



INDUSTRIAL BATTERY Group (Bordeaux)	NS 1 001 004 Revision: ag Date: September 2010
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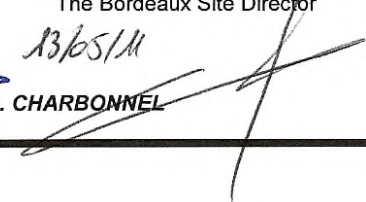
QUALITY POLICY

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

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

ag: Request for change DAQ n#10/053

AUTHOR: P. BOURG

CREATION DATE April 1979		CHECKER Function: The Bordeaux Site Quality Manger	APPROVER RESPONSIBLE AUTHORITY The Bordeaux Site Director
CANCEL AND REPLACE NS 1 001 004 af	Date: 12/05/11	Name & signature: P. SANCHEZ 	13/05/11 D. CHARBONNEL 



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The Industrial Battery Group (IBG) is committed to defining, developing and maintaining a quality policy in compliance with the international standard ISO 9001 as well as with the various quality systems specific to each unit of the Group.

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

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D. CHARBONNEL
 Bordeaux Plant Director
 Bordeaux Site Director



P. SANCHEZ
 Bordeaux Site Quality Manager



H. LEFEBVRE
 System Development Unit (SDU) Director



P-M. LEROY
 IBG Sales Director



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1. PRESENTATION OF SAFT

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

Saft is today a key player in two 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 roughly 4,000 persons.

The annual turnover in 2008 was 609,4 millions Euros. Between 5 and 6% of the turnover is reinvested on research and development activities.

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

Saft is organized into 2 groups:

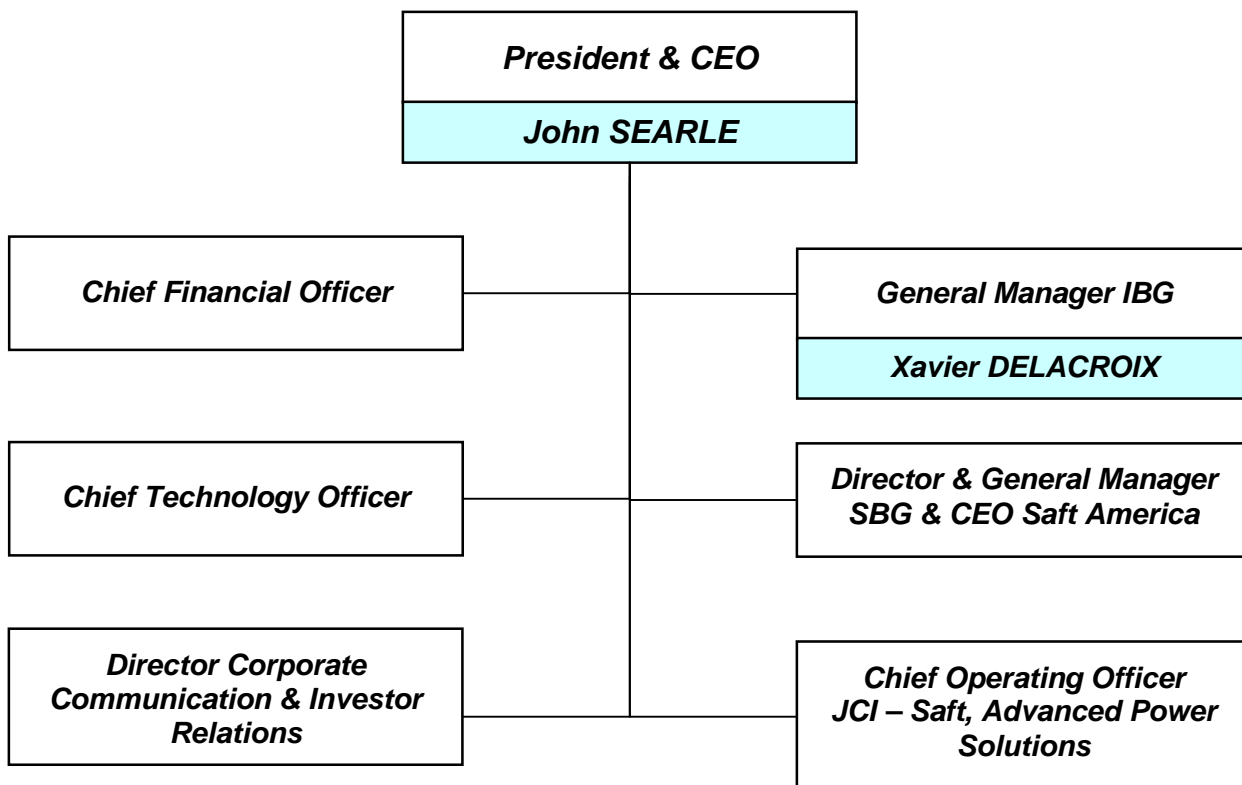
- **Industrial Battery Group (IBG)**
- **Specialty Battery Group (SBG)**

The general organization of SAFT is described in the following chart:



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Saft Senior Management




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ag 2. PRESENTATION OF THE INDUSTRIAL BATTERY GROUP (Bordeaux site)

The production site in Bordeaux (France) and the establishment in Bagnolet (France) is part of Industrial Battery Group (IBG).

The annual turnover was 90.6 millions Euros for 2008 for this production unit.

This facility 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] 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 propulsion on appropriate distances.
- 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.
- Space: batteries for flight models

	Production facility in Bordeaux
Year of construction	1949
Number of employees	500*
Development and Production	Alkaline (Ni-Cd and Ni-MH batteries and Lithium-ion batteries)

* Includes Bagnolet

Geographical location of the four units:
Office in BAGNOLET

Saft
 12 Rue Sadi Carnot
 93170 BAGNOLET (FRANCE)
 Tel.: + 33 (0)1.49.93.19.18
 Fax: + 33 (0)1.49.93.19.50
 SIRET no: 383 703 873 000 26

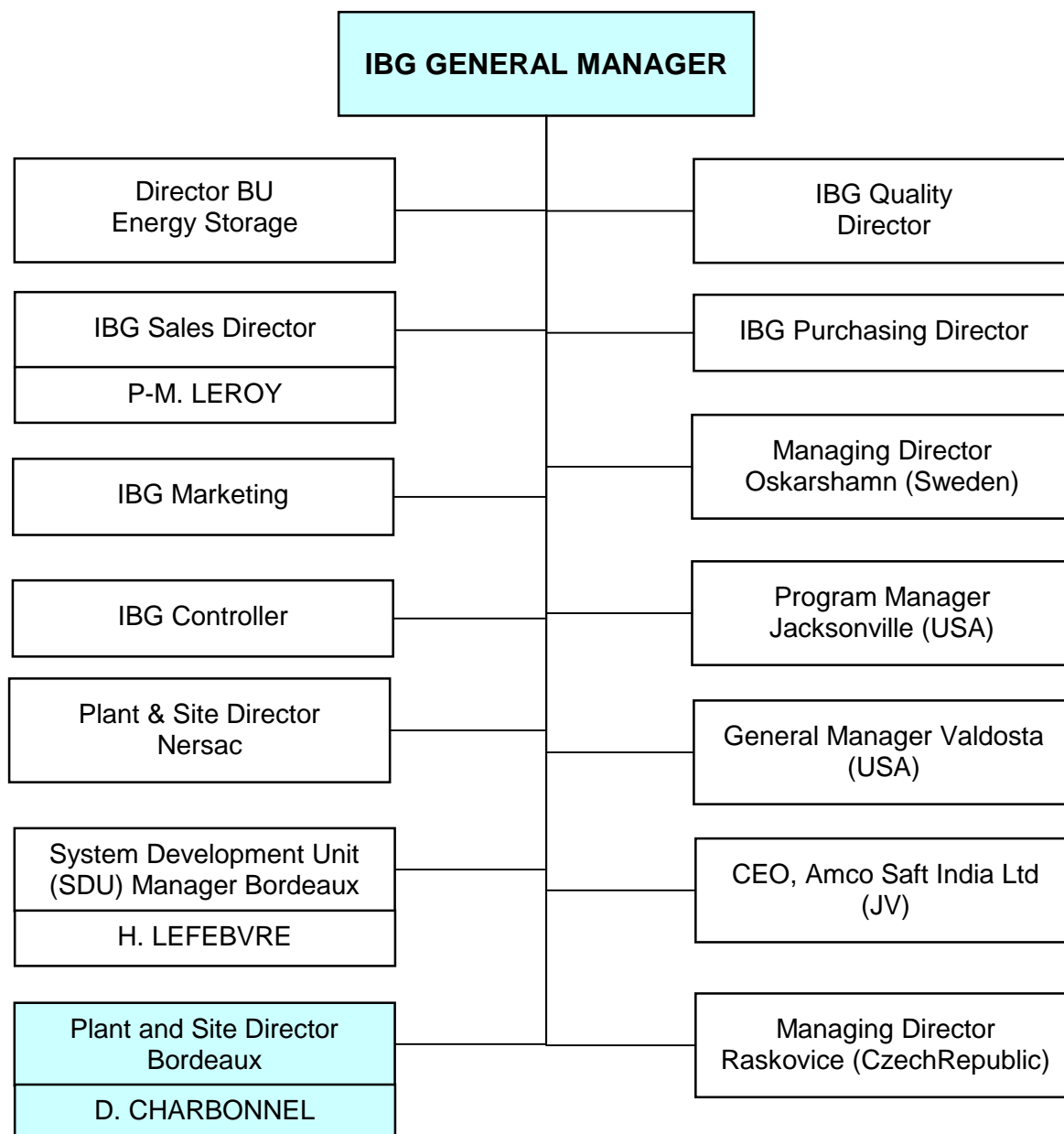
Facility in BORDEAUX

Saft
 111 Boulevard Alfred Daney
 33074 BORDEAUX Cedex (FRANCE)
 Tel: + 33 (0)5.57.10.64.00
 Fax: + 33 (0)5.57.10.66.70
 SIRET no: 383 703 873 000 83



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ag The organization of the Industrial battery group (Bordeaux and Bagnolet Unit) is described in the following chart:

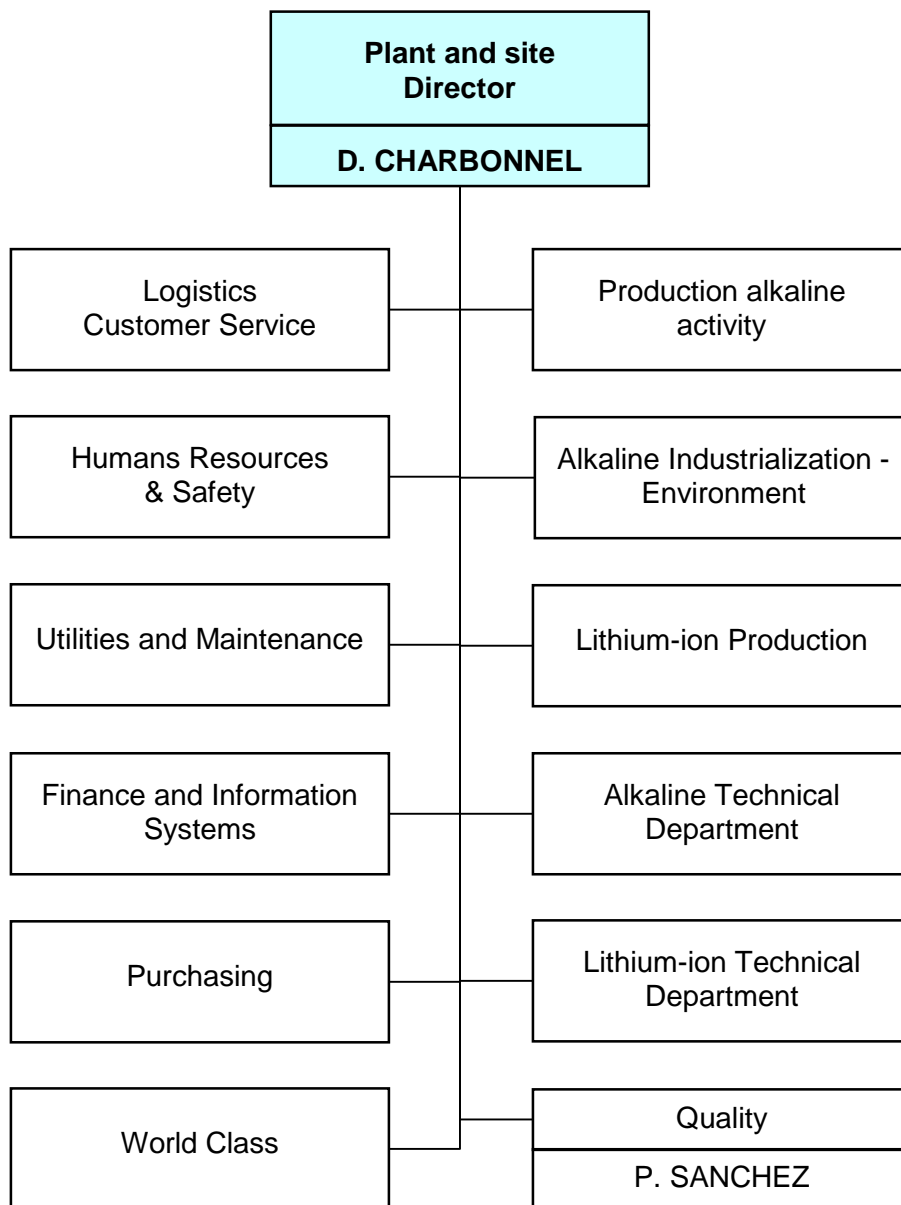


N.B. : Please refer to procedure **NS 1 001 901** for the names of the managers of the unit in Bordeaux and the establishment in Bagnolet.



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ag The organization of the Unit of Bordeaux is described in the following chart :



N.B. : Please refer to procedure **NS 1 001 901** for the names of the managers of the unit in Bordeaux and the establishment in Bagnolet.



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PRESENTATION OF THE IBG PRODUCT RANGE

Nickel-Cadmium Batteries for Electrical Vehicles



Nickel-Cadmium Batteries for Aviation applications

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Nickel-Cadmium Batteries for Stand-by and Telecom applications



Nickel-Cadmium Batteries for Railways applications





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Prismatic size Ni-MH Module

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Cells & Module Lithium-ion





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4. QUALITY MANAGEMENT SYSTEM (QMS)

4.1. GENERAL REQUIREMENTS

The quality management system is based on the requirements of the standard ISO 9001 version 2008, AS 9100 or EN 9100 version 2003 and IRIS [International Railways Industry Standard] (Rev 01, 2007) (specific to Bordeaux and Bagnolet). The quality management system also meets requirements imposed by applicable regulatory authorities as listed in section 4.2.1 of this manual.

This system is geared towards customer satisfaction and continuous improvement.

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

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

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The processes have been identified for the production realization and are defined in the schematic next page. Some processes specific to IRIS are identified in **NS 1 001 943**.

Some activities required for customer satisfaction (in particular AOG's [Aircraft On Ground] and batteries maintenance) are performed as close as possible from the customer and are regularly audited in order to keep mastering the quality.

If the organization chooses to outsource any process that affects 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 defined within the quality management system.

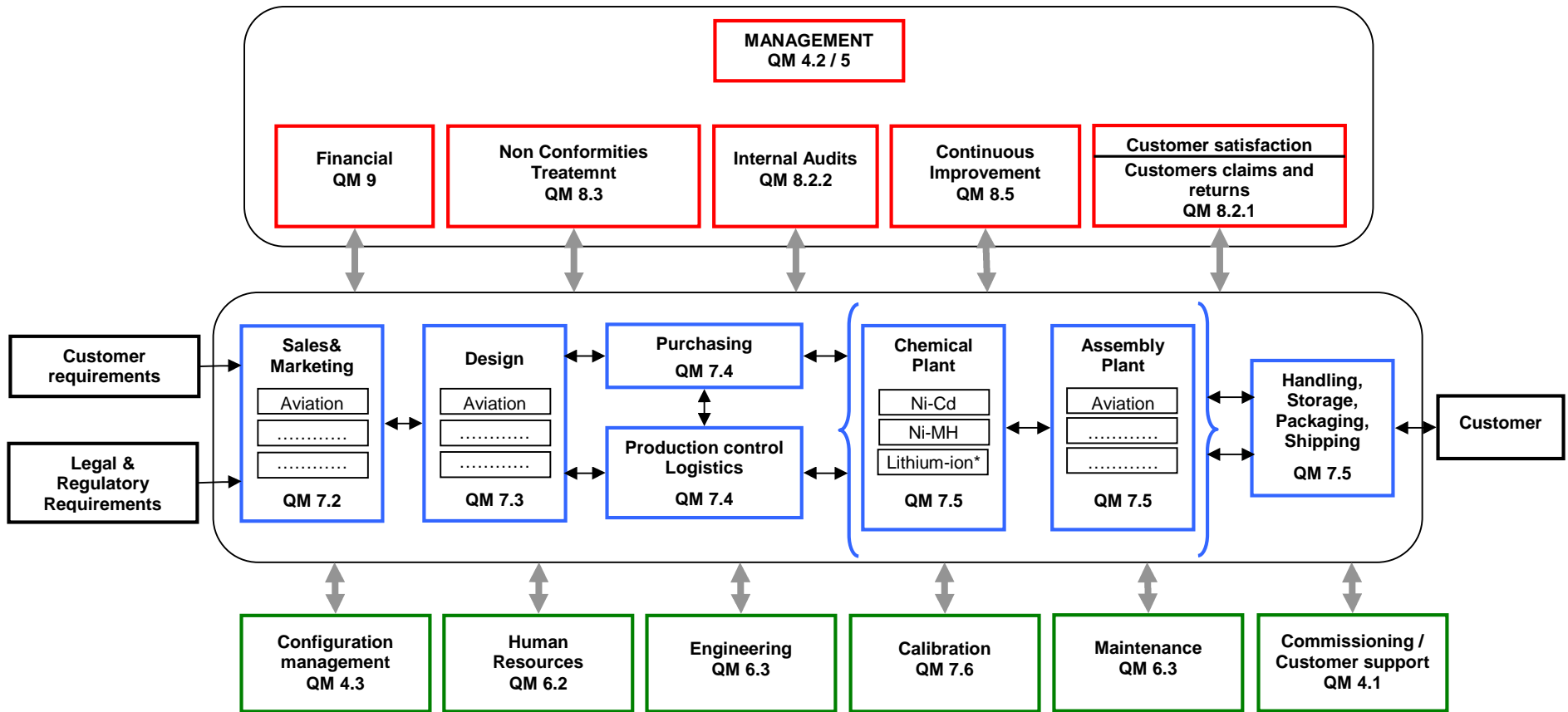
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Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 903**
- **NS 1 001 945**



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- Management
- Realisation
- Support

* Bordeaux only

Subprocessus are defined in **NS 1 001 901** for Bordeaux and Bagnolet.


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	R						S						M
	SALES & MARKETING	DESIGN	PURCHASING	PRODUCTION	LOGISTICS / PROD. CONTROL	MATERIAL HANDLING	INDUSTRIALIZATION	MAINTENANCE	HUMAN RESOURCES	CALIBRATION	CONFIGURATION MANAGEMENT	CUSTOMER SUPPORT	MANAGEMENT
SALES & 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
LOGISTICS / PROD. CONTROL	X	X	X	X		X	X		X		X	X	X
MATERIAL HANDLING		X	X	X	X				X			X	X
INDUSTRIALIZATION		X		X	X			X	X	X	X		X
MAINTENANCE				X			X		X	X			X
HUMAN RESOURCES	X	X	X	X	X	X	X	X		X			X
CALIBRATION		X		X			X	X	X				X
CONFIGURATION MANAGEMENT	X	X	X	X	X		X					X	X
CUSTOMER SUPPORT	X		X	X	X	X					X		X
MANAGEMENT	x	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 of each unit conforms to the following structure:

- ◆ Level 1: Quality Manual, quality plans in accordance with customers requirements
- ◆ Level 2: operating procedures
 - τ **NS 1 001 9xx** for the Bordeaux unit and the establishment in Bagnolet.
- ◆ Level 3: operational procedures
 - τ **Saft NS standards, instruction sheets** for the Bordeaux unit and the Bagnolet establishment.
- ◆ Level 4: documents of record



Each unit manages all these procedures and its documents and records in accordance with its own working rules.

The quality management system must also meet the requirements of the following quality standards:

- τ **PART 21** for the production of batteries meant for Civil Aviation (European Aviation Safety Agency requirement).
- τ **PARTIE 145** for the maintenance of batteries meant for Civil Aviation (European Aviation Safety Agency requirement).
- τ **EN 9100 / AS 9100 / JQIS 9100** for Civilian Aviation and Space batteries.
- τ **IRIS** [International Railways Industry Standard] for batteries to be supplied to specific railways customers.

These specific requirements are defined in the following documents:

- ◆ FAR Supplement # MS002 for FAR PMA.
 - ◆ FAR Supplement # MS004 for FAR 145.
 - ◆ **NS 1 001 119** (Production organization manual) for PART 21
 - ◆ **NS 1 001 150** (Maintenance organization manual) for PARTIE 145
- and included in the appropriate document for **EN9100, AS9100** and **IRIS**.



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Interface Agreements:

- ◆ **NS 1 001 932** between Bagnolet and IBG Bordeaux
- ◆ **NS 1 001 935** between IBG Bordeaux and R&D Department

There are specific agreements between SDU and facilities it supports (**NS 1 001 954** for Bordeaux).

Access to quality management system documentation is provided to Saft personnel through the use of controlled release documents as described in **NS 1 001 905** in Bordeaux. Employee awareness of relevant procedures is ensured as described in **NS 1 001 918** in Bordeaux.

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

4.2.2. Quality Manual

OBJECTIVES

The objectives of this quality manual are:

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- ◆ To define and lay down the rules for ensuring the coherence of quality management systems used in the Industrial Battery Group (Bordeaux and Bagnolet).
- ◆ To communicate the quality policy of the IBG, its objectives and its commitment to customers and to all the employees.
- ◆ To attain 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 the IBG to supply products and services that meet their specifications.

SCOPE AND FIELD OF APPLICATION

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This quality manual applies to the unit of Bordeaux and the IBG activity of the Bagnolet facility.

The scope of this quality manual is to describe the general provisions implemented by the IBG to ensure and constantly enhance the quality of its products and services in the following fields of activity: design, development, production, sales and after-sales of storage batteries.

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 version 2008, AS 9100 Revision B, EN 9100 revision 2003 and IRIS.

The relationship between the requirements of ISO 9001, AS 9100 or EN 9100 and referenced documented procedures is shown in this Quality Manual. (page 44).

The links with IRIS for Bordeaux are included in **NS 1 001 943**.



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CONTROL OF THE MANUAL: MODIFICATION, APPROVAL AND DISTRIBUTION

The Directors of the Industrial Battery Group approve the Quality Manual. The original version is drawn up in French. An English version is published.

The Quality Department of the unit of Bordeaux, publishes, distributes, maintains and controls the quality manual.

The quality manual is a controlled document. Each unit maintains an updated record of distributions.

The modification of the manual is coordinated with the unit department heads. The Quality Director of the IBG decides in case of disagreement.

Any proposal to improve the manual must be approved locally and transmitted to the IBG Quality Director for review, evaluation and approval. The final approval of the Quality Manual is given by the IBG General Manager.

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 against the paragraphs concerned (except for major revisions).

Upon the receipt of the modified manual, each unit distributes the new edition according to its procedure for distribution of controlled documents.

The copies of the manuals given to customers or any other person not included on the list of distribution, are non-controlled documents and may not be used as official documents.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 926.**

4.2.3. Document control

The documents are created or revised in accordance with the procedures followed in each unit. They are managed according to the numbering system defined in each unit and are indexed.

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 immediately 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 the 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 marked clearly 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.

Document changes are coordinated with customers and/or regulatory authorities in accordance with contract or regulatory requirements.

External documents are identified and their distribution is controlled.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 905.**
- ◆ The documents of external origin (specifications, etc.) are identified and their distribution controlled according to **NS 1 001 903.**



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4.2.4. CONTROL OF QUALITY RECORDS

In compliance with the operational procedures and requirements specified, the records relating to quality are maintained to prove compliance with the specified requirements and the efficient functioning of the quality management system.

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 locatable in facilities that guarantee a suitable environment minimizing deterioration and damage and avoiding 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 client 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, the customers of Saft, and regulatory authorities as described in the applicable documents.

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Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 916.**

4.3. CONFIGURATION MANAGEMENT

Written procedures describe the organization's configuration management process.

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Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 940**



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5. MANAGEMENT RESPONSIBILITY

5.1. LETTER OF COMMITMENT FROM THE MANAGEMENT

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The mission of the INDUSTRIAL BATTERY GROUP (BORDEAUX – BAGNOLET) of Saft is to design, develop, produce and sell electric accumulators used in the manufacture of various models of Nickel-Cadmium, Nickel Metal Hydride and Lithium-ion batteries. These products are meant for the sectors of Aviation and Space, Railways, Industry, Telecommunications, and Electric Propulsion.

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 batteries maintenance.

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.

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

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

D. CHARBONNEL
Bordeaux Plant Director
Bordeaux Site Director



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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.

5.3. QUALITY POLICY

It is essential that this quality policy be known and understood by everyone for attaining the stated objectives. To this end, notice boards have been installed in each workshop 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 Bordeaux and Bagnolet Establishments) 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 to the legal/regulatory requirements.

The quality policy is reviewed at least once a year in order to verify its suitability with IBG objectives. The result is included in Bordeaux management review.

This actual version is from September 2010 (and also for the English version).

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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 once every year. They are reviewed at every Management Review to keep abreast with the developments in the 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 action through a team approach
- ◆ Maintain quality driven relationships with suppliers.
- ◆ Develop and maintain certification required by the Group activities.
- ◆ Master quality cost.
- ◆ Pursue "World Class" status.

5.4.2. **Quality planning**

For ensuring efficiency and management, planning is part of the working methods of the Industrial Battery Group. That is why several meetings (apart from the Management Review) are held. The summary table of the meetings and their frequency is given in the associated procedures.



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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 establish, put in place and enforce the various procedures and records in order to meet the requirements of this manual.

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

⇒ **Commercial Director**

- He is responsible for achieving the sales and margin objectives of the Group.
- He prepares the annual budget turnover proposals.
- He is responsible for providing information and technical assistance to clients.
- He ensures that a product meets the Quality requirements in an optimal manner.

⇒ **Bordeaux plant and site Director**

At the facility level, he represents Saft and has the legal and administrative obligations in accordance to the responsibilities delegated to him by Saft General Manager.

He has the responsibility for the facility of the Human Resources, Maintenance, Environmental, Accounting, Purchasing and Logistic Managers.

He is responsible for the production units, the development (except the ones under the SDU responsibility) and industrialization.

He is responsible for leading, coordinating, managing the Bordeaux production of the alkaline batteries unit and to improve its efficiency in order to consistently meet the customer needs in term of quality, cost, and delivery.

His main missions are:

- To reorganize the production unit, process re-engineering, human resources management to pursue World Class Status. Implement the industrial method the most efficient with continuous improvement search.
- Manage and optimize the human, material and financial facility resources within the budget and prioritization according to the most recent events.
- Insure all legal and regulatory requirements are met concerning security of personnel and material, work legislation, environmental and property owner obligations.
- Optimize the processes, closeness to customers, international open-mindedness.
- Change every employee into a change motivated and customer oriented person.
- Responsibility of the purchasing department including a cost reduction action plan for parts and raw materials.
- Contribute to qualification, competency and motivation improvement for the unit personnel.
- Within the framework of the product strategy, he is responsible for undertaking studies and for the development of alkaline products by formulating the annual technical plan and by implementing it.
- Under his responsibility, development studies and projects for the definition of new alkaline products are carried out in accordance with the design rules, marketing and customer requirements.
- Represent Saft locally within organizations (administration, business), to governmental Administration and insure contact with personnel representative organization.

He insures needs in electric tests of the whole site of Bordeaux.



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⇒ **System Development Unit (SDU) Director**

The System Development Unit (SDU) manager has the responsibility of the development of the battery systems known as complexes with the requirements of the customers, the markets and the authorities of certification of the equipment when that is applicable. That includes:

- the development of architectures,
- studies of reliability,
- mechanical and thermal design of the system,
- electrical design, electronics and software,
- validation of the design on prototype,
- Approval or certification according to the contractual requirements.

These developments must fulfill the requirements of quality, timing and costs defined during the starting of the project. He is also responsible for:

- The preliminary studies, ending in a decision of management to enter in a project phase on the basis of the costs and the return on investment, and risks associated with the project ;
- Customer support with the commercial teams,
- Transfer of the knowledge to make with Products Lines IBG and SBG in order to ensure, as well as possible, the series productions and the service after sale.

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Within its unit, he is responsible for the promotion of the continuous improvement, the follow-up of the projects in order to identify any drift on the Quality, Cost and On Time Delivery, of the adequacy of the resources compared to the needs (quantity and competences). He makes sure of the conformity compared to the safety requirements (people and equipment).

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⇒ **Quality Manager of the Bordeaux unit**

- He Looks after the operations of quality management and organization of management quality reviews;
- He Looks after the operations of quality assurance, from product design to their use by customers;
- He gives his agreement to new products and new processes developed by IBG (Development and Industrialization) and the Lithium-ion Division, after examination of the documents and results,
- He controls conformity at all steps of the process, either directly or by delegation according to the inspection and self-inspection plans that he defines,
- He empowers the personnel assigned for operations of inspection, self-inspection and quality,
- He suspends the circulation or delivery of non-complying products,
- He Certifies 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,
- He negotiates specific quality requirements of customers during contracts,
- He follows-up returns from clients to the factory and investigate claims,
- He ensures the application of the quality rules defined through audits,
- He trains the personnel to the quality system.



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MANAGEMENT REPRESENTATIVE

The general manager defines the comprehensive strategy of the enterprise in line with the objective of control and total quality assurance.

The Quality Manager of the unit of Bordeaux is the representative of the management for this unit. He reports to the Quality Director of the Industrial Battery Group, who is the representative of the management at the Group level.

These representatives must be a member of Saft's management team and not an external member.

He has the responsibility and authority for:

- ◆ 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 to resolve matters pertaining to quality.

5.5.2. 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 employees.

Several information bulletins are circulated:

- . INSIGHT, distributed in Bordeaux, presents general information about the company.
- . A monthly bulletin distributed to all employees at the Bordeaux factory. It also summarizes the main points touched upon during the meeting of the establishment committee.

There are several displays in the workshops:

- ◆ An "information center" where the bulletin is displayed, along with newspaper clippings, magazine articles and memos;
- ◆ A bulletin board displaying the following: the Saft quality policy, the productivity results (shown graphically), quality indicators (results of the Management Review), as well as
- ◆ information of the progress of work groups and problem resolution (Quality Initiative, ...) groups.
- ◆ In addition, there is a website: www.saftbatteries.com

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5.6. MANAGEMENT REVIEW

5.6.1. **General Requirements**

The Management, constantly focused on the smooth functioning of the quality management system, organizes a Management Review (quarterly in Bordeaux) in order to verify the progress of the objectives established for each year.

During the Management Review, all the departments are represented.

5.6.2. **Review Input**

Here is a summary table of the various points analyzed during this review:

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	Conformance to objectives
Product conformity	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 for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 901.**

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.



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6. RESOURCE MANAGEMENT

The management defines the human and physical means necessary for ensuring customer satisfaction. Regular meetings allow for manpower adjustment (weekly and monthly in Bordeaux and weekly in Valdosta).

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

6.1. ALLOCATION 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 construction.

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.

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 quality are trained. 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 and training qualifications given are maintained.

ag | Applicable documents for the Bordeaux unit and the establishment in Bagnolet:
- **NS 1 001 918.**

6.3. FACILITIES

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

The sub-process of industrialization sets the rules for ensuring the supply of tools and equipment, and their fine-tuning, for product manufacturing purposes.

ag | Applicable Documents for the Bordeaux unit and the establishment in Bagnolet:
- **NS 1 001 927.**

The maintenance sub-process defines the activities and responsibilities within the context of maintenance and management of means, building and machines

ag | Applicable documents for the Bordeaux unit and the establishment in Bagnolet:
- **NS 1 001 928.**



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6.4. WORK ENVIRONMENT

For the Bordeaux facility, the work environment requirements are specified in the safety sheets:

- **CGS (General Safety Requirements)**
- **CPS (Specific Safety Requirements)**

The Lithium-ion technology requires that the assembly of parts be done in a dry room. For that purpose, the Bordeaux unit has such a room where temperature and humidity are monitored. The assembly equipment is contained within the dry room.

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7. PRODUCT REALIZATION

7.1. PLANNING FOR PRODUCT REALIZATION

This step includes the identification of resources to support operation and maintenance of the product.

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7.2. CUSTOMER RELATED PROCESS

7.2.1. **Identification of Customer Requirements**

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

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

For example:

Maintenance Manual and training may be defined in the contract, but they are also available in our website at:

- ◆ For the aviation batteries Maintenance Manual (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 elimination:

- ◆ Our recycling policy can be found at:
www.saftbatteries.com/TheSaftGroup/Environment/Collectionpoints.com
- ◆ The collection points 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.
- e) Risks have been evaluated. Examples of possible risks are delivery time from suppliers, new technology, etc.
- f) Post-delivery activities such as warranty provisions, contractual obligations, maintenance services and supplementary services concerning 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.
- 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 for the Bordeaux unit and the establishment in Bagnolet:

- . **NS 1 001 905.**



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7.2.3. Communication with Customers

As far as the external communication is concerned, it is done mainly through the sales representatives.

In addition, a web site exists: <http://www.saftbatteries.com> which among 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 that the specified 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.
- e) Identify key characteristics, when applicable, in accordance with design or contract requirements.

All pertinent data required to allow the product to be identified, manufactured, inspected, used and maintained shall be defined.

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.



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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. Documentation of Design and/or Development Verification and Validation

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.

7.3.6.2. Design and/or 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.

7.3.7. 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.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 904.**

7.4. PURCHASING

7.4.1. Purchasing Control

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 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 quality of all products purchased from suppliers, including customer-designated sources.

Records of qualified suppliers are preserved.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 906.**



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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 available on request.

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 or EN 9001 such as key characteristics if required) are requested from the suppliers and from their subcontractors.

7.4.3. Verification of Purchased Product

The audit of components is done upon acceptance and/or in the factory of the supplier. The scope of the audit depends on the type of component and/or of the service and of its criticality, on the quality system of the supplier and the objective evidence of quality given by the supplier and finally on the quality history of the latter.

When so specified by the contract, provisions are made for an audit and/or product verification by the customer or its representative or authority or third party, in the supplier's factory.

7.5. PRODUCTION and SERVICE OPERATION

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The manufacturing process of Nickel-Cadmium batteries (described in page 34 & 35) is sub-divided for the Bordeaux plant into two processes:

- ◆ Chemical process: Production of active strips
- ◆ Assembly process: Production of accumulators and/or batteries
- The manufacturing process for the production of Nickel Metal Hydride modules and batteries is described on page 36.
- The manufacturing process for the production of Lithium-ion modules and batteries is described on page 37.

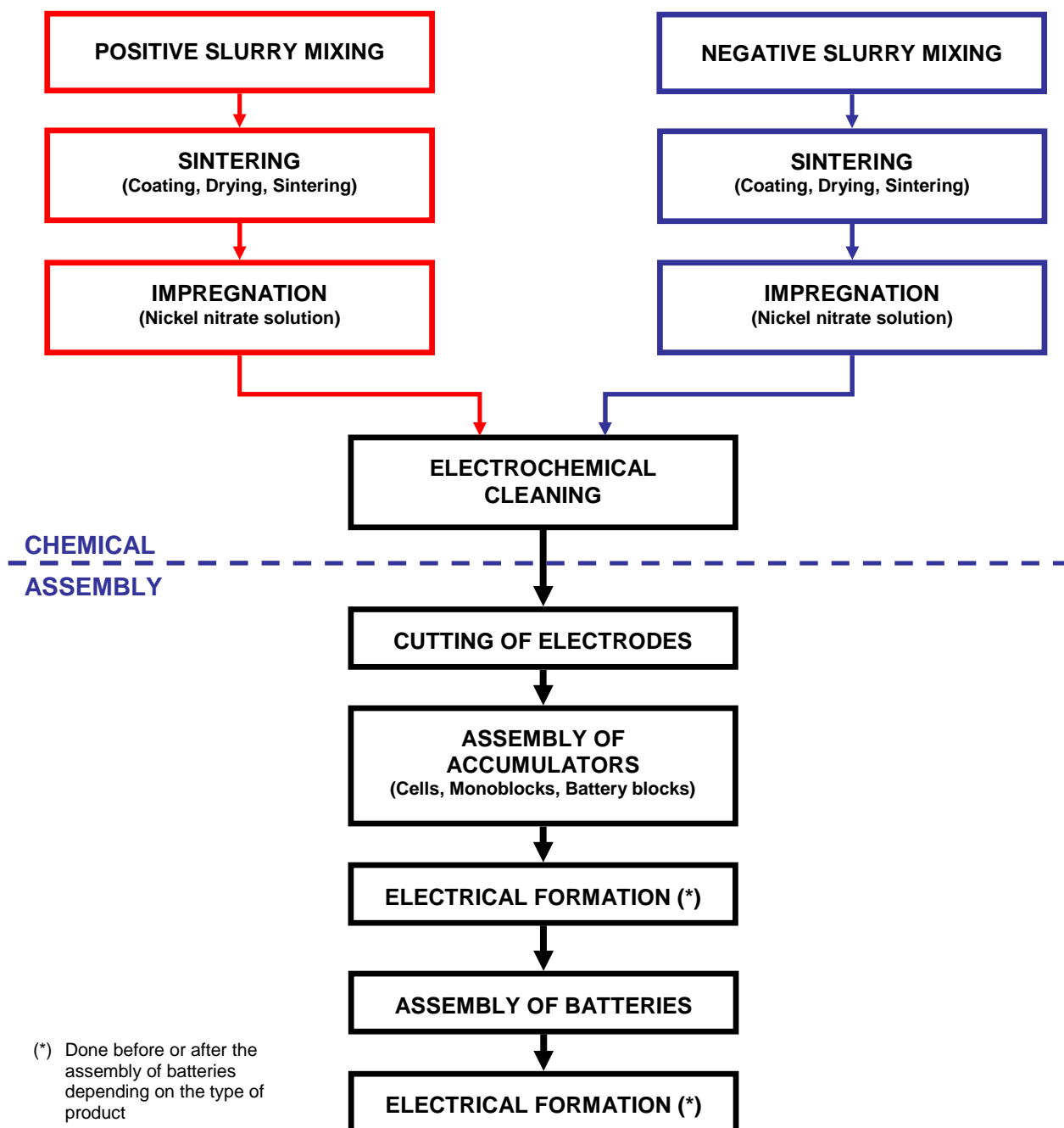
Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 910** and **NS 1 001 929**.



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





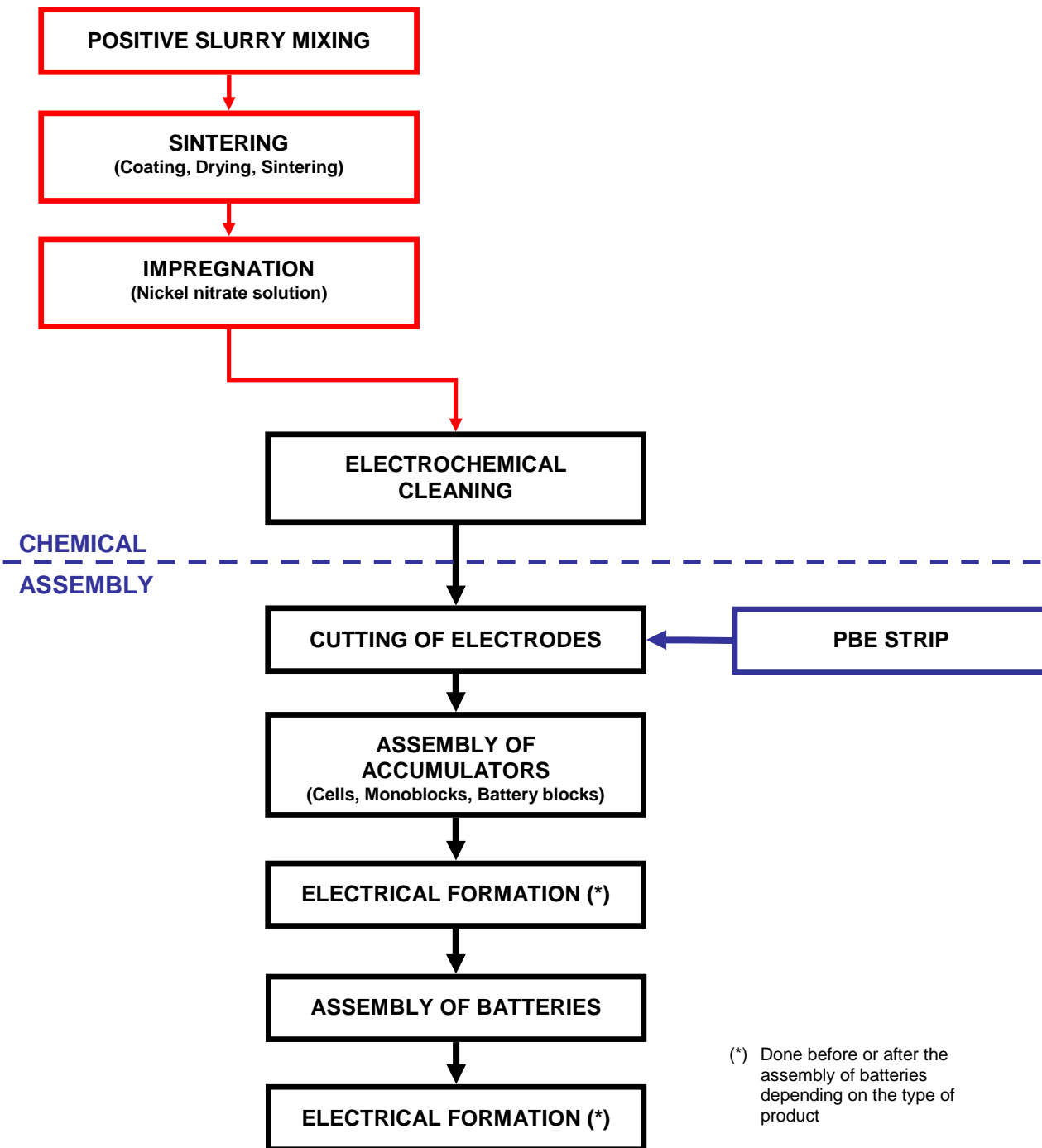
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- ALKALINE PRODUCTS -

REALIZATION PROCESS FOR NICKEL-CADMIUM CELLS AND BATTERIES

SINTER / PBE

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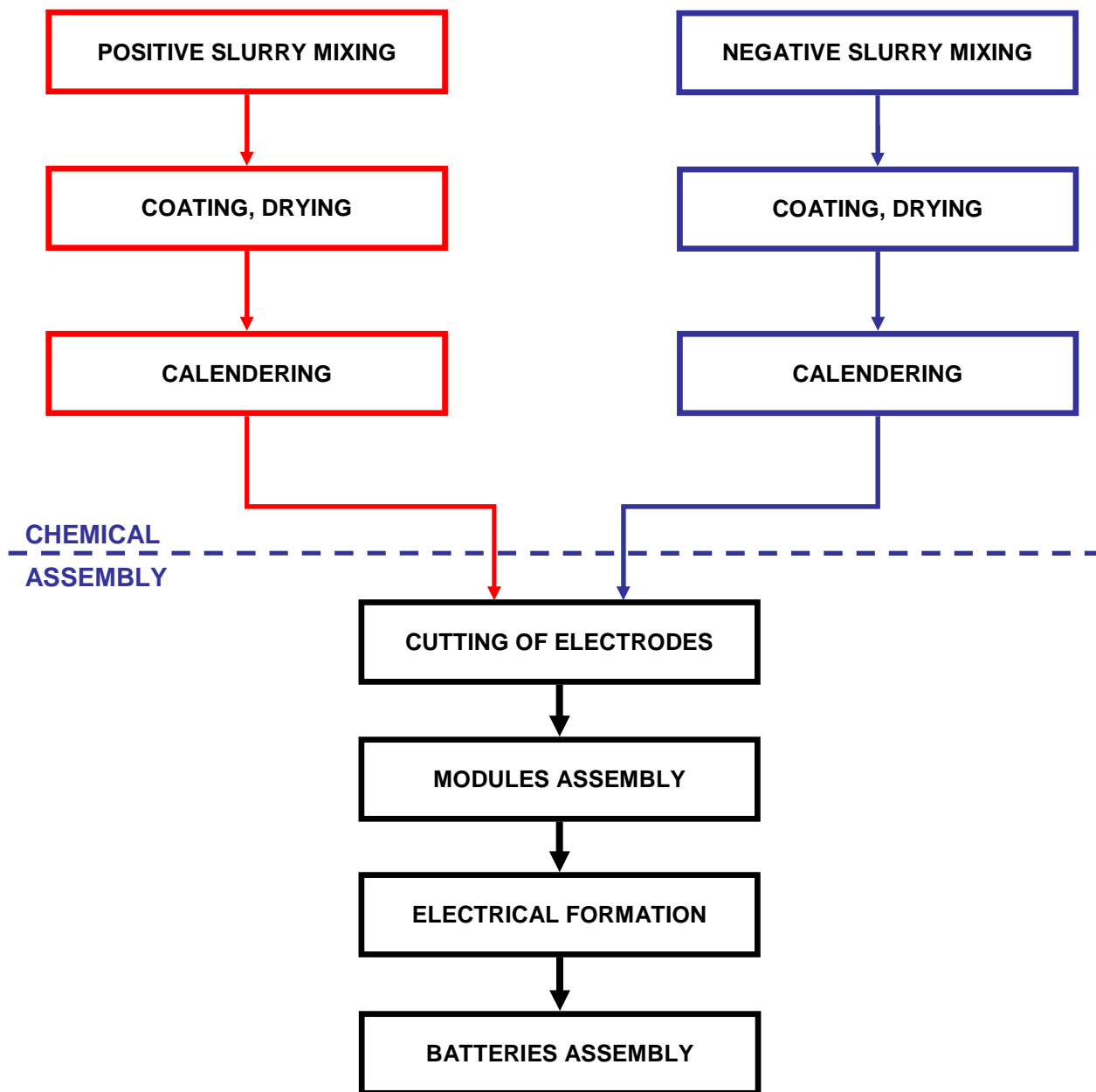
(*) Done before or after the assembly of batteries depending on the type of product



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- ALKALINE PRODUCTS -

REALIZATION PROCESS FOR NI-MH MODULES AND BATTERIES

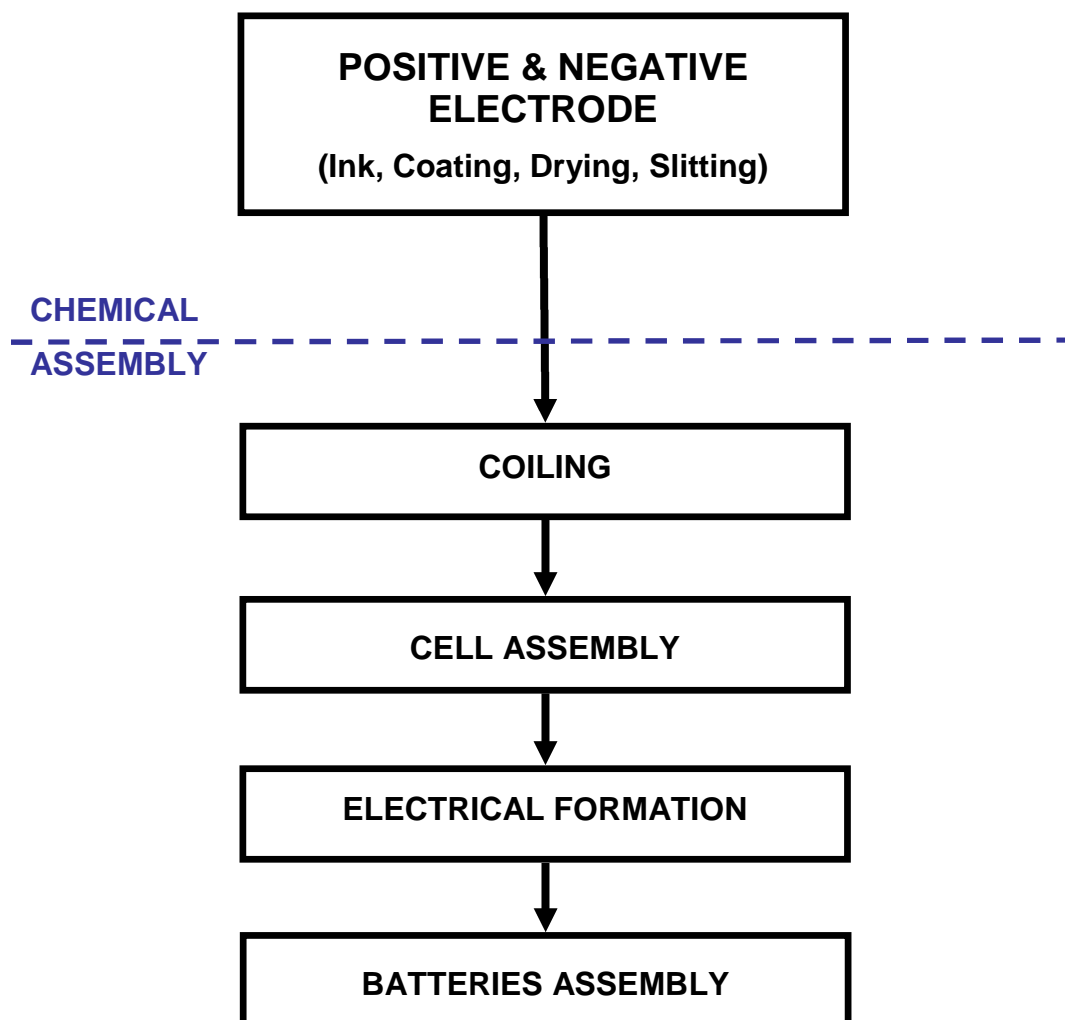




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- LITHIUM-ION UNIT -

REALIZATION PROCESS FOR LI-ION CELLS AND BATTERIES





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7.5.1. Control of Production and Service Provision

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

Planning will consider the following points if applicable:

- a) the establishment of process controls and development of control plans where key characteristics have been identified (Quality Assurance responsibility),
- b) the identification of in-process verification points when adequate verification of conformance cannot be performed at a later stage of realization, (Quality Assurance responsibility)
- c) the design, manufacture, and use of tooling so that variable measurements can be taken, particularly for key characteristics (Process engineering responsibility), and
- d) special processes. (Process engineering responsibility)

Production is planned and carried out under controlled conditions. The monitoring of the production is ensured by the operator training and by providing them with the appropriate documents (auto quality documents, drawings, work instructions,...).

When the production operations are performed without these documents (e.g.: prototypes...) the operator must be certified.

This sub-process defines the modalities for inspection of products when accepted, during manufacturing and final inspection.

7.5.1.1. Production Documentation

Production operations are carried out in accordance with approved data. This data shall include as necessary: drawings, parts lists, process flow charts including inspection operations, production documents and a list of specific or non-specific tools and instructions for their use.

7.5.1.2. Control of Production Process Changes

Individuals authorized to approve changes to production processes shall be identified in the appropriate document at each site.

Saft identifies and obtains acceptance of changes that require customer and/or regulatory authority approval as required by contract or regulation.

Changes affecting processes, production equipment, tools and 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 quality.

7.5.1.3. Control of Production Equipment, Tools and Numerical Control Machine Programs

Production equipment, tools and programs are verified prior to use and maintained and inspected periodically according to procedures at each site. This includes verification of the first article produced to the design specification.

7.5.1.4. 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 document for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 945.**



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7.5.1.5. Control of Service Operations

Saft collects and analyzes in-service data and takes appropriate actions when problems are identified.

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

Applicable document for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 903.**

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7.5.2. **Production Process Validation**

During the design stages of new equipment and processes, a validation plan is established. The plan defines mainly the tests to be performed and the criteria that must be met for validation.

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

When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), each production site shall establish and document controls for the media.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

. **NS 1 001 927.**

. **NS 1 001 918.**

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7.5.3. **Traceability**

This sub-process clearly identifies the traceability of batteries, accumulators and blocks at each step of their manufacture.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

. **NS 1 001 908.**

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7.5.4. **Customer Property**

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

. **NS 1 001 910.**

7.5.5. **Product Preservation**

This sub-process defines the rules to be applied in order to control the handling, storage, packing, preservation and delivery.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

. **NS 1 001 915.**

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7.6. INSPECTION, MEASUREMENT AND TESTING EQUIPMENT

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.

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 911.**

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8. MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1. GENERAL

The measurement tools (Internal Audits, Customer Audits, World Class Audits, indicators, FMEA, capabilities,...) are used to ensure the product conformity and quality management system conformity.

From these measurements, improvement actions are implemented using problem-solving methods (PDCA, Kaizen, TPM, JIT, Mapping, 8D,...).

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 **NS 1 001 903** for the Bordeaux unit and the establishment of Bagnolet. They may include on time delivery (requested date and promised date), customer claims and return indicators; surveys using internal sensors: analysis of lost orders; ...

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.

Various audit tools shall be developed and deployed as appropriate at each site to support the internal audit of the quality management system requirements, (e.g., check-sheets, process flowcharts).

The results of the audits are recorded and notified to the personnel who have responsibilities in the areas audited. 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 correction and corrective action have to be taken without undue delay.

The implementation and effectiveness of the corrective actions are verified.

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

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 917.**



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8.2.3. Monitoring 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.

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.

8.2.4. Measurement and Monitoring of Product

The product characteristics are measured and controlled according to the auto quality plans. Each auto quality plan defines the controls to be performed and the records to be maintained.

When key characteristics have been identified, they are monitored and controlled according to **NS 1 001 941** in the Bordeaux facility.

When sampling is used in the inspection process as a means of product acceptance, the sampling plans are statistically valid and appropriate. 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.

8.2.4.1. Inspection Documentation

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

8.2.4.2. First Article Inspection

First article inspection procedures have been implemented by each working unit. The first article inspection process is described in **NS 1 001 942** for aviation and railways products in Bordeaux.

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.



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The non-complying product is examined and processed according to written procedures. 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 the contract so requires, the customer is consulted for the acceptance 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.

ag | Applicable documents for the Bordeaux unit and the establishment in Bagnolet:
- **NS 1 001 913.**

8.4. DATA ANALYSIS

The fields where statistical techniques are specified or suitable for the establishment, control and/or audit of the capacities of processes as well of the product characteristics and product follow-up, are identified.

Procedures are developed, implemented and maintained for the use and audit of statistical techniques.

ag | Applicable documents for the Bordeaux unit and the establishment in Bagnolet:
- **NS 1 001 920.**

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, JIT teams,...

The implementation of these methods is decided by the Management committee.

ag | Applicable documents for the Bordeaux unit and the establishment in Bagnolet:
♦ **NS 1 001 922.**

8.5.2. **Corrective Actions**

The corrective actions implemented for eliminating the causes of real failure are proportionate to the gravity of the problem and the risks involved.

An appropriate research is carried out to identifying the cause(s) of the existence of non-conformities. The curative and/or corrective actions are taken to eliminate the cause(s) and to avoid recurrence.



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The results are recorded.

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

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

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.

ag

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 914.**

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.

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.

ag

Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- ◆ **NS 1 001 930.**

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.

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Applicable documents for the Bordeaux unit and the establishment in Bagnolet:

- **NS 1 001 921.**

10. AGREEMENTS

The list of agreements for IBG are listed in:

- **NS 1 001 924** for Bordeaux and the establishment in Bagnolet.



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EN/AS 9100 Requirements to Saft Documentation Cross Reference

EN/AS 9100 requirements		QM	Saft documents reference	EN/AS 9100 requirements		QM	Saft documents reference
4.1	General requirements	<u>4.1</u>	NS 1 001 903	7.2	Customer – Related Processes	7.2	NS 1 001 903
4.2	General documentation requirements	<u>4.2</u>	NS 1 001 932	7.3	Design et Development	7.3	
			NS 1 001 935	7.4	Purchasing	7.4	NS 1 001 906
4.2.2	Quality Manual	4.2.2	NS 1 001 926	7.5.1	Control of Production and Service	7.5.1 4.2.1	NS 1 001 910
4.2.3	Control of documents	4.2.3	NS 1 001 943				NS 1 001 929
4.2.4	Control of records	4.2.4	NS 1 001 905	7.5.2	Validation of Processes for Production and Service	7.5.2	NS 1 001 927 NS 1 001 918
4.3	Configuration Management	4.3	NS 1 001 916	7.5.3	Identification and Traceability	7.5.3	NS 1 001 908
5.1	Management commitment	5.1		7.5.4	Customer property	7.5.4	NS 1 001 910
5.2	Customer focus	5.2		7.5.5	Preservation of product	7.5.5	NS 1 001 911
5.3	Quality policy	5.3		7.6	Control of Monitoring and Measuring Devices	7.6	NS 1 001 911
5.4.1	Quality objectives (Planning)	5.4.1		8.1	General	8.1	
5.4.2	Quality Management System Planning	5.4.2		8.2.1	Customer Satisfaction	8.2.1	
5.5	Responsibility, Authority and Communication	5.5		8.2.2	Internal Audit	8.2.2	NS 1 001 917
5.6	Management Review	5.6	NS 1 001 901	8.2.3	Monitoring and Measurement of Processes	8.2.3	NS 1 001 901
6.1	Provision of Resources	6.1		8.2.4	Monitoring and Measurement of Product	8.2.4	NS 1 001 941 NS 1 001 942
6.2	Human resources	6.2	NS 1 001 918	8.3	Control of Non Conforming Product	8.3	NS 1 001 913
6.2.2	Competence, Awareness and Training	6.2	NS 1 001 918	8.4	Analysis of Data	8.4	NS 1 001 920
6.3	Infrastructure	6.3	NS 1 001 927 NS 1 001 928	8.5.1	Continuous Improvement	8.5.1	NS 1 001 922
6.4	Work equipment	6.4		8.5.2	Corrective Action	8.5.2	NS 1 001 914
7.1	Planning of Product Realization	7.1		8.5.3	Preventive Action	8.5.3	NS 1 001 930