

Cargotec

Supplier Requirements

1 Management Responsibility.....	6
1.1 Business Plan	6
1.2 Key Performance Indicators	6
1.3 Financial Stability	6
1.4 Quality Management System	6
1.5 Risk Policy	6
1.6 Management Review	6
1.7 Resources.....	6
1.8 Code of Conduct.....	7
2 Quality Management	8
2.1 Internal & External records.....	8
2.2 Quality Planning.....	8
2.3 Internal Audits.....	8
2.4 Document Control	8
3 Environmental	9
3.1 Environmental management	9
3.2 Environmental matters	9
3.3 End-of-life treatment.....	9
3.4 International Material Data System (IMDS) Registration	9
3.5 National & International Regulations	9
3.6 Environmental impacts.....	9
4 Risk Management	10
4.3 Emergency Procedures.....	10
4.4 Safety Precautions.....	10
4.5 Security.....	10
4.5 Confidentiality Agreement	10
5 Project Management	11
5.1 Contract Review.....	11
5.2 Project Management planning.....	11
5.3 Resources and Contact person.....	11
5.4 Escalation process for Project Management	11

5.5 Change Management.....	11
5.6 IPR - Intellectual Property rights.....	11
5.7 Project Management handover	11
5.8 Prototype building	12
6 Production	13
6.1 Process Flow Chart.....	13
6.2 Customer Approval	13
6.3 Work Instructions	13
6.4 Maintenance	13
6.5 Customer Tooling.....	13
6.6 Control Plan	13
6.7 Continues Improvements	13
6.8 Rework	13
6.9 Root Cause Analyses.....	14
6.10 Releasing of Products	14
6.11 Measuring Equipment	14
6.12 Calibration of measuring equipment's	14
6.13 Testing in Process	14
6.14 Incoming Inspection	14
6.15 Managing Transportation	14
6.16 Product Audit	14
6.17 Labelling and Quantity delivery	14
6.18 Identification.....	15
6.19 Traceability	15
7 Training	16
7.1 Education of Personal.....	16
7.2 Competence Matrix.....	16
7.2 Development Plans for Employees	16
8 Product Development	17
8.1 Product Development process	17
8.2 Design requirement's	17

8.3 Project planning	17
8.4 Design Review	17
8.5 Development Tools	17
8.6 Control of Design Changes	17
8.7 R&D Capabilities & Innovation	17
8.8 Prototype building	17
8.9 QA of Prototypes,.....	18
9 Purchasing	19
9.1 Purchasing Process	19
9.2 Purchasing Organization.....	19
9.3 Outsourced Services.....	19
9.4 Outsourced & Assigned Products.....	19
9.5 Supplier Pricing.....	19
10 Cost Control	20
10.1 Cost improvement.....	20
10.2 Continuous Improvements	20
10.3 Inventory Management	20
11 Warranty.....	21
11.1 Warranty issues	21
11.2 Warranty Claims	21
12 Product Liabilities	22
12.1 Recall Procedure	22
12.2 Insurance	22
13 Logistic.....	23
13.1 Logistic support.....	23
13.2 Integrated Planning System	23
13.3 Materials management.....	23
13.4 Lead-times and lot-sizes	23
14 Spare Parts	24
14.1 Deliveries	24
14.2 Availability.....	24

14.3 Quality.....	24
15 Facilities	25
15.1 Layout & Material flow.....	25
15.2 House keeping	25
15.3 Manufacturing Assurance.....	25

1 Management Responsibility

1.1 Business Plan

The Supplier shall have a clear business plan and a strategy to guide the future development of the company. This plan shall be reflected in respective plans of business units, functions or equal. The plan shall include objectives, targets, actions, responsibilities and schedules.

1.2 Key Performance Indicators

The Supplier shall define key performance indicators, which will be used to monitor the company's performance towards its strategic objectives. These KPI shall be measurable towards the targets into the Business plan. Management shall review these indicators on a regular basis and use the data to initiate improvement actions

1.3 Financial Stability

The Supplier shall demonstrate a solid financial history.

1.4 Quality Management System

The Supplier shall ensure that the Supplier itself and all its production units minimum are certified according to ISO 9001

1.5 Risk Policy

The Supplier shall have an up-to-date risk management policy. It shall promote effective identification, analysis, control, prevention and monitoring of business risks. Management shall ensure that it is appropriately communicated, understood and implemented throughout the whole organization.

1.6 Management Review

Management shall ensure the quality, environmental and risk management systems' applicability and effectiveness by regular reviews. The reviews shall lead to planning and implementing improvements.

1.7 Resources

Suppliers Management shall ensure availability of adequate resources. Employees shall have the required education, training and competencies for their position and tasks. The supplier shall create and retain all Certificates, These development plans shall support the fulfilment of the supplier's business plan.

1.8 Code of Conduct

The Supplier shall have a documented code of ethics or a code of conduct. The supplier shall; respect internationally accepted human rights; respect the freedom of association and the right to collective bargaining, eliminate all forms of compulsory or forced labour, effectively promote abolition of child labour and eliminate discrimination in respect of employment and occupation

The Supplier shall also acquaint himself with Cargotec's Code of Conduct.

The Supplier shall comply at all times with all applicable laws and regulations pertaining to, without limitation, anti-money laundering, embargoes and/or sanction requirements as well as the US Foreign Corrupt Practices Act and the UK Bribery Act, as may be amended. The Supplier shall accept specific anti-corruption clauses to be included in the contract with Cargotec

2 Quality Management

2.1 Internal & External records

The Supplier shall define internal and external quality records. Such as Internal audits, product audits, 8D reports etc. Responsibilities to collect, store, maintain and delete such records must be explicitly defined. These records shall consist of documents related to quality/environmental/risk management system reviews.

2.2 Quality Planning

The Supplier shall have a systematic Quality project planning process, such as the Cargotec Quality Assurance Plan.

It shall be used to determine if all engineering design record and specification requirements are properly understood by the supplier. The manufacturing process shall have the potential to produce products consistently meeting these requirements on time.

2.3 Internal Audits

The Supplier shall conduct internal quality (System, Product, Project and Process) audits using qualified auditors according to set procedures. Internal quality audits shall be planned and executed according to the plans. Audit results shall be a subject to regular reviews and respective corrective actions shall be taken without unnecessary delay. These corrective actions' effectiveness shall be verified.

2.4 Document Control

The Supplier shall have a document control system to create, check, approve, release, distribute and delete quality system related documentation (Drawings etc.) and data throughout the whole organization. It shall also include the Sub Supplier (Tier 2).

3 Environmental

3.1 Environmental management

The Supplier shall have a documented environmental management system. It shall be under regular reviews and emphasize continuous improvement actions.

3.2 Environmental matters

The Supplier shall consider environmental matters during all phases of its product development process. All reasonable efforts shall be made to eliminate or reduce hazardous contents from the product and its manufacturing process.

3.3 End-of-life treatment

The Supplier shall have procedures for and evidence of recording the raw material content of its products, Certificates and material data sheets.

3.4 International Material Data System (IMDS) Registration

When required the supplier shall obtain adequate knowledge and report into IMDS.

3.5 National & International Regulations

Supplier must provide documented compliance of National and International environmental legislations as well as specific European Union legislations. Supplier must also continuously remain updated of changes, news to the legislations.

3.6 Environmental impacts

The Supplier shall identify environmental impacts. It shall include, but not limited to, emissions to air, water and soil. All impacts shall be monitored for continuous improvements.

4 Risk Management

4.1 Risk Plan

The Supplier shall have an up to date risk plan. The plan shall include strategy, financials, quality, operations, supply, logistics, technology, location, natural hazards and (trade) political risks.

4.2 Contingency Plan

Supplier shall have a Business contingency plan. Including Major disruptions, Fire, Production stop etc. It shall guarantee business operations continuity and customer service in case of an interruption

4.3 Emergency Procedures

The Supplier shall have appropriate emergency procedures including evacuation and rescue plans.

4.4 Safety Precautions

The Supplier shall have a process in place to manage health & safety at workplaces. Supplier shall implement safety precautions throughout the whole organization for dealing with hazardous substances, noise, and equipment. Safety instructions and appropriate safety devices shall be in use.

4.5 Security

The Supplier shall implement security procedures covering buildings, employees, documents, IT systems and movement of products. It shall also include measures to prevent unauthorized access to its IT systems. Necessary precautions shall be implemented in form of fireproof cabinets, virus scans, up-to-date electronic back-ups etc.

4.5 Confidentiality Agreement

The Supplier shall have a confidentiality agreement with all of its employees including temporary employees and resident subcontractors.

5 Project Management

5.1 Contract Review

The Supplier shall have a formal Project management review system to convert customer requirements into Supplier's internal requirements. The requirements referred to may be: Requirements specifically documented in Cargotec specifications, purchase order, agreement, request for quotation or other documentation

5.2 Project Management planning

The supplier shall have a project plan for its project management, with milestones included. The plan shall cover important activities from RFQ to start of production.

5.3 Resources and Contact person

The supplier shall make sure that they have the right resources available for Project management, including their responsibility. The supplier shall nominate contact person(s) to manage the relationship between Cargotec and the Supplier. The contact persons shall have fluent skills in English.

5.4 Escalation process for Project Management

The supplier shall have a defined process for handling disruptions in the project plan, and inform Cargotec if time plan will be affected.

5.5 Change Management

Contractual changes like engineering changes and changes related to customer requirements shall be managed using Project Management Planning.

5.6 IPR - Intellectual Property rights

The supplier shall have a policy to protect 3rd party IPR (Intellectual Property Rights). According to the policy the Supplier shall have a procedure within its Project Management system to assure that no 3rd party IPR are included in deliveries to Cargotec without the right to do so.

5.7 Project Management handover

The supplier shall have an official handover process from project management to serial production. There shall be an agreement between the project and production that they are ready to start serial production.

5.8 Prototype building

Prototypes shall be managed early in the supplier's project management system. The plan shall clearly define how and when a prototype shall be build.

6 Production

6.1 Process Flow Chart

The supplier shall have a production process implemented according to an optimized plan. The process flow shall ensure effective operation and control of the process. If any part of the process is subcontracted, this shall be indicated in the process flow.

6.2 Customer Approval

The supplier's process and materials including related changes shall be qualified and approved according to set procedures by Customer. The records of process and material qualification shall be available to Customer.

6.3 Work Instructions

The Supplier shall have work instructions, it shall include descriptions for each work station in the process.

6.4 Maintenance

The Supplier's process equipment shall be qualified for the purpose. The equipment shall be under preventive maintenance according to a specific plan. All records of maintenance shall be stored.

6.5 Customer Tooling

The supplier shall establish appropriate procedures for storing, inspecting and maintaining customer owned tools, fixtures and jigs. All customer owned equipment must be labelled with "property of Cargotec".

6.6 Control Plan

The supplier shall define a production control plan in order to keep the process under control. Respective controls shall be established, for processing, assembly and inspection/testing with results recorded. The control plan shall be available at the different work places and operators shall have been trained.

6.7 Continues Improvements

The Supplier shall use statistical methods and techniques to analyze process data for continuous improvement. All records of all improvements must be stored.

6.8 Rework

The supplier shall define in-process rework and appropriate procedures for conducting it. Repaired and/or reworked products shall be re-inspected.

6.9 Root Cause Analyses

The supplier must conduct root cause analyses for production and process failures. All records must be stored.

6.10 Releasing of Products

Prior to releasing products for delivery the Supplier shall assure that the products confirms to Cargotec's requirements.

6.11 Measuring Equipment

The serial production supplier shall have all necessary measuring equipment's to be able to measure and verify if the products comply with all customer requirements, stated on drawings and standards to be able to keep an in-house process control.

6.12 Calibration of measuring equipment's

The Supplier shall have a documented procedure for the calibration and certification of tools/equipment. All data from calibration and certification of inspection, measurement and test equipment must be stored.

6.13 Testing in Process

The Supplier shall conduct inspection and testing according to control plans. The records of testing and inspection must be maintained and stored.

6.14 Incoming Inspection

The Supplier shall have a procedure describing appropriate inspection of incoming materials. These procedures shall include systems to ensure traceability of product if found unacceptable.

6.15 Managing Transportation

The Supplier shall establish methods and means for preventing damage to materials and products during handling and transportation.

6.16 Product Audit

The Supplier shall conduct Product Audits at suitable intervals of the products while they are in stock.

6.17 Labelling and Quantity delivery

The Supplier shall pack and label the products appropriately prior to the delivery to avoid damage or loss. It shall also be established controls and procedures to assure on-time and right quantity deliveries.

6.18 Identification

The Supplier shall have a documented procedure for ensuring that all products are identified to indicate their conformance or non-conformance throughout all process steps

6.19 Traceability

The Supplier shall implement method for traceability of individual parts used in the final product throughout all stages of the manufacturing process. When traceability of finished product is a specific requirement every completed product or lot shall have a clear, well documented mean of identification. This identification shall be recorded and retained as a quality record.

7 Training

7.1 Education of Personal

The supplier shall continuously educate and train their personal/resources. All records of all training must be stored.

7.2 Competence Matrix

The supplier shall have a procedure in place to define/monitor the competence skills the employees/resources possess.

7.2 Development Plans for Employees

The supplier shall regularly conduct Personal Development Plans with all their employees.

8 Product Development

8.1 Product Development process

The Supplier shall have a documented product development process to ensure effective planning, execution and control of the product throughout its lifecycle.

8.2 Design requirement's

The development process shall be based on the requirements identified during contract review.

8.3 Project planning

The supplier shall have a project planning tool. It shall clearly identify responsibility for engineering/design and development. Project shall be managed according to planned targets in terms of resourcing, scheduling, product quality and costs.

8.4 Design Review

The Supplier shall perform formal design reviews to systematically analyze the progress of the product development activities and their output at certain milestones.

8.5 Development Tools

The Supplier shall validate all design and development tools including software. The tools used shall be compatible with ones used by Cargotec.

8.6 Control of Design Changes

The Supplier shall establish procedures to reliably manage, track and document changes in requirements and designs. The process shall include practices for documentation and version management. The Supplier shall inform Cargotec of all engineering changes.

8.7 R&D Capabilities & Innovation

The supplier shall have a strategy and plan for future technologies and innovation.

8.8 Prototype building

The Supplier shall be able to handle prototype building during the project phase in the project management. Prototypes shall be provided to Customer according to a set time plan and effective manner.

8.9 QA of Prototypes,

The supplier must verify that prototypes are produced so they are representing the technical documentation. Records of verification must be available upon request.

9 Purchasing

9.1 Purchasing Process

The Supplier shall have defined procedures to select, approve and monitor its suppliers.

9.2 Purchasing Organization

The Supplier's purchasing organization shall be aligned to support both continuous operations and product development to assure availability of quality, delivery and cost optimized material supply.

9.3 Outsourced Services

The supplier shall have procedures to ensure quality of outsourced services.

9.4 Outsourced & Assigned Products

The supplier shall have a procedure for Quality Planning and Assurance of outsourced and assigned products.

9.5 Supplier Pricing

The Supplier shall have a process/program to stabilize and/or reduce supplier pricing.

10 Cost Control

10.1 Cost improvement

The supplier shall have continuous improvement programs for cost improvement.

10.2 Continuous Improvements

The supplier shall active work to reduce non value added, waste to increase productivity, not only to have an procedure to identify the waste, but as well to have a development plan how to do it.

10.3 Inventory Management

The Supplier shall actively manage its inventories to reduce unnecessary capital employed, and to avoid unnecessary cost related to obsolete materials or products.

11 Warranty

11.1 Warranty issues

The supplier shall have a procedure for handling Warranty issues.

11.2 Warranty Claims

The Supplier shall have a corrective action process for warranty to evaluate customer claims

12 Product Liabilities

12.1 Recall Procedure

The Supplier shall have a Product Liability Procedure including a recall process and defined liability related responsibilities.

12.2 Insurance

The Supplier shall have liability insurance for finished products covering Cargotec's market areas. The minimum insurance limit shall be EUR 1.000.000.

13 Logistic

13.1 Logistic support

The Supplier shall have an established system and access to necessary service providers to supply both production material and spare parts – if applicable – to Cargotec on a global basis

13.2 Integrated Planning System

Supplier should use an integrated planning system for order management, materials requirements planning, procurement, ware housing and inventory management.

In order to reduce the administrative waste in his processes, supplier should have an adequate Electronic Data Interchange (EDI) system in place.

13.3 Materials management

Supplier shall work according to First-In-First-Out (FIFO) principle.

Supplier should actively manage inventory accuracy by regularly stock takes.

13.4 Lead-times and lot-sizes

Supplier shall actively work on lead-times and lot-sizes in his supply chain.

14 Spare Parts

14.1 Deliveries

The Supplier shall be able to support spare parts deliveries directly to location assigned by Cargotec in small quantities on short lead-times without a cost penalty.

14.2 Availability

The Supplier shall have a system to assure spare parts availability to Cargotec at reasonable cost throughout the Cargotec spare part liability period.

14.3 Quality

The supplier shall have a procedure for Quality Planning and Assurance of spare parts.

15 Facilities

15.1 Layout & Material flow

The Supplier's manufacturing, testing, packing, storing and shipping shall have a clear layout to avoid bottlenecks created due to space constraints or unsuitable material or product flows.

15.2 House keeping

The Supplier's facilities, equipment and tools shall be clean, well-organized and in a proper order.

15.3 Manufacturing Assurance

The Supplier shall ensure that all manufacturing and product development facilities have reliable sources of electricity, water, chemicals, gases etc.