAL BATTERY GROUP VALDOSTA	QM - 01
QUALITY MANAGEMENT SYSTEM	
QUALITY MANUAL	Revision: E Date: November 2015

- ALKALINE PRODUCTS -

REALIZATION PROCESS FOR NICKEL-CADMIUM CELLS AND BATTERIES

SINTER / PBE



(*) Done before or after the assembly of batteries depending on the type of product

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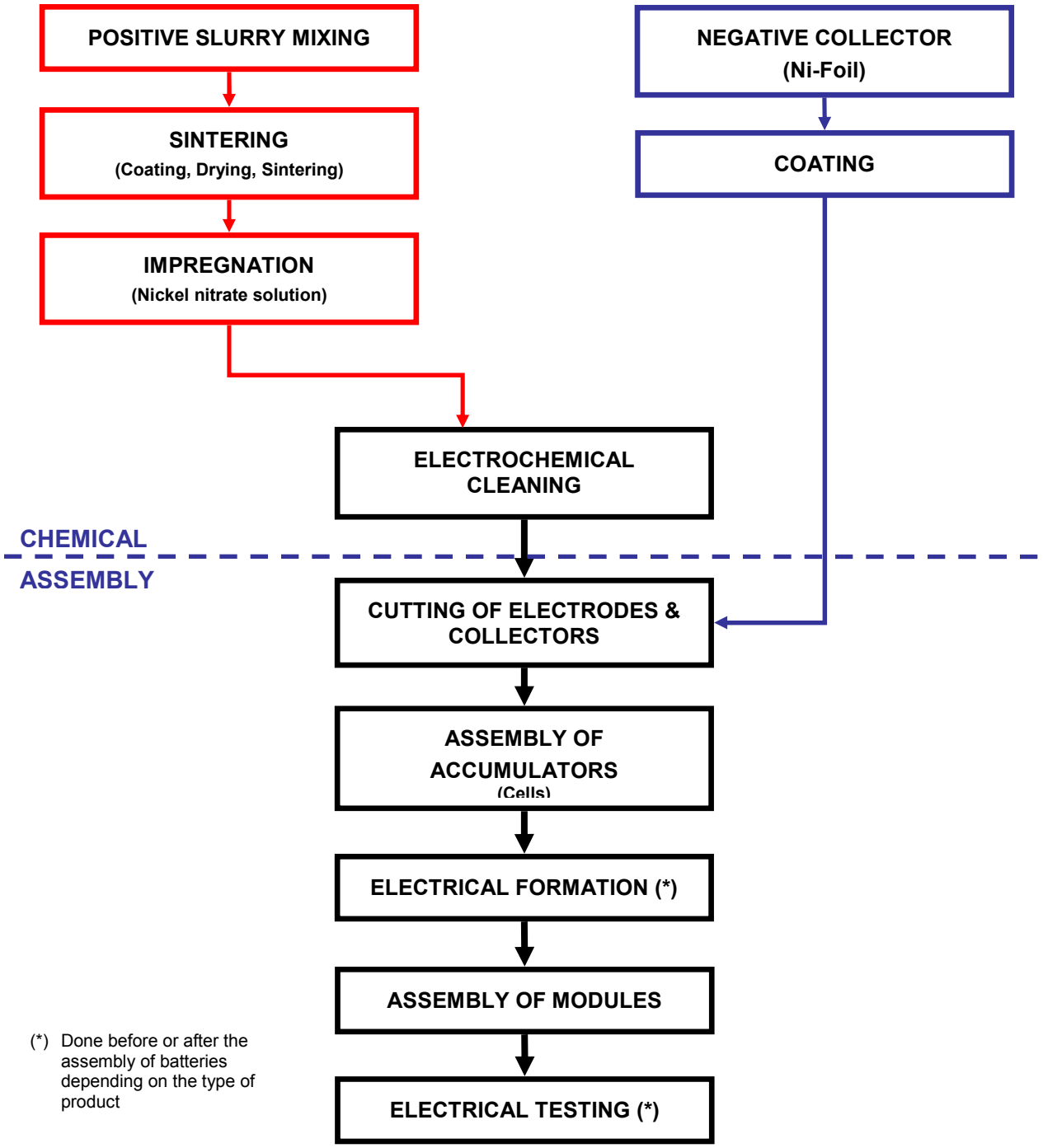
INDUSTRIAL BATTERY GROUP VALDOSTA	QM - 01
QUALITY MANAGEMENT SYSTEM	
QUALITY MANUAL	Revision: E Date: November 2015

- ALKALINE PRODUCTS -

REALIZATION PROCESS FOR NICKEL CAPACITOR CELLS AND MODULES



(*) Done before or after the assembly of batteries depending on the type of product

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7.5.1 Control of Production and Service Provision

Production is planned and carried out under controlled conditions including:

a) The availability of information describing the characteristics of the product (e.g., drawings, parts lists, materials and process specifications).

b) The availability of work instructions (e.g., production documents, flow charts, travelers, routers, work orders etc.) and inspection documents

c) The use of suitable equipment (e.g., jigs, fixtures, etc.)

d) The availability and use of monitoring equipment

e) The implementation of monitoring and measurement

f) The implementation of product release, delivery and post-delivery activities

g) Accountability of all product during production (e.g., parts quantities, split orders, and non-conforming product)

h) Evidence that all production and inspection/verification operations have been completed as planned, or as otherwise documented and authorized

i) Provisions for the prevention, detection and removal of foreign objects

j) Monitoring and control of utilities and supplies (e.g., water, compressed air, electricity, chemical products) to the extent they affect conformity to product requirements, and

k) Criteria for workmanship, specified in the clearest practical way (e.g., written standards, representative samples, illustrations, etc.).

The production planning (logistic) activities are described in the applicable procedures.

Planning will consider the following points if applicable:

a) establishing, implementing and maintain appropriate process to manage critical items, including process controls where key characteristics have been identified (Quality Assurance responsibility),

b) the designing, manufacturing, and use of tooling to measure variable data (Process engineering responsibility)

c) the identification of in-process/verification points when adequate verification of conformance cannot be performed at a later stage of realization, (Quality Assurance responsibility)

d) special processes. (Process engineering responsibility)

7.5.1.1 Production Process Verification

A representative item from the first production run of a new part or assembly is used to verify that the production processes, production documentation and tooling are capable of producing parts and assemblies that meet requirements (known as first article inspection (FAI)). This process is repeated when changes occur that invalidate original results (e.g., engineering changes, manufacturing process changes, tooling changes, etc.)

7.5.1.2 Control of Production Process Changes

Personnel authorized to approve changes to production processes shall be identified in the appropriate document within the organization.

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Changes affecting processes, production equipment, tools or software programs shall be documented. Their implementation shall be controlled by appropriate documentation.

The results of changes to production processes are assessed to confirm that the desired effect has been achieved without adverse impact to product conformity.

7.5.1.3 Control of Production Equipment, Tools and Software Programs

Production equipment, tools and software programs used to automate and control/monitor product realization processes, are validated prior to release for production are maintained, Storage requirements, including periodic preservation/condition checks, are defined for production equipment and tooling storage.

7.5.1.4 Post Delivery Support

Saft collects and analyzes in-service data and takes appropriate actions when problems are detected after delivery.

Updated Service documentation is made available to the customer through various means including the Saft website: www.saftbatteries.com.

Applicable document

OP-05, Document and Data Control
OP-09, Process Control
OP-10, Inspection and test
OP-12, Inspection and test Status
OP-19, Servicing
E-188, Engineering Release Notice (ERN)
E-342, Control of Standards and Specifications
E-351, Engineering Change Control
Q-036, Document Control System
Q-262, First Article Inspection
Q-657, Operating and Maintenance Manual and Component Maintenance Manual Document Control Procedure
Q-658, Foreign Object Program
MFG-035, Procedures for Production Control
MS 004, Repair Station Manual

7.5.2 Validation of Processes for Production and Service Provision

During the design stages of new equipment and processes, a validation plan is established. The plan defines the tests to be performed and the criteria that must be met where the resulting output cannot be verified by subsequent monitoring and measurement i.e., the verification of special processes such as TIG welding and soldering.

The validation plan also includes the requirements for personnel training and documentation.

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7.5.3 Identification and Traceability

This sub-process clearly identifies the traceability of batteries, accumulators and modules throughout product realization. The product is identified through the use of unique product identifiers. Records are maintained and are retrievable

When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), appropriate controls for the media are established and documented.

Applicable documents

OP-08, Product Identification and Traceability
E-360, Engineering Special Instruction Procedure (ESI)
Q-342, Inspection Stamp Control

7.5.4 Customer Property

Great care is taken to protect customer property from loss or damage while assigned to the facility. The property is identified and records are maintained.

Applicable documents

OP-07, Customer Supplied Product

7.5.5 Product Preservation of Product

To maintain product conformity requirements, preservation of product includes identification, handling, packaging, storage and protection. In addition, consistent with applicable statutory and regulatory requirements, there are provisions for cleaning, foreign object detection and removal, special handling of sensitive products, marking and labeling to include safety warning labels, shelf life controls and stock rotation and hazardous material handling.

Applicable documents

OP-15, Handling, Storage, Packaging, Preservation and Delivery
E-045, Storage Requirements for Parts, Cells, and Batteries for the Industrial Battery Group
Q-658, Foreign Object Program

7.6 INSPECTION, MEASUREMENT AND TESTING EQUIPMENT

The organization has determined the monitoring and measurement to be undertaken and the monitoring and measuring equipment needed to provide evidence of conformity of the product. A procedure has been written and this sub-process defines the rules to be applied in order to control the validity of inspection, measurement and testing equipment used when making batteries including a process for the recall of monitoring and measuring equipment requiring calibration or verification.

Applicable documents

OP11, Inspection, Measuring and Test Equipment

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8 MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 GENERAL

The organization has planned for and implemented monitoring, measurement, and analysis processes to demonstrate conformity to product requirements, ensure conformity to the quality management system, and to continually improve the effectiveness of the quality management system. This is accomplished through the use of measurement tools including Internal Audits, Customer Audits, World Class Audits, indicators, FMECA, capabilities, etc. From these measurements, improvement actions are implemented using various problem-solving methods including PDCA, Kaizen, TPM, JIT, Process Mapping, 8D, or other world class methods as appropriate.

Applicable documents

OP-01, Management Responsibility
OP-14, Corrective/Preventive Actions
OP-17, Internal Auditing
OP-22, Continual Improvement

8.2 MEASUREMENT AND MONITORING

8.2.1 Customer Satisfaction

The customer satisfaction objective is clearly expressed in the Quality Policy. This objective is defined more specifically in this manual and also refined in the yearly objectives.

The information related to the customer's perception of Saft's performance is discussed during the management reviews and the monthly reviews. The methods of identification and measurement are defined in Q-680, Customer Satisfaction Process. They include product conformity, on-time delivery (requested date and promise date), customer complaints and corrective action requests, customer claims and return indicators, surveys using internal sensors, analysis of customer complaints, etc…

Applicable documents

OP-01, Management Responsibility
Q-680, Customer Satisfaction Process

8.2.2 Internal Audit

A schedule of internal quality audits is established at least once every year to objectively evaluate the application and the suitability of the quality system.

The audits are scheduled according to the progress and the importance of the activities to be audited and on the results of the previous audits. They are done by trained personnel who do not have any direct responsibility for these activities.

The results of the audits are recorded and personnel who have responsibilities in the areas audited are notified. The persons in charge of the audited sectors plan corrective actions for failures detected during the audit.

In order to eliminate detected nonconformities and their cause, necessary corrective actions are to be taken without undue delay.

The implementation and effectiveness of the corrective actions are verified.

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The audit reports are used during the Management reviews to assess the continuity of the effectiveness of the quality system.

Applicable documents

OP-17, Internal Auditing

8.2.3 Monitoring and Measurement of Processes

The monitoring of processes is done with the help of follow-up indicators established for each process. These indicators are analyzed during the Management Review in order to ensure the effectiveness of the processes.

In the event of process nonconformity, appropriate actions are taken to correct the nonconforming process and identify and control any nonconforming product that resulted. An investigation is then launched to determine if this was an isolated nonconformity or if other processes or products were affected.

SAFT is also involved in a change program called “WORLD CLASS”. This program aims at the improvement of the overall efficiency of the enterprise by taking into account the growing requirements of customers.

The 14 criteria that were defined in 2003 have been condensed into 10 criteria (Leadership, Innovation, Human resources, 5S and Safety, Environment, Purchasing, Quality, Equipment, Flow and Delivery, Customer Focus).

These criteria are used to audit the facility; the audit results allow us to measure the gap to excellence and to define the improvement action plans. (SAFT wide and specific to each facility)

This program is a new step after the “World Class 2000” program launched in 1998.

Applicable documents

OP-01, Management Responsibility
E-313, Chemical Plant General Control Plan
Q-587, Manufacturing Control Plan

8.2.4 Monitoring and Measurement of Product

The product characteristics are measured and controlled according to the auto quality plans (Control Plan). Each auto quality plan defines the controls to be performed and the records to be maintained as evidence of conformity.

Critical items, including key characteristics, have been identified. They are monitored and controlled according to Q-652 Key Characteristics Identification and Management**.**

When sampling is used in the inspection process as a means of product acceptance, the sampling plans are justified on the basis of statistical principals and, based on criticality, are appropriate for use on the specific product or process. Only plans that preclude the acceptance of lots whose samples have known nonconformities are used. When required, the sampling plan is submitted for customer approval.

Product is not used until it has been inspected or otherwise verified as conforming, except when it is released under positive-recall procedures pending completion of all required inspections by means of a Q-253, Release of Material Prior to Incoming Inspection.

Measurement requirements for product or service acceptance is documented and includes the criteria for acceptance and/or rejection, where in the process sequence the measurement is performed, required records of the measurement results, and the specific type of measurement instrument to be used.

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Records are maintained indicating the person(s) authorizing the release of product for delivery to the customer.

The organization maintains records as evidence that the product meets the defined requirements and, when required, is able to provide verification of product qualification.

The release of product and delivery of service to the customer does not proceed until all planned arrangements are complete. All required documentation accompanies the product and is available to the customer at the time of delivery.

Applicable documents

OP-10, Inspection and Test
OP-15, Handling, Storage, Packaging, Preservation and Delivery
E-313, Chemical Plant Control Plan
Q-001, Incoming Inspection Plan
Q-253, Release of Material Prior to Incoming Inspection
Q-587, Manufacturing Control Plan
Q-652, Key Characteristics Identification and Management

8.3 CONTROL OF NON-CONFORMITIES

The production is stopped when a non-complying product is discovered and resumes when a corrective action has been found and implemented.

The non-complying product is identified and isolated when this is possible, to prevent the risk of accidentally using, dispatching or mixing it with complying products.

The non-complying product is examined and processed according to OP-13, Control of Nonconforming Material. It may be:

a) Returned to manufacturing for rework to meet the specified requirement.
b) Accepted with or without repair, by a deviation permit.
c) Returned for another use
d) Rejected or disposed of as waste. Aviation product dispositioned as scrap shall be conspicuously and permanently marked, or positively controlled, until physically rendered unusable.
e) Processed according to any other appropriate provision

When specified in the contract, the customer is consulted for the acceptation of the deviation permit for the use or repair of non-conforming materials.

The repaired or reprocessed product is controlled again according to the quality plan and/or the written procedures.

The applicable documents controlling non-conformities define the responsibility for review and authority for the disposition of nonconforming product and the process for approving personnel making these decisions.

Applicable documents

OP13, Control of Nonconforming Material

8.4 ANALYSIS OF DATA

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Data related to the following areas is collected, analyzed and presented to the staff at each Management review:

a) Customer satisfaction

b) Conformity of product to requirements

c) Characteristics and trends of processes and products, including opportunities for preventive action

d) Suppliers (reviewed monthly with Purchasing department)

Applicable Data

OP-01, Management Responsibility

8.5 IMPROVEMENT

8.5.1 Planning for Continual Improvement

The improvement actions are defined by process improvement or problem solving groups using the PDCA method (Plan, Do, Check, Act) and TPM teams, KAIZEN groups, Pull Flow, Process Mapping, JIT teams,…

The implementation of these methods is decided by the Management committee and the effectiveness of the improvement activity is evaluated during Management Reviews.

Applicable documents

OP-22, Continual Improvement

8.5.2 Corrective Actions

Corrective actions are implemented to eliminate the root causes of nonconformities and are proportionate to the gravity of the problem and the risks involved.

An appropriate investigation is carried out to identify the root cause(s) of the nonconformity. Corrective actions are implemented to eliminate the root cause(s) and to avoid recurrence.

a) The results are recorded.

b) The application and the effectiveness of the corrective actions are verified.

c) The review of the corrective actions is done during the Management review.

d) The modifications in the written procedures arising from the corrective actions are recorded.

The corrective action requirement is flowed down to the supplier when it is determined that the supplier is responsible for the root cause.

Specific actions where timely and/or effective corrective actions are not achieved are described in the applicable documents.

Applicable documents

OP-01, Management Responsibility
OP-14, Corrective/Preventive Actions

8.5.3 Preventive Actions

The preventive actions implemented to eliminate the causes of potential failure are proportionate to the gravity of the potential problem and risks.

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Examples of preventative action opportunities include risk management, error proofing, failure mode and effect analysis (FMEA), and information on product problems reported by external sources.

The evaluation and analysis of the quality results are done to detect the conditions that are potential causes of non-conformity, process or quality system failure. For each case, the unit determines the type and scope of the results to be analyzed and the frequency of such analyses. Appropriate actions are decided to eliminate the potential cause(s) and to prevent the appearance of non-conformities. The results are recorded.

The review of the preventive actions is done during the Management review.

The modifications in the written procedures arising from the preventive actions are recorded.

Applicable documents

OP-01, Management Responsibility
OP-14, Corrective/Preventive Actions

9 FINANCIAL CONSIDERATIONS

The method for the calculation of quality cost is defined and must include the cost to obtain quality, the cost of prevention, the cost of internal failures and the cost of external failures.

The frequency of distribution must be at least that of the management review.

Quality cost is examined during the management reviews.

Applicable documents

OP21, Financial Considerations

10 AGREEMENTS

The list of agreements follows:

- **Q-633, Interface Agreement Valdosta IBG and Information Technology Services**

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Quality Manual to SAFT Documentation Cross Reference

Quality Manual Requirement		SAFT document reference					
4.1	General Requirements	QM 4.1	OP-02	MS002	MS004	Q-691	
4.2	General Documentation Requirements	QM 4.2	OP-05	OP-18	Q-036		
4.2.2	Quality Manual	QM 4.2.2	OP-05	Q-036			
4.2.3	Control of Documents	QM 4.2.3	OP-05	OP-04	Q-036	E-188	E-342 E-351
4.2.4	Control of Records	QM 4.2.4	OP-16	Q-588			
5.1	Management Commitment	QM 5.1	OP-01				
5.2	Customer Focus	QM 5.2	OP-01	OP-14	Q-680		
5.3	Quality Policy	QM 5.3	OP-01				
5.4.1	Quality Objectives (Planning)	QM 5.4.1	OP-01				
5.4.2	Quality Management System Planning	QM 5.4.2	OP-02				
5.5	Responsibility, Authority and Communication	QM 5.5	OP-01				
5.6	Management Review	QM 5.6	OP-01				
6.1	Provision of Resources	QM 6.1	OP-01				
6.2	Human resources	QM 6.2	OP-18				
6.2.2	Competence, Awareness and Training	QM 6.2	OP-18				
6.3	Infrastructure	QM 6.3	OP-09				
6.4	Work environment	QM 6.4	Policy No 2.6	Policy No 2.7			
7.1	Planning of Product Realization	QM 7.1	OP-02	OP-03	OP-04		
7.1.1	Project Management	QM 7.1.1	OP-04				
7.1.2	Risk Management	OP-03	OP-04	OP-06	OP-09		
7.1.3	Configuration Management	E-197	E-351	E-364			
7.1.4	Control of Work Transfer	Q-691					
7.2	Customer - Related Processes	QM 7.2	OP-03	OP-19			

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Quality Manual Requirement		SAFT document reference					
7.3	Design and Development	QM 7.3	OP-04	Q-652	E-351	E-364	
7.4	Purchasing	QM 7.4	Q-001	OP-06	OP-10	Q-588	MFG-094
7.5	Production and Service Operation	QM 7.5	OP-07	OP-09	OP-10	OP-12	OP-19
7.5.1	Control of Production and Service	QM 4.2.1 OP-19 E-188	QM 7.5.1 Q-036 E-342	OP-05 Q-262 E-351	OP-09 Q-657	OP-10 Q-658	OP-12 MFG-035
7.5.2	Validation of Processes for Production and Service	QM 7.5.2	OP-09	Q-062	Q-342	E-342	MFG-045
7.5.3	Identification and Traceability	QM 7.5.3	OP-08	Q-342	E-360		
7.5.4	Customer Property	QM 7.5.4	OP-07				
7.5.5	Preservation of Product	QM 7.5.5	OP-15	Q-658	E-045	MFG-039	MFG-188
7.6	Control of Monitoring and Measuring Devices	QM 7.6	OP-11				
8.1	General	QM 8.1	OP-01	OP-14	OP-17	OP-22	
8.2.1	Customer satisfaction	QM 8.2.1	OP-01	Q-680			
8.2.2	Internal audit	QM 8.2.2	OP-17				
8.2.3	Monitoring and Measurement of Processes	QM 8.2.3	OP-01	Q-587	E-313		
8.2.4	Monitoring and Measurement of Product	QM 8.2.4	OP-10 Q-587	OP-15 Q-652	Q-001 E-313	Q-253	Q-262
8.3	Control of Nonconforming Product	QM 8.3	OP-13				
8.4	Analysis of Data	QM 8.4	OP-01				
8.5.1	Improvement Continual	QM 8.5.1	OP-22				
8.5.2	Corrective actions	QM 8.5.2	OP-01	OP-14			
8.5.3	Preventive actions	QM 8.5.3	OP-01	OP-14			

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