

QUALITY MANUAL

VARIOUS INDICES

<u>Chapter</u>	<u>Title</u>
00	Various Indices
01	Introduction to General Cable
02	Requirements of the Quality Management System
03	Requirements of the documentation of the Quality Management System
04	Management Responsibilities
05	Planning and Review of the Quality Management System
06	Management of resources
07	Processes related to the customer
08	Design and Development Process
09	Purchasing Process
10	Production and provision of service process
11	Control of the monitoring and measuring devices
12	Monitoring and measuring
13	Control of the non-conforming product
14	Analysis of the data and improvement
Appendix I	List of general procedures

VARIOUS INDICES**STATE OF REVIEW OF THE CHAPTERS**

CHAPTER	Rev. 0	Rev. 1	Rev. 2	Rev. 3	Rev. 4
0	April-03				
1	April-03				
2	April-03				
3	April-03				
4	April-03				
5	April-03				
6	April-03				
7	April-03				
8	April-03				
9	April-03				
10	April-03				
11	April-03				
12	April-03				
13	April-03				
14	April-03				
APPENDIX I	April-03				

INTRODUCTION TO GENERAL CABLE**CONTENTS:**

01.1 OBJECT

01.2 SCOPE

01.3 DESCRIPTION

01.3.1 PRESENTATION OF GENERAL CABLE

01.3.1.1 GENERAL CABLE CORPORATION

01.3.1.2 GENERAL CABLE IBERIA

01.3.1.3 GRUPO GENERAL CABLE SISTEMAS, S.A.

01.3.1.3.1 BACKGROUND

01.3.1.3.2 GEOGRAPHIC SITUATION OF THE
FACILITIES

01.3.2 SCOPE OF THE QUALITY MANAGEMENT SYSTEM

01.3.3 QUALITY POLICY

01.1 OBJECT

The object of this chapter is to introduce Grupo General Cable Sistemas, S.A., describe the activities, products and services included within the scope of the Quality System, and to include General Cable's Quality Policy.

01.2 SCOPE

This chapter is applicable to the Quality Management System established in Grupo General Cable Sistemas, S.A.

01.3 DESCRIPTION

01.3.1 PRESENTATION OF GENERAL CABLE

01.3.1.1 General Cable Corporation

General Cable Corporation's headquarters is in the United States town of Highland Heights, situated in the state of Kentucky, and is the third cable manufacturer in the world and the first in North America. The company has production facilities in 9 countries. It has 36 of its own modern manufacturing plants and employs 9,000 people.

With a hundred-year-old tradition, General Cable Corporation is one of the major historical companies of the sector, and through its activity it has contributed and it contributes decisively to the progress of society and to the improvement of the quality of life of people. Its products are of vital importance in key sectors for social development, such as electricity, construction and communication.

It manufactures and supplies a very wide range of cables, going from energy to telecommunication cables, and electric, construction, data transmission, instrumentation and control and special cables.

General Cable Corporation's strategy is based on three main principles: the Power of One (the capacity to become a supplier which meets all the needs of its customers), excellent service for these customers and a continuous improvement of productivity. It likewise bases its activity on a series of corporate values which guide all of its operations: customer satisfaction as an absolute priority; integrity in all its actions; considering people as the main source of value; teamwork as the path to excellence; speed of delivery as a competitive advantage; and quality and continuous improvement as a constant objective.

01.3.1.2 General Cable Iberia

Iberia is the name of the area which brings together the activities of General Cable Corporation in Spain and Portugal. The companies existing in each of these countries (Grupo General Cable Sistemas, S.A. in Spain and General Cable Celcat in Portugal) are fully coordinated, taking advantage of synergies and optimizing resources in their manufacturing centres. Their integration makes it possible to offer the greatest flexibility in customer service and to have a permanent stock to respond to their needs quickly and efficiently.

General Cable Iberia moreover has an important sales network distributed throughout Spain and Portugal. It is likewise present in other countries such as Norway (General Cable Norge), Brazil (BICC General Cable do Brasil) and Argentina (General Cable Argentina).

01.3.1.3 Grupo General Cable Sistemas, S.A.

Grupo General Cable Sistemas, S.A., as already indicated, forms part of the Iberia structure of General Cable Corporation and operates with the image and the business name General Cable. General Cable will be used hereinafter in this manual to refer to the company Grupo General Cable Sistemas, S.A.

Over 1,000 people work in General Cable. Its production facilities (with the three production plants) occupy a total surface area of 338,000 square metres. Its headquarters is in Barcelona, and it has an important sales network distributed throughout the Spanish territory.

General Cable is the leading and the biggest electric cable manufacturer in Spain, with a production of around 70 thousand tonnes of cables a year.

The specialization of its production plants by products ensures that there is an intensified platform for product and process development focused on meeting the customer's needs.

01.3.1.3.1 BACKGROUND

The transportation of energy is an area in which General Cable has widespread experience. In 1988 the companies General Cable Compañía, S.A. (1957)¹, Conductores Eléctricos Roqué, S.A. (1923), Saenger, S.A. (1948), Conductores Eléctricos Navarro, S.A. (1957) and Plásmica (1943), formed a group, unifying their identity under the name Grupo General Cable Energía.

¹ Dates of creation of the individual companies.

The integration of the companies took place in 1988, in order to take advantage of the synergies, improve the service level and product quality.

In the first quarter of 1990, forming part of the Strategic Planning of Quality, the “Total Quality Controlling Plan” was established. A quality system was introduced throughout the organization, based on the criteria of Standard ISO 9001, and between 1991 and 1992 all the production centres obtained the certification of their Quality System by AENOR.

In 1995, and based on the company’s mission statement which places special emphasis on teamwork as the main instrument for the permanent improvement of our products, services, processes and costs, the Business Excellence process began with the establishment of multidisciplinary Progress Teams which work on solving important problems for the company.

In 1998, a further step was taken in this process with the constitution of the Natural Work Teams. The training programme is based on the Communication and the deployment of General Cable’s Vision: Mission, Operating Principles, Goals and Strategies, Teamwork, Quality Delivery Process, Structured Solution of Problems and Communication and Leadership.

01.3.1.3.2 GEOGRAPHIC SITUATION OF THE FACILITIES

Head Office:	Calle Casanova, 150. 08036 Barcelona.
Abrera Plant:	Carrer del Metall, 4 (Polígono Can Sucar-rats) 08630 Abrera.
Manlleu Plant:	Ctra. Rusiñol, 63. 08560 Manlleu.
Montcada Plant:	Ctra. de Ribas, Km 13,250. 08110 Montcada i Reixac

01.3.2 SCOPE OF THE QUALITY MANAGEMENT SYSTEM

The Q.M.S. is established in:

The design, development and production of:

- Insulated cables for the transportation and distribution of energy in high, medium and low voltage.
- Insulated cables for instrumentation, command and control.
- Cables for special applications.
- Aluminium copper and steel aluminium wires and conductors.
- Mixes and granules of thermoplastic and heat-stable materials.
- Lead extrusion.

The marketing of:

- The above products
- Accessories for cables
- Copper and optical fibre cables and components for telecommunications and data
- Customer support during the supply
- The turnkey installation of High Voltage cables.

01.3.3 QUALITY POLICY

General Cable's Quality Policy is enclosed in table I of this chapter of the Quality Manual.

Table 1
General Cable's Quality Policy



Quality Policy


Grupo General Cable Sistemas, S.A.

*Quality is an indispensable principle in **General Cable**. We aspire to achieve Business Excellence in our activity. To achieve this the whole organization, and therefore all the people who work in it, undertake to fulfil the legal and regulatory requirements of our internal and external customers, exceeding their expectations, and doing so at the minimum cost.*

We encourage continuous improvement and we believe in teamwork as the main instrument for the permanent improvement of our products, services, processes and costs.

Our Quality Systems are based on the technical criteria of Standard UNE-EN-ISO 9001, and are aimed at providing, on the basis of a Quality product, a differential value of Excellent Service which distinguishes us in the market. We consider ourselves to be collaborating partners of our customers, suppliers and of the society where we operate.

We spare no effort of any kind to achieve these objectives, supplying the necessary means, and we provide adequate training to achieve Total Quality, Excellent Service and Continuous Improvement.



Domingo Goenaga
Managing Director

April 2003

CONTENTS:

02.1 OBJECT

02.2 SCOPE

02.3 GENERAL REQUIREMENTS

02.3.1 GENERAL COMMENTS

02.3.2 PROCESSES OF THE QUALITY MANAGEMENT SYSTEM

02.3.2 OUTSOURCING OF PROCESSES

02.3.4 REQUIREMENTS EXCLUDED

02.4 PROCEDURES

02.1 OBJECT

The object of this chapter is to describe the general requirements of the Quality Management System established in General Cable.

02.2 SCOPE

This chapter is applicable to the requirements of the Quality Management System established in General Cable.

02.3 GENERAL REQUIREMENTS

02.3.1 GENERAL COMMENTS

As a means to ensure the conformity of the products with the requirements specified ⁽¹⁾ and to achieve the greatest satisfaction of the customers, General Cable has established, documented and kept up to date the Quality System and continuously improves the efficiency of the same.

The Quality System is based on the requirements of international standard UNE-EN ISO 9001:2000 *Quality management systems – Requirements*.

The systematics followed by General Cable to comply with the requirements is:

- a) Identify the processes necessary for the Quality Management System and its application in the Company.
- b) Determine the sequence and interaction of the processes identified.
- c) Determine the criteria and methods necessary to ensure that the operation and the control of the processes are efficient.
- d) Ensure the availability of resources and information necessary to support the operation and the monitoring of the processes.
- e) Carry out the monitoring, the measurement and the analysis of the processes.
- f) Implement the actions necessary to achieve the results planned and the continuous improvement of the processes.

02.3.2 PROCESSES OF THE QUALITY MANAGEMENT SYSTEM

(1) The requirements specified can be National, International, Customer and Internal Standards.

The processes necessary for the Quality Management System, the sequence and interaction of the same are documented. Figure 1 of this chapter shows the interaction between the processes of the Quality Management System.

Table I of this chapter lists the processes of General Cable's Quality Management System.

**Table I
 Processes of the Quality Management System**

	<u>GROUP</u>	<u>PROCESS</u>	<u>CHAPTER</u>
1	Strategic	MANAGEMENT REVIEW. DEPLOYMENT OF OBJECTIVES	05
10	Operational	CABLE ENQUIRIES	07
12	Operational	CABLE ORDERS	07
23	Operational	AFTER SALES	07
11	Operational	SALES	07
13	Operational	DESIGN	08
14	Operational	PURCHASING	09
18	Operational	PROCESS OUTSOURCING	09 - 10
17	Operational	CABLE OUTSOURCING	09 - 10
20	Operational	STORAGE AND CONSERVATION (APT)	10
21	Operational	DESPATCH AND DELIVERY	10
19	Operational	MANUFACTURE	10
16	Operational	ICAT	10
15	Operational	PRODUCTION PROGRAMMING AND STOCK MANAGEMENT	10
30	Support	ADVERTISING AND CUSTOMER SERVICE	07
34	Support	INTERNAL COMMUNICATION	04
33	Support	HUMAN RESOURCES	06
32	Support	MAINTENANCE	06
31	Support	IT	06
35	Support	FINANCE	06
41	Measurement and improvement	MEASUREMENT OF CUSTOMER SATISFACTION	12

43	Measurement and improvement	INTERNAL AUDIT	12
42	Measurement and improvement	MONITORING AND MEASURING	12
42	Measurement and improvement	CORRECTIVE & PREVENTIVE ACTIONS AND CONTINUOUS IMPROVEMENT	14

02.3.3 OUTSOURCING OF PROCESSES

When General Cable outsources any process that may affect the conformity of the product with the requirements, it is ensured that the control of these processes is in accordance with the systematics established in the Quality Management System.

The control of these processes is identified within the Quality Management System and is carried out as specified in a documented procedure (see section 02.4 of this chapter).

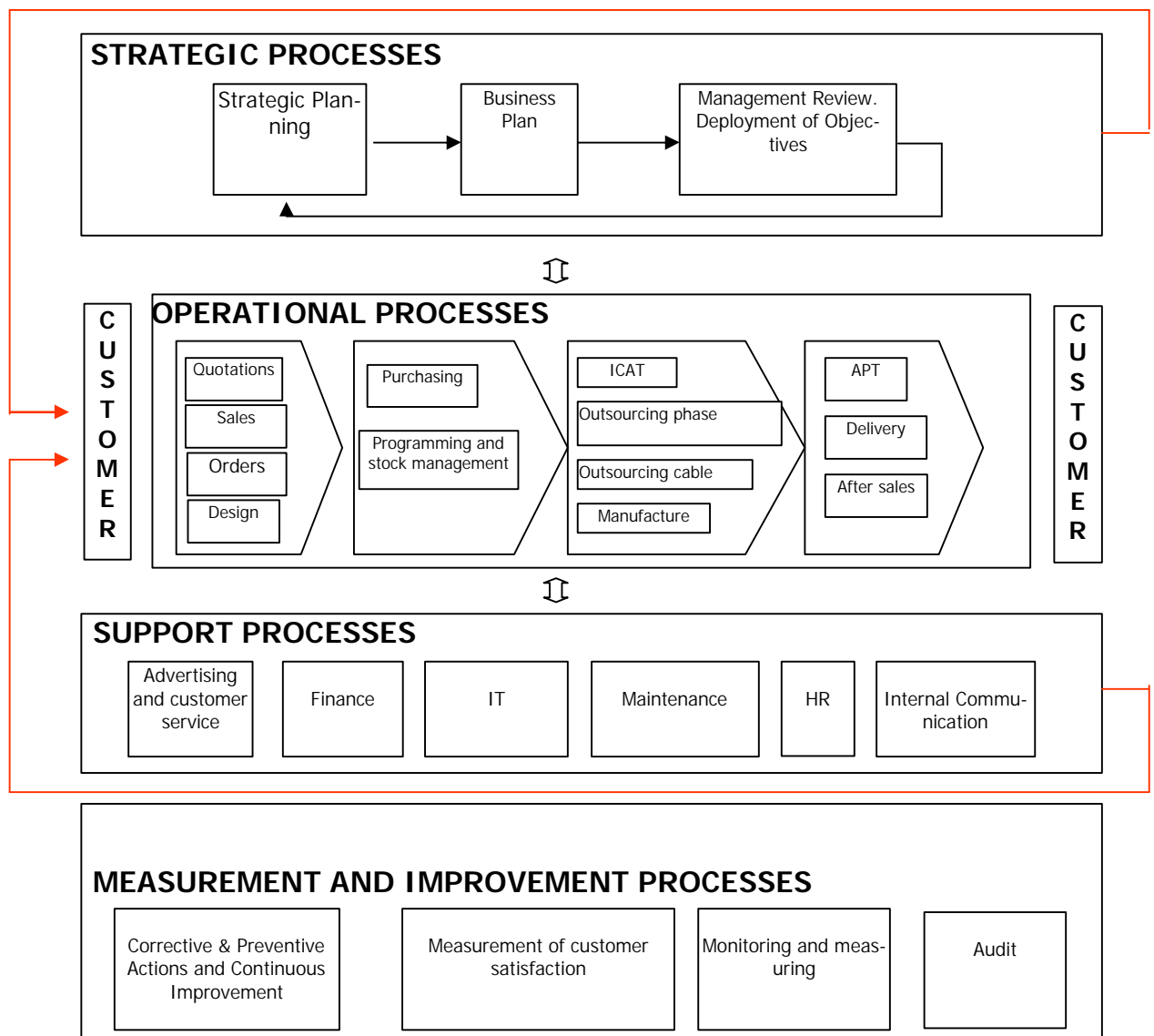
02.3.4 REQUIREMENTS EXCLUDED

In the Quality Management System established in General Cable there are no processes for which the resultant products cannot be verified by means of subsequent monitoring or measuring activities.

Consequently, there is no process that needs to be validated, as specified in the International Standard, indicated in section 02.3.1 of this chapter of the Quality Manual, the regulatory requirements for the “validation of the production processes and the provision of services” being excluded.

02.4 PROCEDURES

The policy followed in General Cable’s Quality System for the outsourcing of processes is developed in the General Procedure related to this chapter in Appendix I of this Quality Manual.

Figure 1
Interaction between the processes of the Quality Management System


**REQUIREMENTS OF THE DOCUMENTATION OF
THE QUALITY MANAGEMENT SYSTEM****CONTENTS:**

03.1 OBJECT

03.2 SCOPE

03.3 REQUIREMENTS OF THE DOCUMENTATION

03.3.1 GENERAL COMMENTS

03.3.2 QUALITY MANUAL

03.3.3 CONTROL OF THE DOCUMENTS

03.3.4 CONTROL OF THE QUALITY RECORDS

03.4 PROCEDURES

03.1 OBJECT

The object of this chapter is to describe the requirements of the documentation of the Quality Management System established in General Cable.

03.2 SCOPE

This chapter is applicable to the documents that contain information related to the Quality Management System established in General Cable.

03.3 REQUIREMENTS OF THE DOCUMENTATION

03.3.1 GENERAL COMMENTS

The documentation of the Quality Management System includes:

- a) The documented statement of General Cable's Quality Policy
- b) The documented statement of the quality objectives
- c) The Quality Manual
- d) The general procedures of the Quality Management System
- e) The specific procedures and the remaining documentation necessary to ensure the efficient planning, operation and control of the processes.
- f) The records of the Quality Management System

03.3.2 QUALITY MANUAL

The Quality Manual is the basic document of the Quality System in which is set forth the General Quality Policy and in which are established the responsibilities and practices concerning Quality.

General Cable establishes and maintains this Quality Manual which includes:

- a) The scope of the Quality Management System
- b) The reference of the general procedures (see Appendix I of this Quality Manual)
- c) The description of the interaction between the processes of the Quality Management System (see chapter 02 of this Quality Manual).

General Cable specifies how the Manual is structured in a documented procedure (see section 03.4 of this chapter). The Manual is divided into chapters which are managed

separately. Each page is identified with the chapter number, the edition number, the revision number of this chapter and the page number within the chapter. This procedure also specifies the operation for the management, approval and distribution of this Manual.

03.3.3 CONTROL OF THE DOCUMENTS

General Cable has established the procedures that specify the systematics to control the documents required by the Quality Management System (see section 03.4 of this chapter).

The control includes the documents both of internal origin (issued by entities or departments of the organization itself) and those of external origin (such as Technical Standards and Customer Specifications) directly related to the activities included in the Quality System.

The procedures for the control of the documentation specify the systematics indicated below:

- 1) The approval and review of the documents by the authorized staff before they are distributed;
- 2) The review of the information and the updating, if appropriate, of the documents in a controlled manner, so that:
 - a) They are reviewed and approved by the same positions / organizations that initially reviewed or approved them, except when explicitly indicated in the corresponding procedures;
 - b) The positions / organizations designated and authorized to make changes have access to the relevant information on which to base the review and the approval;
 - c) The nature of the change is identified in the document and the current state of review of the document; and
 - d) The state of review or the version in force is easily verifiable to prevent the use of invalid or obsolete documents.
- 1) The distribution of the documents is carried out in a controlled manner to ensure that the relevant versions of the applicable documents are available in the points of the organization which carry out fundamental operations for the operation of the Quality System;
- 2) The control of the obsolete documents to prevent unintentional use, so that:

- a) Invalid or obsolete documents are withdrawn in the shortest possible time from the points of use or distribution or it is ensured that an unplanned use is not made of them; and
- b) Obsolete documents that have to be kept for legal reasons or to conserve the information contained in them are adequately identified.

03.3.4 CONTROL OF THE QUALITY RECORDS

General Cable has established the procedures that specify the systematics to control the quality records (see section 03.4 of this chapter).

The quality records are the documents that provide evidence of conformity with the requirements and of the efficient operation of the Quality Management System.

The procedure for the control of the quality records specifies:

- a) The documents that are quality records;
- b) The management of the quality records, establishing the responsibilities and operations for the collection, identification, access, filing and maintenance; and
- c) The time to remain on the files and the disposal of the record once the filing time has elapsed. The records are available for the assessment or certification entities and, when established in the contract, are available for the customer or for their representative during the time agreed.

03.4 PROCEDURES

The policy followed in General Cable's Quality System for the control of the documentation and the control of quality records is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

- 04.1 OBJECT
- 04.2 SCOPE
- 04.3 COMMITMENT OF THE MANAGEMENT
- 04.4 CUSTOMER FOCUS
- 04.5 QUALITY POLICY
- 04.6 RESPONSIBILITY AND AUTHORITY
 - 04.6.1 RESPONSIBILITY
 - 04.6.2 PRINCIPLE OF DELEGATION
 - 04.6.3 AUTHORITY
- 04.7 MANAGEMENT REPRESENTATIVE
 - 04.7.1 GENERAL COMMENTS
 - 04.7.2 DESIGNATION OF THE MANAGEMENT REPRESENTATIVES
 - 04.7.3 DELEGATION TO THE QUALITY MANAGEMENT MANAGERS
- 04.8 INTERNAL COMMUNICATION
- 04.9 PROCEDURES

04.1 OBJECT

The object of this chapter is to describe the responsibilities of the Management of General Cable related to the Quality Management System established in General Cable.

04.2 SCOPE

This chapter is applicable to the responsibilities related to the Quality Management System.

04.3 COMMITMENT OF THE MANAGEMENT

The responsibilities of the Managing Director of General Cable related to Quality are as follows:

- a) Accept the maximum responsibility for management and control of General Cable. Coordinate the sales, administrative and financial actions which allow the business objectives established to be achieved;
- b) Define General Cable's Quality Policy (see section 04.5 of this chapter); promote the efficient introduction of the Quality System, providing it with the adequate resources (see chapter 06 of this Quality Manual);
- c) Communicate to the whole organization, through the Quality Policy, the importance of satisfying both the customer's and the legal and regulatory requirements.
- d) Analyze the results of the Quality System obtained in General Cable, establishing with his co-workers the appropriate Improvement Plans and quality objectives (see chapter 05 of this Quality Manual); and
- e) Accept responsibility for approving and enforcing this Quality Manual.

04.4 CUSTOMER FOCUS

The Management of General Cable transmits instructions for the establishment of systematics which ensure that the requirements of the customer are determined and are fulfilled with the aim of increasing customer satisfaction.

The operation for the determination of the customer's requirements is developed and specified in General Cable's Quality Management System (see chapter 07 of this Quality Manual).

The Management of General Cable verifies that the customer satisfaction increases by means of the systematics established in General Cable's Quality Management System (see chapter 12 of this Quality Manual).

04.5 QUALITY POLICY

The Quality Policy is the document of the Quality Management System that declares the overall intentions and the orientation of General Cable in relation to quality, expressed formally by the Management.

The Quality Policy is consistent with the overall policy of General Cable.

The Quality Policy fulfils the following requirements:

- a) It is appropriate for the aim of General Cable;
- b) It includes the commitment to fulfil both the customer's and the legal and regulatory requirements and to continuously improve the efficiency of the Quality Management System;
- c) It provides the framework of reference to establish and review the quality objectives (see chapter 05 of this Quality Manual);
- d) It is communicated and understood within General Cable; and
- e) It is reviewed to verify its continued applicability (see chapter 05 of this Quality Manual).

The Managing Director of General Cable approves the Quality Policy.

Chapter 01 of this Quality Manual shows the version in force of General Cable's Quality Policy.

General Cable's Quality Policy is transmitted by means of systematics such as: display on information panels, publication in internal journals, information or training sessions and by documentary transmission to the people who make up the company.

04.6 RESPONSIBILITY AND AUTHORITY

The responsibilities and authorities are defined and are communicated within General Cable in accordance with the systematics indicated below.

04.6.1 RESPONSIBILITY

General Cable has defined and documented the responsibilities, the competences and the relations between the people who control, carry out and verify any work which affects quality. In particular, for the people who need the freedom and organizational authority to:

- a) Begin actions to prevent the appearance of non-conformities concerning products, processes and the quality system;

- b) Identify and record the problems concerning the product, the processes and the quality system;
- c) Begin, recommend or provide solutions through the established channels (quality commission, quality committee, activity meetings, non-conformity reports, etc.);
- d) Verify the introduction of the solutions; and
- e) Control the subsequent treatment, the delivery or the installation of a non-conforming product until the defect or the unsatisfactory situation has been corrected.

The responsibilities and competences are detailed among the general procedures indicated in Appendix II and the job profile cards.

04.6.2 PRINCIPLE OF DELEGATION

All the tasks assigned in this Quality Manual or in the general procedures to a specific position can be delegated to other suitably qualified people. These delegations can be temporary or permanent. Permanent delegations shall be declared in writing. Delegations do not free the person making this assignment from any responsibility. None of the delegations that can be made will be able to limit the independence of the Quality function.

04.6.3 AUTHORITY

The authority of the organizational levels of General Cable is described in the organization charts managed by the Human Resources Management, according to the corresponding general procedure (see section 04.9 of this chapter).

The top level of the organization of General Cable and the organization chart of the Quality function are detailed in tables 1 and 2 of this chapter.

04.7 MANAGEMENT REPRESENTATIVE

04.7.1 GENERAL COMMENTS

The “Management representative” is a member of the management who, irrespective of other responsibilities, has been assigned the responsibility and authority which includes:

- a) Ensuring that the processes necessary for the Quality Management System are established, implemented and maintained;

MANAGEMENT RESPONSIBILITIES

- b) Informing the Management on the performance of the Quality Management System and on any improvement need (see chapter 05 of this Quality Manual); and
- c) Ensuring that awareness-raising on the requirements of the customer is promoted at all levels of General Cable.

04.7.2 DESIGNATION OF THE MANAGEMENT REPRESENTATIVES

The Management of General Cable has designated the Industrial Director as “Management representative” for matters relating to production and the Commercial Director as “Management representative” for matters relating to the marketing of the products.

04.7.3 DELEGATION TO THE QUALITY MANAGEMENT MANAGERS

The “Management representatives” delegate the authority and responsibility to develop, introduce and maintain the Quality System, so that it fulfils the requirements of Standard UNE-EN ISO 9001 and to develop the Quality Policies expressed in chapter 01 of this Quality Manual, to the Quality Management Managers, as per the following outline:

- Subjects related to production, the Industrial Director delegates to the Quality Management Manager of the Production Unit.
- Subjects related to the marketing of the products, the Commercial Director delegates to the Quality Management Manager of the Commercial Unit.

Both Quality Management Managers collaborate with the Directors of the remaining areas of General Cable, to ensure that the Quality System is established, introduced and maintained in accordance with that indicated in this Quality Manual, and have sufficient authority to intervene in the processes indicated in the QMS.

04.8 INTERNAL COMMUNICATION

General Cable’s Quality Management System has established the process for the internal communication of important and relevant information on quality.

The internal communication is carried out considering the efficiency of the Quality Management System.

04.9 PROCEDURES

The policy followed in General Cable's Quality System for the management of the organization charts is developed in the General Procedure related to this chapter in Appendix I of this Quality Manual.

Table 1
Organization chart of the top level of General Cable

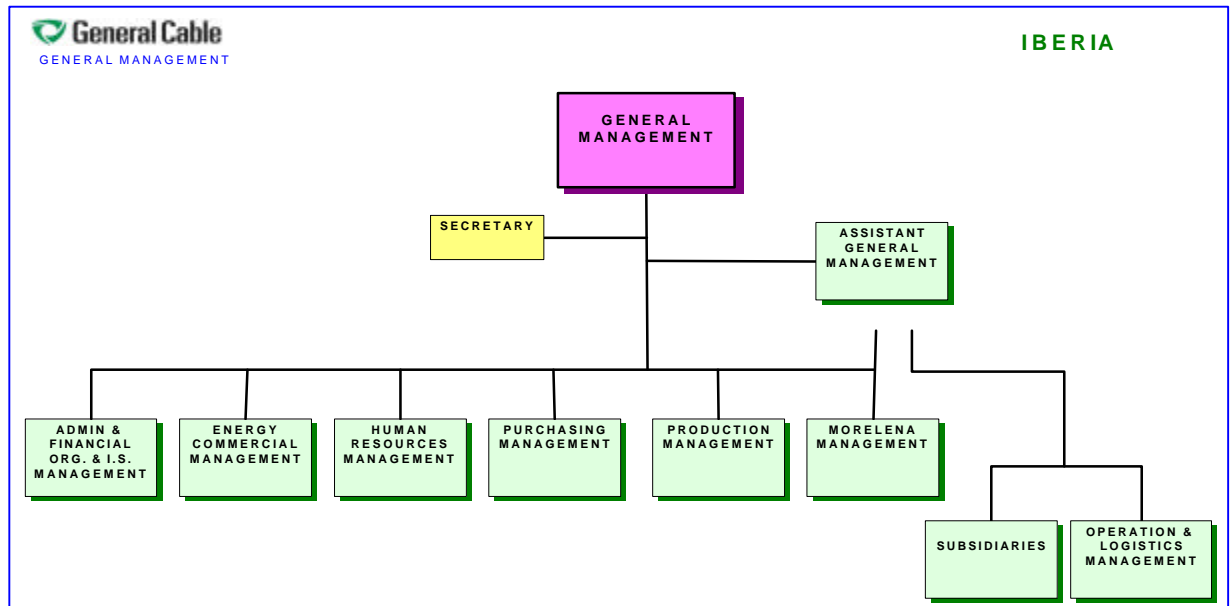
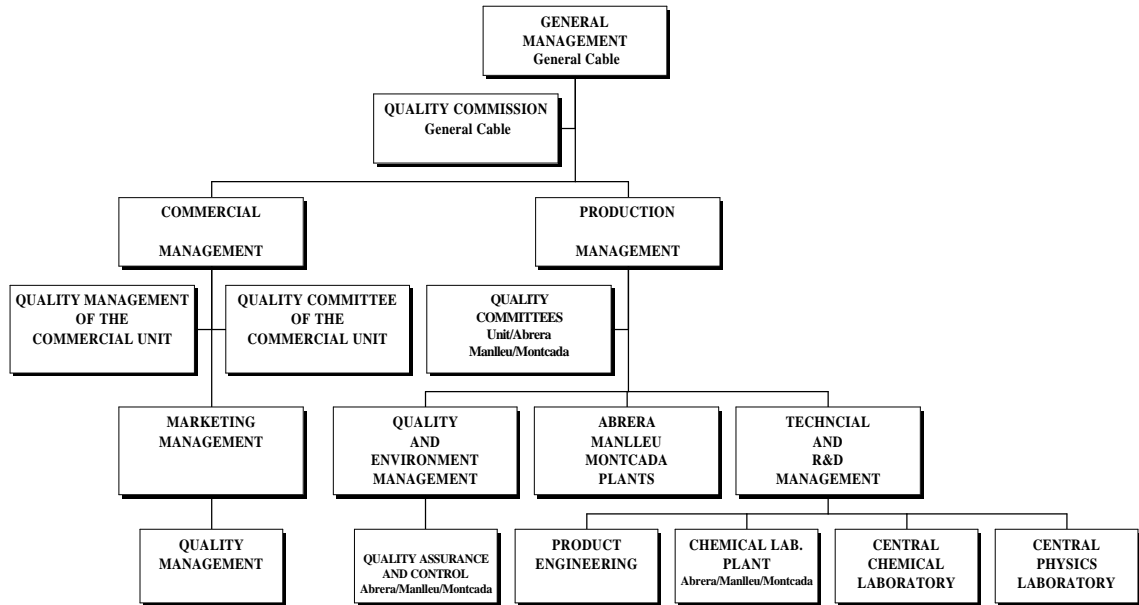


Table 2
Organization chart of the “Quality” function of General Cable



CONTENTS:

05.1 OBJECT

05.2 SCOPE

05.3 PLANNING

05.3.1 QUALITY OBJECTIVES

05.3.2 PLANNING OF THE QUALITY SYSTEM

05.4 MANAGEMENT REVIEW

05.4.1 GENERAL COMMENTS

05.4.2 INFORMATION FOR THE REVIEW

05.4.3 RESULTS OF THE MANAGEMENT REVIEW

05.4.4 MONITORING OF THE MANAGEMENT REVIEWS

05.5 PROCEDURES

05.1 OBJECT

The object of this chapter is to specify the systematics to carry out the Planning and the Management Review of the Quality Management System established in General Cable.

05.2 SCOPE

This chapter is applicable to all the processes and activities related to General Cable's Quality Management System.

05.3 PLANNING

05.3.1 QUALITY OBJECTIVES AND INDICATORS

The systematics for the establishment of the Quality Objectives and indicators ensure that these objectives verify that they:

- a) Include the objectives necessary to comply with the requirements of the product (see chapters 07, 08, 09, 10 and 11 of this Quality Manual);
- b) Are established in the relevant functions and levels of General Cable; and
- c) Are measurable and consistent with the Quality Policy.

The systematics is specified in a general procedure (see section 05.5 of this chapter).

05.3.2 PLANNING OF THE QUALITY SYSTEM

The planning of the Quality Management System is carried out with the aim of fulfilling the general requirements indicated in chapter 02 of this Quality Manual and the quality objectives (see section 05.3.1 of this chapter). Also to ensure that the completeness of the Quality Management System is maintained when changes to this system are planned and implemented.

The systematics to carry out the planning of the Quality Management System is specified in a general procedure (see section 05.5 of this chapter).

05.4 MANAGEMENT REVIEW

05.4.1 GENERAL COMMENTS

The object of the Management Review is to ensure, by means of a systematic review, that the Quality Management System introduced is convenient, adequate and of continued efficiency. The review is performed at planned intervals. It includes an assessment of the improvement opportunities and the need to make changes to the Quality Management System, including the Quality Policy and the quality objectives.

A process of the Quality Management System (see chapter 02 of this Quality Manual) describes the systematics to perform the Management Review. The systematics is specified in a general procedure (see section 05.5 of this chapter).

The result of the Management Review process is a quality record, managed as specified by chapter 03 of this Quality Manual.

05.4.2 INFORMATION FOR THE REVIEW

The minimum initial information of the Management Review process of the Quality Management System includes:

- a) The results of the audits (see chapter 12 of this Quality Manual);
- b) Customer feedback (see chapter 07 of this Quality Manual);
- c) The performance of the processes and the conformity of the product;
- d) The state of the corrective and preventive actions (see chapter 14 of this Quality Manual);
- e) The follow-up actions for prior management reviews (see section 05.4.3 of this chapter);
- f) The changes that may affect General Cable's Quality Management System; and
- g) The improvement recommendations.

05.4.3 RESULTS OF THE MANAGEMENT REVIEW

The information resulting from the "Management Review" process includes the decisions and actions related to:

- a) The improvement of the efficiency of the Quality Management System and its processes;
- b) The improvement of the product in relation to the customer's requirements; and
- c) The needs for resources.

05.4.4 MONITORING OF THE MANAGEMENT REVIEWS

The systematics established in the general procedure for the Management Review process (see section 05.5 of this chapter) specifies how to carry out and document the monitoring of the decisions and actions taken.

05.5 PROCEDURES

The policy followed in General Cable's Quality System for the establishment and monitoring of the quality objectives, the planning and the performance of the Review of the Quality Management System is developed in the General Procedure related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

06.1 OBJECT

06.2 SCOPE

06.3 PROVISION OF RESOURCES

06.4 HUMAN RESOURCES

06.5 INFRASTRUCTURE AND WORK ENVIRONMENT

06.6 PROCEDURES

06.1 OBJECT

The object of this chapter is to specify the systematics for the provision of the resources necessary for the processes and activities of the Quality Management System established in General Cable.

06.2 SCOPE

This chapter is applicable to the control and management of the resources required in the processes and activities related to General Cable's Quality Management System.

06.3 PROVISION OF RESOURCES

The Quality Management System includes the systematics to determine and provide the necessary resources:

- a) For the introduction and maintenance of the system and the continuous improvement of its efficiency; and
- b) To increase the satisfaction of the customers by complying with their requirements.

06.4 HUMAN RESOURCES

The Quality Management System includes the systematics to determine the necessary competence of the staff that carries out jobs affecting the quality of the product.

Competence is the demonstrated ability to apply knowledge and aptitudes and is based on appropriate education, training, skills and experience for the functions related to quality.

The systematics established to manage staff competence is as follows:

- a) Determine the necessary competence for these processes or activities;
- b) Provide training or take other actions to meet these needs;
- c) Assess the efficiency of the actions taken;
- d) Ensure that the staff is aware of the relevance and importance of the activities that they perform and of how they contribute to attaining the quality objectives; and
- e) Maintain records of the education, training, skills and experience of the staff of General Cable related to quality (see chapter 03 of this Quality Manual)

The systematics for the management of the staff competence is specified in a general procedure (see section 06.6 of this chapter).

06.5 INFRASTRUCTURE AND WORK ENVIRONMENT

The Quality Management System includes systematics to determine, provide and maintain the infrastructure and to determine and manage the work environment necessary to achieve conformity with the product requirements.

The infrastructure includes the:

- a) Buildings, work spaces and associated services;
- b) Equipment for the processes: production lines, testing equipment, etc. Including the hardware and software; and
- c) The support services; for example, transport or communications, etc.

The systematics is based on the planning and development of the investment plans and on the system for the maintenance of facilities and equipment. The maintenance system is specified in a general procedure (see section 06.6 of this chapter).

In addition, a process of the Quality Management System (see chapter 02 of this Quality Manual) describes the management of the computer infrastructure. This systematics is specified in a general procedure (see section 06.6 of this chapter).

06.6 PROCEDURES

The policy followed in General Cable's Quality System for the management of staff competence, the system for the maintenance of facilities and equipment, and the management of the computer infrastructure is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

PROCESSES RELATED TO THE CUSTOMER**CONTENTS:**

07.1 OBJECT

07.2 SCOPE

07.3 GENERAL COMMENTS

07.4 DETERMINATION OF THE REQUIREMENTS RELATED TO THE PRODUCT

07.5 REVIEW OF THE REQUIREMENTS RELATED TO THE PRODUCT

07.6 COMMUNICATION WITH THE CUSTOMER

07.7 PROCEDURES

07.1 OBJECT

The object of this chapter is to specify the systematics of the processes related to the customer for the determination and review of the product requirements and for communication with the customer.

07.2 SCOPE

This chapter is applicable to the products and services defined in chapter 01 of this Quality Manual.

07.3 GENERAL COMMENTS

General Cable plans and develops the processes necessary to make the product, including those related to the customer. This planning is consistent with the requirements of the remaining processes of the Quality Management System.

In the processes related to the customer, the planning determines, in whatever is appropriate, the following:

- a) The quality objectives and/or indicators;
- b) The product requirements;
- c) The need to establish processes, documents and to provide specific resources for the product or service;
- d) The required activities for the specific verification, validation, monitoring, inspection and test / trial of the product or service and the criteria for the acceptance of the same; and
- e) The records necessary to provide evidence of the performance processes and that the resultant product or service complies with the requirements. These records will be managed as established in the systematics described in chapter 03 of this Quality Manual

The Quality Management System processes that manage the relations with the customer are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 07.7.

07.4 DETERMINATION OF THE REQUIREMENTS RELATED TO THE PRODUCT

The systematics establishes that when a product is designed and developed, a quotation enquiry is received or an order or contract is received, the following is determined, as applicable:

- a) The requirements specified by the customer, including the requirements for the activities of delivery and those subsequent to the same (after sales);
- b) The requirements not established by the customer but necessary for the use specified or for the use foreseen, when this is known;
- c) The legal and regulatory requirements related to the product; and
- d) Any additional requirement determined by General Cable.

07.5 REVIEW OF THE REQUIREMENTS RELATED TO THE PRODUCT

The systematics establishes that the requirements determined in accordance with the previous section are reviewed before General Cable undertakes to provide a product to the customer. For example, a) to send a quotation; b) to accept a contract or order; and c) to accept changes to the contracts or orders.

The object of the review is to ensure that:

- a) The product requirements are defined (see section 07.4 of this chapter);
- b) The differences existing between the contract or order requirements and those previously expressed (for example, in the quotation) have been resolved; and
- c) General Cable has the capacity to comply with the requirements defined.

The results of the review and the actions resulting from the same are a record of the Quality Management System, managed in accordance with the systematics described in chapter 03 of this Quality Manual.

The systematics establishes that when the customer does not provide a documented statement of the requirements (for example, in oral or telephone orders), the requirements of the customer are confirmed before they are accepted.

The systematics also establishes that when the requirements of the product are modified or changed, it is ensured that the relevant documentation is modified and that the corresponding staff is aware of the changed requirements.

07.6 COMMUNICATION WITH THE CUSTOMER

The systematics determines and implements the effective arrangements for the communication with the customers. This systematics is related to:

- a) Information on the product;
- b) Enquiries, contracts or customer service, including modifications; and
- c) Customer feedback, including complaints or claims.

07.7 PROCEDURES

The policy followed in General Cable's Quality System for the determination and review of the requirements related to the product and the communication with the customer is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

DESIGN AND DEVELOPMENT PROCESS**CONTENTS:**

- 08.1 OBJECT
- 08.2 SCOPE
- 08.3 GENERAL COMMENTS
- 08.4 DESIGN AND DEVELOPMENT
 - 08.4.1 PLANNING OF THE DESIGN AND DEVELOPMENT
 - 08.4.2 INITIAL ELEMENTS FOR THE DESIGN AND DEVELOPMENT
 - 08.4.3 RESULTS OF THE DESIGN AND DEVELOPMENT
 - 08.4.4 REVIEW OF THE DESIGN AND DEVELOPMENT
 - 08.4.5 VERIFICATION OF THE DESIGN AND DEVELOPMENT
 - 08.4.6 VALIDATION OF THE DESIGN AND DEVELOPMENT
 - 08.4.7 CONTROL OF THE CHANGES IN DESIGN AND DEVELOPMENT
- 08.5 PROCEDURES

08.1 OBJECT

The object of this chapter is to specify the systematics of the processes related to the design and development of the product.

08.2 SCOPE

This chapter is applicable to the design and development of the products and services defined in chapter 01 of this Quality Manual.

08.3 GENERAL COMMENTS

General Cable plans and develops the processes necessary to make the product, including the design and development. This planning is consistent with the requirements of the remaining processes of the Quality Management System.

In the design and development processes the planning determines, where appropriate, the following:

- a) The quality objectives and/or indicators;
- b) The product requirements;
- c) The need to establish processes, documents and to provide specific resources for the product or service;
- d) The required activities for the specific verification, validation, monitoring, inspection and test / trial of the product or service and the criteria for the acceptance of the same; and
- e) The records necessary to provide evidence of the performance processes and that the resultant product or service complies with the requirements. These records will be managed as established in the systematics described in chapter 03 of this Quality Manual

The Quality Management System processes that manage the design and development are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 08.5.

08.4 DESIGN AND DEVELOPMENT

The product design and development involves the following activities:

- 1) Planning.
- 2) Initial elements.

- 3) Results.
- 4) Review.
- 5) Verification.
- 6) Validation.
- 7) Control of the changes.

These activities are described in the following sections.

08.4.1 PLANNING OF THE DESIGN AND DEVELOPMENT

General Cable plans and controls the design and development of the products. During this planning it determines:

- a) The design and development stages;
- b) The review, verification and validation, appropriate for each stage of the design and development; and
- c) The responsibilities and authorities for the design and development.

The systematics establishes how to manage the interfaces between the different areas of General Cable involved in the design and development to ensure efficient communication and a clear assignment of responsibilities and the results of the planning are updated, when appropriate, as the design and development progresses.

08.4.2 INITIAL ELEMENTS FOR THE DESIGN AND DEVELOPMENT

General Cable determines the “initial elements” related to the product requirements. The systematics establishes that the initial elements are reviewed to verify that they are adequate and complete, they do not contain ambiguities and are not contradictory.

The initial elements include:

- a) The functional and performance requirements;
- b) The legal and regulatory requirements applicable;
- c) The information from previous similar designs, where applicable;
- d) Any other essential requirement for the design and development.

The initial elements form a record of the Quality Management System managed as specified in the systematics described in chapter 03 of this Quality Manual.

08.4.3 RESULTS OF THE DESIGN AND DEVELOPMENT

The systematics establishes that the results of the design and development are provided in such a way as to allow the verification of the initial elements and that they are approved before they are released.

The results of the design and development process verify that they:

- a) Comply with the requirements of the initial and development elements (see section 08.4.2 of this chapter):
- b) Provide the appropriate information for the purchase (see chapter 09 of this Quality Manual) and the production and the provision of the service (see chapter 10 of this Quality Manual):
- c) Contain or refer to the product acceptance criteria; and
- d) Specify the characteristics of the product that are essential for its safe and correct use.

08.4.4 REVIEW OF THE DESIGN AND DEVELOPMENT

The systematics establishes the performance of reviews of the design and development. This review is performed in the adequate stages, as planned (see section 08.4.1 of this chapter) and has as its purpose to:

- a) Assess the capacity of the design and development results (see section 08.4.3 of this chapter) to comply with the requirements; and
- b) Identify any problem and propose the necessary actions.

The results of the reviews and of any action necessary constitute a record of the Quality Management System managed as specified in the systematics described in chapter 03 of this Quality Manual.

08.4.5 VERIFICATION OF THE DESIGN AND DEVELOPMENT

The systematics establishes that in accordance with the planning (see section 08.4.1 of this chapter), the verification is carried out to ensure that the results of the design and development comply with the requirements of the initial elements (see section 08.4.2 of this chapter).

The results of the verification and of any action necessary constitute a record of the Quality Management System managed as specified in the systematics described in chapter 03 of this Quality Manual.

08.4.6 VALIDATION OF THE DESIGN AND DEVELOPMENT

The systematics establishes that in accordance with the planning (see section 08.4.1 of this chapter), the validation is carried out to ensure that the resultant product is capable of meeting the requirements for its specified application or expected use, when known (see chapter 07 of this Quality Manual).

The systematics establishes that, provided that it is feasible, the validation is completed before the delivery or implementation of the product.

The results of the validation and of any action necessary constitute a record of the Quality Management System managed as specified in the systematics described in chapter 03 of this Quality Manual.

08.4.7 CONTROL OF THE CHANGES IN DESIGN AND DEVELOPMENT

The systematics establishes that the changes in design and development are identified and recorded. In addition, the changes are reviewed, verified and validated, as appropriate, and are approved before their implementation.

When the changes affect the conformity of the product already delivered, the systematics establishes that the review of the changes in the design and development shall include an assessment of the effect of these changes.

The results of the review of the changes and of any action necessary constitute a record of the Quality Management System managed as specified in the systematics described in chapter 03 of this Quality Manual.

08.5 PROCEDURES

The policy followed in General Cable's Quality System in the processes related to design and development is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

09.1 OBJECT

09.2 SCOPE

09.3 GENERAL COMMENTS

09.4 PURCHASING

09.4.1 GENERAL COMMENTS

09.4.2 CONTROL OF THE PURCHASES

09.4.3 SELECTION OF THE SUPPLIERS

09.4.4 INFORMATION ON THE PURCHASES

09.5 VERIFICATION OF THE PRODUCTS PURCHASED

09.6 PROCEDURES

09.1 OBJECT

The object of this chapter is to specify the systematics of the purchasing processes and the verification of the products purchased (raw materials, materials, services outsourced, etc.).

09.2 SCOPE

This chapter is applicable to the purchases and verification of the products purchased which affect the quality of the products and services defined in chapter 01 of this Quality Manual.

09.3 GENERAL COMMENTS

General Cable plans and develops the processes necessary to make the product, including the purchase and verification of the products purchased. This planning is consistent with the requirements of the remaining processes of the Quality Management System.

In the purchasing processes and verification of the products purchased, the planning determines, as appropriate, the following:

- a) The quality objectives and/or indicators;
- b) The requirements of the products purchased and services outsourced;
- c) The need to establish processes, documents and to provide specific resources for the product or service;
- d) The required activities for the specific verification, validation, monitoring, inspection and test / trial of the product or service and the criteria for the acceptance of the same; and
- e) The records necessary to provide evidence of the performance processes and that the resultant product or service complies with the requirements. These records will be managed as established in the systematics described in chapter 03 of this Quality Manual.

The Quality Management System processes that manage the purchases and the verification of the products purchased are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 09.6.

09.4 PURCHASING

09.4.1 GENERAL COMMENTS

The systematics established ensures that the products purchased that affect the quality of the final product obtained comply with the requirements specified.

The requirements of the products purchased are specified in the applicable documents of the Quality Management System.

09.4.2 CONTROL OF THE PURCHASES

The purchasing systematics establishes the type and the scope of control applied to the supplier and to the products purchased. This control depends on the impact of the product purchased on the subsequent completion of the product or on the final product.

09.4.3 SELECTION OF THE SUPPLIERS

The systematics establishes the assessment and selection of the suppliers, which shall be in accordance with their capacity to supply products which fulfil the requirements specified.

The general procedure applicable (see section 09.6 of this chapter) establishes the criteria for the selection, the assessment and the reassessment.

The results of the assessments and of any action necessary which arises from the same constitute a record of the Quality Management System, managed as specified in the systematics described in chapter 03 of this Quality Manual.

09.4.4 INFORMATION ON THE PURCHASES

The systematics establishes the information contained in the orders or contracts for the products purchased. This information describes the product to be purchased, including, where appropriate, the following:

- a) The requirements for the approval of the product purchased;
- b) The requirements for the qualification of the personnel; and
- c) The requirements of the quality management system.

The systematics established ensures that the purchasing requirements specified are adequate before notifying them to the supplier.

09.5 VERIFICATION OF THE PRODUCTS PURCHASED

Systematics are established and introduced for the inspection or other activities necessary to ensure that the product purchased complies with the purchasing requirements specified.

In the cases in which General Cable or its customers wish to perform the verification in the facilities of the supplier, the systematics establishes that the purchasing information (see section 09.4.4 of this chapter) indicates the provisions for the intended verification and the method for the release of the product.

09.6 PROCEDURES

The policy followed in General Cable's Quality System in the processes related to purchasing and the verification of the products purchased is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

- 10.1 OBJECT
- 10.2 SCOPE
- 10.3 GENERAL COMMENTS
- 10.4 PRODUCTION AND PROVISION OF THE SERVICE
 - 10.4.1 CONTROL OF THE PRODUCTION AND OF THE PROVISION OF THE SERVICE
 - 10.4.2 IDENTIFICATION AND TRACEABILITY
 - 10.4.3 PROPERTY OF THE CUSTOMER
 - 10.4.4 PRESERVATION OF THE PRODUCT
- 10.5 PROCEDURES

10.1 OBJECT

The object of this chapter is to specify the systematics applicable to the production and provision of the service processes.

10.2 SCOPE

This chapter is applicable to the production and provision of the service for the products and services defined in chapter 01 of this Quality Manual.

10.3 GENERAL COMMENTS

General Cable plans and develops the processes necessary to make the product, including those of production and provision of the service. This planning is consistent with the requirements of the remaining processes of the Quality Management System.

In the production and provision of the service processes, the planning determines, as appropriate, the following:

- a) The quality objectives and/or indicators.
- b) The requirements of the products and services provided.
- c) The need to establish processes, documents and to provide specific resources for the product or service.
- d) The required activities for the specific verification, validation, monitoring, inspection and test / trial of the product or service and the criteria for the acceptance of the same; and.
- e) The records necessary to provide evidence of the performance processes and that the resultant product or service complies with the requirements. These records will be managed as established in the systematics described in chapter 03 of this Quality Manual.

The Quality Management System processes that manage the production and provision of the service are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 10.5.

10.4 PRODUCTION AND PROVISION OF THE SERVICE

The production and provision of the service are organized according to the following activities:

- 1) Control of the production and of the provision of the service.
- 2) Identification and traceability.
- 3) Management of the property of the customer.
- 4) Preservation of the product.

The activities related to the “validation of the production and provision of the service processes” are excluded from the Quality Management System established in General Cable (see chapter 02 of this Quality Manual).

The above-mentioned activities are described in the following sections:

10.4.1 CONTROL OF THE PRODUCTION AND OF THE PROVISION OF THE SERVICE

General Cable plans and carries out the production and the provision of the service under controlled conditions. These controlled conditions include, as applicable, the following systematics:

- a) The availability of information that describes the characteristics of the product;
- b) The availability of work instructions, especially when the absence of these documents could have an adverse effect on the quality;
- c) The use of adequate equipment;
- d) The availability and use of monitoring and measuring devices;
- e) The implementation of the monitoring and the measuring (see chapter 12 of this Quality Manual); and
- f) The implementation of activities of release, delivery and subsequent to the delivery (after sales).

10.4.2 IDENTIFICATION AND TRACEABILITY

General Cable establishes the systematics for the identification and the traceability of the products. This systematics includes the following:

- a) Where appropriate, the identification of the product throughout the manufacture of the product;

- b) The identification of the state of the product in relation to the monitoring and measuring requirements (see chapter 12 of this Quality Manual);
- c) In the cases in which traceability is a requirement (see chapter 07 of this Quality Manual), the control and recording of the sole identification of the product. This record is managed as established in chapter 03 of this Quality Manual.

10.4.3 PROPERTY OF THE CUSTOMER

When the customer furnishes goods that it owns, General Cable establishes the following systematics, as applicable:

- a) Take care of the goods while they are under the control of or are being used by General Cable;
- b) The identification, verification, protection and safeguarding of the goods owned by the customer supplied for their use or incorporation into the product; and
- c) The recording and notification of the customer when any goods owned by the customer are lost, deteriorate or in any other way are considered unsuitable for use. This record is managed as established in chapter 03 of this Quality Manual

10.4.4 PRESERVATION OF THE PRODUCT

General Cable establishes the systematics to preserve the conformity of the product during the internal process and the delivery to the destination foreseen. This systematics is also applicable, where applicable, to the constituent parts of a product.

The preservation includes: the identification, handling, packing, storage and protection of the product.

10.5 PROCEDURES

The policy followed in General Cable's Quality System in the processes related to the production and provision of the service is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

11.1 OBJECT

11.2 SCOPE

11.3 GENERAL COMMENTS

11.4 CONTROL OF THE MONITORING AND MEASURING DEVICES

11.4.1 GENERAL COMMENTS

11.4.2 MONITORING AND MEASURING PROCESSES

11.4.3 REQUIREMENTS APPLICABLE TO THE MEASURING EQUIPMENT

11.4.4 NON-CONFORMING MEASURING EQUIPMENT

11.5 CAPACITY COMPUTER PROGRAMS

11.6 PROCEDURES

11.1 OBJECT

The object of this chapter is to specify the systematics for the control of monitoring and measuring devices.

11.2 SCOPE

This chapter is applicable to the control of the monitoring and measuring devices required in the Quality Management System established in General Cable.

11.3 GENERAL COMMENTS

General Cable plans and develops the processes necessary to make the product, including those required for the control of the monitoring and measuring devices. This planning is consistent with the requirements of the remaining processes of the Quality Management System.

In the monitoring and measuring device control processes, the planning determines, as appropriate, the following:

- a) The quality objectives and/or indicators;
- b) The requirements of the products;
- c) The need to establish processes, documents and to provide specific resources for the product or service;
- d) The required activities for the specific verification, validation, monitoring, inspection and test / trial of the product or service and the criteria for the acceptance of the same; and
- e) The records necessary to provide evidence of the processes so that the control of the monitoring and measuring devices complies with the requirements. These records will be managed as established in the systematics described in chapter 03 of this Quality Manual.

The Quality Management System processes for the control of the monitoring and measuring devices are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 11.6.

11.4 CONTROL OF THE MONITORING AND MEASURING DEVICES

The systematics to ensure the control of the monitoring and measuring devices is described in the following sections.

11.4.1 GENERAL COMMENTS

General Cable determines the monitoring and the measuring to be performed, and the measuring and monitoring devices necessary to provide the evidence of the conformity of the product with the requirements determined, as established in section 11.3 of this chapter.

11.4.2 MONITORING AND MEASURING PROCESSES

General Cable establishes the processes to ensure that the monitoring and measuring can be performed and is performed in a manner consistent with the monitoring and measuring requirements (see section 11.4.1 of this chapter).

11.4.3 REQUIREMENTS APPLICABLE TO THE MEASURING EQUIPMENT

When it is necessary to ensure the validity of the results, the measuring equipment is:

- a) Calibrated or verified, at specified intervals or before its use, compared with measuring standards traceable to national or international measuring standards and when these standards do not exist the base used for the calibration or the verification is recorded;
- b) Adjusted or readjusted as necessary;
- c) Identified to be able to determine the state of calibration;
- d) Protected against adjustments that may invalidate the result of the measurement;
and
- e) Protected against damage and deterioration during handling, maintenance and storage.

The results of the calibration and the verification constitute records managed as established in chapter 03 of this Quality Manual.

11.4.4 NON-CONFORMING MEASURING EQUIPMENT

When it is detected that equipment does not conform to the requirements, the systematics establishes the assessment and recording of the validity of the previous results and the taking of appropriate action on the equipment and on any product affected.

11.5 CAPACITY COMPUTER PROGRAMS

The systematics establishes that when computer programs are used in the activities for monitoring and measuring the requirements specified, the capacity of these programs is confirmed to satisfy their foreseen application. This confirmation is carried out before beginning their use and confirmed again when necessary.

11.6 PROCEDURES

The policy followed in General Cable's Quality System for the control of the monitoring and measuring devices is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

MONITORING AND MEASURING**CONTENTS:**

- 12.1 OBJECT
- 12.2 SCOPE
- 12.3 GENERAL COMMENTS
- 12.4 MONITORING AND MEASURING
 - 12.4.1 CUSTOMER SATISFACTION
 - 12.4.2 INTERNAL AUDIT
 - 12.4.2.1 GENERAL COMMENTS
 - 12.4.2.2 SYSTEMATICS FOR THE INTERNAL AUDIT
 - 12.4.2.3 DOCUMENTED PROCEDURE
 - 12.4.2.4 RESPONSIBILITIES OF THE AREAS AUDITED
 - 12.4.3 MONITORING AND MEASURING OF THE PROCESSES
 - 12.4.4 MONITORING AND MEASURING OF THE PRODUCT
 - 12.4.4.1 GENERAL COMMENTS
 - 12.4.4.2 PERFORMANCE OF THE MONITORING AND MEASURING OF THE PRODUCT
 - 12.4.4.3 RELEASE OF THE PRODUCT
 - 12.4.4.4 RECORDS
- 12.5 PROCEDURES

12.1 OBJECT

The object of this chapter is to specify the systematics for the monitoring and measuring of the Quality Management System.

12.2 SCOPE

This chapter is applicable to the monitoring and measuring of the performance, processes and products of the Quality Management System established in General Cable.

12.3 GENERAL COMMENTS

General Cable plans and implements the monitoring and measuring processes necessary to:

- a) Demonstrate the conformity of the product; and
- b) Ensure the conformity of the Quality Management System.

The planning and implementation include the determination of the methods applicable, including the statistical techniques, and the scope of their use.

The Quality Management System processes for monitoring and measuring are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 12.5.

12.4 MONITORING AND MEASURING

The systematics for the monitoring and the measuring are described in the following sections.

12.4.1 CUSTOMER SATISFACTION

The measurement of the customer satisfaction is one of the measurements of the performance of the Quality Management System. General Cable carries out the monitoring of the information concerning the customer's perception of the fulfilment of their requirements by General Cable.

The systematics establishes the methods to obtain and use this information.

12.4.2 INTERNAL AUDIT

12.4.2.1 GENERAL COMMENTS

At planned intervals General Cable carries out internal audits to determine whether the Quality Management System:

- a) Conforms to the provisions planned (see chapters 07, 08, 09, 10 and 11 of this Quality Manual), to the requirements of the International Standard (see chapter 02 of this Quality Manual) and to the requirements of the Quality Management System; and
- b) Is implemented and maintained efficiently.

12.4.2.2 SYSTEMATICS FOR THE INTERNAL AUDIT

General Cable has established the following systematics for the internal audit:

- a) The planning of the schedule of internal audits, taking into consideration the state and the importance of the processes and the areas to be audited, in addition to the results of previous audits;
- b) The definition of the auditing criteria, the scope of the audit, the frequency and methodology; and
- c) How the auditors are selected and the audits are performed to ensure the objectiveness and impartiality of the audit process and that the auditors do not audit their own work.

12.4.2.3 DOCUMENTED PROCEDURE

The systematics is described in a “documented procedure” (see section 12.5 of this chapter). This document defines:

- a) The responsibilities and requirements for the planning and performance of audits;
- b) How the results are reported; and
- c) The maintenance of the records of the results, managed as specified in chapter 03 of this Quality Manual.

12.4.2.4 RESPONSIBILITIES OF THE AREAS AUDITED

MONITORING AND MEASURING

The systematics establishes that the management responsible for the area being audited ensures that actions are taken without unjustified delay to eliminate the non-conformities detected and their causes.

The monitoring activities include the verification of the actions taken and the report on the results of the verification (see chapter 14 of this Quality Manual).

12.4.3 MONITORING AND MEASURING OF THE PROCESSES

General Cable applies appropriate methods for the monitoring and, where applicable, the measuring of the Quality Management System processes (see chapter 02 of this Quality Manual).

The purpose of these methods is to demonstrate the capacity of the processes to achieve the results planned.

When the results planned are not achieved, the systematics establishes how to carry out corrections and corrective actions (see chapter 14 of this Quality Manual), as convenient, to ensure the conformity of the product.

12.4.4 MONITORING AND MEASURING OF THE PRODUCT.**12.4.4.1 GENERAL COMMENTS**

General Cable carries out the measuring and performs the monitoring of the characteristics of the products to verify that they fulfil the requirements established for the same.

12.4.4.2 PERFORMANCE OF THE MONITORING AND MEASURING OF THE PRODUCT

The systematics establishes that the measuring and monitoring is carried out in appropriate stages of the process to make the product, in accordance with the planned provisions (see chapters 07, 08, 09, 10 and 11 of this Quality Manual).

12.4.4.3 RELEASE OF THE PRODUCT

The systematics establishes that the release of the product and the provision of the service are not carried out until the provisions planned have been satisfactorily completed (see chapters 07, 08, 09, 10 and 11 of this Quality Manual), unless they are otherwise approved (for example, by a concession) by a relevant authority and, when appropriate, by the customer.

12.4.4.4 RECORDS

The evidence of the conformity of the products with the acceptance criteria and the reference of the person/people who authorize the release of the product constitute a record of the Quality Management System, managed as specified in the systematics described in chapter 03 of this Quality Manual.

12.5 PROCEDURES

The policy followed in General Cable's Quality System for the monitoring and measuring is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

13.1 OBJECT

13.2 SCOPE

13.3 GENERAL COMMENTS

13.4 CONTROL OF THE NON-CONFORMING PRODUCT

13.4.1 GENERAL COMMENTS

13.4.2 MANAGEMENT OF THE NON-CONFORMING PRODUCT

13.4.1 DOCUMENTED PROCEDURE

13.4.2 RECORDS

13.5 PROCEDURES

13.1 OBJECT

The object of this chapter is to specify the systematics for the control of the non-conforming product.

13.2 SCOPE

This chapter is applicable to non-conforming products resulting from the Quality Management System processes established in General Cable.

13.3 GENERAL COMMENTS

General Cable plans and implements the monitoring and measuring processes, including the control of non-conforming products, necessary to:

- a) Demonstrate the conformity of the product; and
- b) Ensure the conformity of the Quality Management System.

The planning and implementation includes the determination of the methods applicable, including the statistical techniques, and the scope of their use.

The Quality Management System processes that include the systematics for the control of non-conforming products are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 13.5.

13.4 CONTROL OF THE NON-CONFORMING PRODUCT

13.4.1 GENERAL COMMENTS

The systematics established ensures that products not conforming to the requirements are identified and controlled to prevent their use or unintentional delivery.

13.4.2 MANAGEMENT OF THE NON-CONFORMING PRODUCT

The management of the non-conforming product is carried out in one or more of the following manners:

- a) Taking actions or contingency measures to eliminate the non-conformity detected;
- b) Authorizing its use, release or acceptance under concession by a relevant authority and, where possible, by the customer; or

- c) Taking actions to prevent its originally planned use or application.

Moreover, the systematics for the control of the non-conforming product establishes the following provisions:

- a) When a non-conforming product is corrected it is subjected to a further verification to demonstrate its conformity with the requirements; and
- b) When a non-conforming product is detected after delivery or when its use has begun, General Cable takes the appropriate actions in relation to the effects, or potential effects, of the non-conformity.

13.4.3 DOCUMENTED PROCEDURE

The systematics for the control of non-conforming products is described in a “documented procedure” (see section 13.5 of this chapter). This document defines the controls, the responsibilities and authorities related to dealing with the non-conforming product.

13.4.4 RECORDS

The systematics establishes that the nature of the non-conformities and of any action taken subsequently, including the concessions that have been obtained, constitutes a record of the Quality Management System, managed as specified in the systematics described in chapter 03 of this Quality Manual.

13.5 PROCEDURES

The policy followed in General Cable’s Quality System for the control of non-conforming products is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

CONTENTS:

14.1 OBJECT

14.2 SCOPE

14.3 GENERAL COMMENTS

14.4 ANALYSIS OF THE DATA

14.5 IMPROVEMENT

14.5.1 CONTINUOUS IMPROVEMENT

14.5.2 CORRECTIVE ACTIONS

14.5.2.1 GENERAL COMMENTS

14.5.2.2 DOCUMENTED PROCEDURE FOR THE CONTROL OF THE
CORRECTIVE ACTIONS

14.5.3 PREVENTIVE ACTIONS

14.5.3.1 GENERAL COMMENTS

14.5.3.2 DOCUMENTED PROCEDURE FOR THE CONTROL OF THE
PREVENTIVE ACTIONS

14.6 PROCEDURES

14.1 OBJECT

The object of this chapter is to specify the systematics for the analysis of the data and the improvement of the Quality Management System.

14.2 SCOPE

This chapter is applicable to the analysis of the data and improvement of the Quality Management System established in General Cable.

14.3 GENERAL COMMENTS

General Cable plans and implements the monitoring and measuring processes, including the analysis of the data and the improvement necessary to:

- a) Demonstrate the conformity of the product; and
- b) Ensure the conformity of the Quality Management System.

The planning and implementation includes the determination of the methods applicable, including the statistical techniques, and the scope of their use.

The Quality Management System processes that include the systematics for the analysis of the data and the improvement are indicated in chapter 02 of this Quality Manual and the general procedures applicable to the systematics described in this chapter are indicated in section 14.6.

14.4 ANALYSIS OF THE DATA

The systematics established for the analysis of the data include:

- a) The determination, compilation and analysis of the appropriate data to demonstrate the suitability and the efficiency of the Quality Management System;
- b) The assessment where the continuous improvement of the efficiency of the Quality Management System should be performed; and
- c) Including, in both cases, the data generated from the result of the monitoring and measuring (see chapter 12 of this Quality Manual) and from any other relevant sources.

The analysis of the data provides information on:

- a) Customer satisfaction (see chapter 12 of this Quality Manual)
- b) The conformity with the requirements of the product (see chapters 07, 08, 09, 10 and 11 of this Quality Manual)

- c) The characteristics and tendencies of the processes and of the products, including the opportunities to carry out preventive actions (see section 14.5.3 of this chapter); and
- d) The suppliers (see chapter 09 of this Quality Manual)

14.5 IMPROVEMENT

The improvement of the Quality Management System includes the following systematics:

- 1) Continuous improvement.
- 2) Corrective actions.
- 3) Preventive actions.

14.5.1 CONTINUOUS IMPROVEMENT

General Cable carries out the continuous improvement of the efficiency of the Quality Management System through the use of:

- a) The Quality Policy (see chapter 04 of this Quality Manual);
- b) The quality objectives (see chapter 05 of this Quality Manual);
- c) The results of the audits (see chapter 12 of this Quality Manual);
- d) The analysis of the data (see section 14.4 of this chapter), the corrective actions (see section 14.5.2 of this chapter) and the preventive actions (see section 14.5.3 of this chapter); and
- e) The management review (see chapter 05 of this Quality Manual).

14.5.2 CORRECTIVE ACTIONS

14.5.2.1 GENERAL COMMENTS

The systematics establishes the taking of actions to eliminate the cause of the non-conformities with the aim of preventing them from recurring. The Corrective actions should be appropriate for the purposes of the non-conformities encountered.

14.5.2.2 DOCUMENTED PROCEDURE FOR THE CONTROL OF THE CORRECTIVE ACTIONS

The systematics for the control of the Corrective actions is described in a “documented procedure” (see section 14.6 of this chapter). This document specifies the following actions:

- a) The review of the non-conformities, including customer complaints (see chapter 07 of this Quality Manual);
- b) Determine the causes of the non-conformities;
- c) Assess the need to adopt actions to ensure that the non-conformities do not recur;
- d) Record the results of the actions taken; and
- e) Review the Corrective actions taken.

The record indicated under point “d” above constitutes a record of the Quality Management System, managed as specified in the systematics described in chapter 03 of this Quality Manual.

14.5.3 PREVENTIVE ACTIONS

14.5.3.1 GENERAL COMMENTS

The systematics establishes the determination of the actions necessary to eliminate the causes of the potential non-conformities to prevent their occurrence. The preventive actions should be appropriate for the effects of the potential problems.

14.5.2.2 DOCUMENTED PROCEDURE FOR THE CONTROL OF THE PREVENTIVE ACTIONS

The systematics for the control of the preventive actions is described in a “documented procedure” (see section 14.6 of this chapter). This document specifies the following actions:

- a) Determine the potential non-conformities and their causes;
- b) Assess the need to act to prevent the occurrence of non-conformities;
- c) Determine and introduce the actions necessary;
- d) Record the results of the actions taken; and
- e) Review the preventive actions taken.

The record indicated under point “d” above constitutes a record of the Quality Management System, managed as specified in the systematics described in chapter 03 of this Quality Manual.

14.6 PROCEDURES

The policy followed in General Cable's Quality System for the control of Corrective and Preventive actions is developed in the General Procedures related to this chapter in Appendix I of this Quality Manual.

LIST OF GENERAL PROCEDURES

REFERENCE	TITLE PROCEDURE	CHAPTER
DE/SGC/PRO/GAC/007-005	Procedure to ensure the quality of the processes out-sourced	02
DE/COM/PRO/GAC/002-001	Procedure to manage the Manuals of the Management Systems	03
DE/COM/PRO/GCM/006-001	Procedure to code the documentation of internal origin for the management systems	03
DE/SGC/PRO/GAC/006-002	Procedure to control the documentation of external origin	03
DE/COM/PRO/GCM/006-003	Procedure to control the documentation of internal origin for the management systems	03
DE/SGC/PRO/GCM/006-004	Procedure to control the data in electronic format	03
UP/SGC/PRO/GAC/016-001	General Procedure for the Management of the Quality Records	03
DE/COM/PRO/RHH/003-001	Procedure to control the organization charts	04
DE/COM/PRO/GCM/001-001	General Procedure to carry out the management review of the Management Systems	05
CO/SGC/PRO/CAL/001-001	Procedure for the monitoring and the review of the Quality System – Quality Committee	05
DE/COM/PRO/CAL/018-001	“Staff training” Procedure	06
DE/COM/PRO/GCM/018-002	General Procedure for the qualification of the staff auditing the quality and environmental systems	06
CO/SGC/PRO/CAL/004-001	Procedure for the preparation of quotations and the review of orders	07
CO/SGC/PRO/CAL/004-002	Procedure for the modification of orders	07
CO/SGC/PRO/DCI/004-001	Procedure for the Preparation of quotations, review and modification of orders (Cables, accessories, assembly, turnkey installations)	07
CO/SGC/PRO/CAL/013-003	Procedure for the management of claims	07
DE/SGC/PRO/GET/005-001	Procedure for the planning and the control of the design and development	08
DE/SGC/PRO/GET/005-002	Procedure for the control of the exploitation of the formulations.	08
DE/SGC/PRO/GET/005-003	Procedure for the control of the exploitation of the design of cables	08

LIST OF GENERAL PROCEDURES

REFERENCE	TITLE PROCEDURE	CHAPTER
DE/SGC/PRO/GAC/007-004	Procedure for the management of drums and reels of finished cable	09
DE/ASC/PRO/07-01	Guide for making assessment visits	09
UP/SGC/PRO/GAC/007-001	Procedure for the assessment of suppliers and management of the orders	09
CO/SGC/PRO/CAL/007-001	Procedure for the Assessment of Suppliers and the Management of Orders	09
CO/SGC/PRO/CAL/007-004	Procedure for assessment of transport services	09
DE/SGC/PRO/GAC/007-002	Supplier assessment questionnaire	09
UP/SGC/PRO/GAC/008-001	Procedure for the receipt and inspection of products of external origin	09
DE/SGC/PRO/GAC/019- 001	Procedure for the management of tests on installed cables	10
CO/SGC/PRO/DCI/009-001	Procedure for the Management of the turnkey installations process	10
CO/SGC/PRO/CAL/009-001	Procedure for the management of delivery times	10
CO/SGC/PRO/CAL/009-002	Procedure for programming to factories	10
UP/SGC/PRO/GAC/009-001	Procedure for the launch of manufacture	10
CO/SGC/PRO/CAL/009-004	Procedure for preparation, delivery note and despatch of finished product	10
UP/SGC/PRO/GAC/012-001	General procedure for the identification and traceability of the products	10
UP/SGC/PRO/GAC/012-002	Procedure for traceability in the manufacture of cables	10
UP/SGC/PRO/GAC/015-001	Procedure for handling, storage, packing and conservation of products in process and finished products	10
CO/SGC/PRO/CAL/015-001	Procedure for the handling, storage, packing, conservation and delivery of finished products.	10
CO/SGC/PRO/DCI/015-001	Procedure for the Receipt, storage, conservation and shipping of turnkey accessories	10
CO/SGC/PRO/CAL/015-002	Procedure for periodic control of the state of the stored products	10
UP/COM/PRO/GAC/011-001	Calibration Procedure	11
DE/COM/PRO/INF/011-001	Procedure for the performance and validation of computer applications and transfer from the development	11

REFERENCE	TITLE PROCEDURE	CHAPTER
	to the operating computer	
DE/SGC/PRO/GAC/019-001	Procedure for the management of tests on installed cables	12
CO/SGC/PRO/CAL/019-001	Procedure for technical assistance, service and customer satisfaction	12
CO/SGC/PRO/CAL/010-002	Procedure for Quality Control of service	12
UP/SGC/PRO/GAC/010-001	General Procedure to control the inspection activities	12
DE/COM/PRO/GAC/017-001	Procedure to perform internal audits	12
UP/SGC/PRO/GAC/013-001	Procedure to deal with Non-conformities	13
CO/SGC/PRO/CAL/013-005	Procedure for emergency action to be carried out when notification is received of a failure that requires the withdrawal of the product	13
UP/SGC/PRO/CAL/014-001	Procedure for the management of Corrective and Preventive Actions	14
UP/SGC/PRO/GAC/020-002	Procedure for use of the statistical applications	14