

DBI SUPPLIER MANUAL - CORPORATE



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# DBI SUPPLIER MANUAL

# **DBI Plastics**

Founded in 1937, DBI was a pioneer in plastic manufacturing in Denmark. We have been a trusted provider of protection solutions for over 80 years and we have strong expertise in both innovation and creating standardized, proven products.

# **DBI SUPPLIER REQUIREMENTS**

DBI SUPPLIER REQUIREMENTS ARE DEFINED IN THE FOLLOWING 16 SECTIONS EACH OF WHICH CONTAINS VARIOUS DETAILED REQUIREMENTS.

SUPPLIERS TO DBI ARE EXPECTED TO DEMONSTRATE THEIR CAPABILITY IN ALL APPLICABLE REQUIREMENT AREAS. PROVEN CAPABILITY IS A PREREQUISITE FOR A BUSINESS RELATIONSHIP BETWEEN THE SUPPLIER AND DBI.

THE SUPPLIERS' CONFORMANCE TO THESE REQUIREMENTS MAY BE VERIFIED BY MEANS OF SUPPLIER ASSESSMENTS CONDUCTED BY DBI, SELF-ASSESSMENTS, OR ASSESSMENTS CONDUCTED BY A THIRD PARTY.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS DBI PROPRIETARY AND CONFIDENTIAL. IT SHALL NOT BE DISCLOSED TO ANY THIRD PARTIES WITHOUT A WRITTEN CONCENT FROM DBI.



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# 2 Management responsibility

# 2.1 Business plan

The Supplier shall have a clear business vision 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. There shall be objective evidence of execution and effectiveness of the business plan.

# 2.2 Key performance indicators

The Supplier shall define key performance indicators, which will be used to monitor the company's performance towards its strategic objectives. Management shall review these indicators on a regular basis and use the data to initiate improvement actions. Key performance indicators shall include ones promoting customer satisfaction.

DBI measures on regular basis:

- delivery precision (required target is >98% deliveries on time)
- number of complaints from customers due to supplier errors target is < 0,1/week (average)

# 2.3 Financial stability

The Supplier shall demonstrate a solid financial history during the last 3 years. It must be able to finance its current operations as well as potential future growth.

# 2.4 Quality policy

The Supplier shall have an up-to-date quality policy. Management shall ensure that it is appropriately communicated, understood and implemented throughout the whole organization. The objectives defined in context of the business plan shall promote the implementation of the quality policy.



# 2.5 Environmental policy

The Supplier shall have an up-to-date environmental policy. It shall include management commitment to environmental protection, prevention of pollution and compliance with environmental legislation. Management shall ensure that it is appropriately communicated, understood and implemented throughout the whole organization. The objectives defined in context of the business plan shall promote the implementation of the environmental policy.

#### 2.6 Management reviews

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.

#### 2.7 Resource

Management shall ensure availability of adequate resources. Employees shall have the required education, training and competencies for their position and tasks. All employees shall be subject to regular appraisals of competence in order to identify necessary training needs. Competence development plans shall promote the implementation of company's strategic objectives.

#### 2.8 Ethical considerations

The Supplier shall show commitment to ethical business conduct. The Supplier shall fully comply with applicable national and international laws; condemn and refrain from recourse to child labor (Reference ILO Conventions No 79/138/142/182) and Forced labour (Reference ILO Conventions 29/105); respect for human rights; actively promote equal opportunity in employment policy; commit to a nondiscriminatory work environment and prevent corruption and bribery.

# 3 Quality Management

# 3.1 Quality management system

The Supplier shall have a documented quality management system. It shall be established in compliance with the requirements of IATF 16949, IS09001, or other internationally recognized standard applicable to its business area.

### 3.2 Quality manual

The Supplier shall describe its Quality Management system in a quality manual providing a detailed overview of the company's quality management system. Responsibilities related to quality shall be explicitly defined. Quality manual and related procedures shall be a subject to



continuous development and thus a system to assure effective implementation of changes shall be implemented.

### 3.3 Quality records

The Supplier shall define internal and external quality records. 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 and audits as well as material, product tests, and process control. Agreed quality records shall be readily available for DBI's inspection.

# 3.4 Quality plan

The Supplier shall conduct product, project or process specific quality assurance activities according to separately defined procedures and plans. Quality plans of DBI's specific parts shall be subject to mutual approval.

#### 3.5 Internal quality audits

The Supplier shall conduct internal quality 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.

#### 3.6 Document control

The Supplier shall have a document control system to create, check, approve, release, distribute and delete quality system related documentation and data throughout the whole organization. There shall be evidence that all current issues of pertinent documentation such as drawings, specifications, procedures, etc. are available at all the appropriate locations where operations are critical to the quality of the product A procedure shall exist to review, evaluate and implement changes to pertinent documents. Anticipated changes to major processes or products supplied to the customer shall be communicated to the customer before implementation.

#### 3.7 PPAP implementation

The Suppliers to DBI shall be familiar with PPAP (Production Part Approval Process) procedures (Ref AIAG Standard). The Supplier shall be able to implement and embed to its processes and procedures relevant sections of PPAP on DBI's request.

### 3.8 Zero defect policy



DBI core target is to ensure customer satisfaction for Quality, Cost and Delivery. To enable us to achieve this, we must have as Objectives:

- Class A Suppliers
- 100% of initial samples delivered right first time and on time
- Self-Certification compliance with DBI's Requirement
- 0 PPM strategy received PPM (Parts per Million)
- 0 customer complaint strategy
- 0 Tolerance on Safety- and Regulation Alerts
- 0 Warranty Case/Cost

In order to achieve these goals, suppliers shall develop appropriate documented Zero Defect programs for DBI products covering:

- The right process and technology
- The right support and service processes
- The right people
- The right organization and methods

# 4 Environmental management

# 4.1 Environmental management system

The Supplier shall have a documented environmental management system. It shall be established in compliance with the requirements of IS014001 or other internationally recognized standard applicable to its business area. The environmental management system shall emphasize continuous improvement actions.

# 4.2 Design for Environment

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. Use of recyclable materials shall be preferred and the environmental impact of the product through its whole lifecycle minimized.

# 4.3 Raw material content

The Supplier shall have procedures for and evidence of recording the raw material content of its products. End-of-life treatment recommendations shall be documented for all products. This documentation shall be available to DBI upon request.



# 4.4 Legal compliance and other requirements

The Supplier shall continuously remain updated of environmental legislation and regulations and provide evidence of compliance. The supplier will fulfill demands according to REACH and RoHS or equivalent.

### 4.5 Environmental performance

Supplier shall identify environmental impacts associated with its activities. Continuous improvement programs shall be implemented to minimize environmental impact including, but not limited to, emissions to air, water and soil. Such programs effectiveness shall be subject to regular reviews. The Supplier shall evaluate its sub suppliers' environmental performance in accordance with DBI Supplier Requirements; and sub-suppliers' environmental performance shall be a decision making in Supplier's respective procedures.

# 5 Risk Management

#### 5.1 Risk plan

The Supplier shall implement a system to identify, analyze, control, monitor and minimize business risks. The system shall be utilized to produce a risk plan identifying risks, their impact to the Supplier and its customers; and actions to minimize risks and their impact. The plan shall include strategy, financials, operations, supply, logistics, technology, quality, location, natural hazards and political risks.

# 5.2 Business continuity plan

The Supplier shall have a business continuity plan. The plan shall establish procedures, roles and responsibilities to guarantee business operations continuity and customer service in case of an interruption. To deal with major business discontinuities a response and recovery plan shall be established.

# 5.3 Emergency procedures

The Supplier shall have appropriate emergency procedures including evacuation and rescue plans. The Supplier shall take necessary steps to prevent, to detect and to react to emergency incidents. There shall be competent emergency response teams to deal with emergencies. Regular evacuation, rescue and emergency response shall be organized.

# 5.4 Occupational safety



The Supplier shall implement occupational safety precautions throughout the whole organization for dealing with hazardous substances, noise, and equipment. Safety instructions and appropriate safety devices shall be in use. The Supplier shall comply with all relevant national and international laws and regulations related to occupational safety. The occupational safety management shall preferably be in compliance with OHSAS (ISO) 18001 Occupational Health and Safety Standard.

# 5.5 Security

The Supplier shall implement security procedures covering buildings, employees, documents, IT systems and movement of products. The effectiveness of these procedures shall be subject to a regular review. Access to areas containing DBI confidential information or products shall be restricted to relevant personnel only.

### 5.6 IT security

The Supplier shall take appropriate measures to prevent unauthorized access to its IT systems and potential breach of confidential data. The measures taken shall preferably be in compliance with ISO27001 Information Security Management Standard or equivalent.

# 5.7 Document and data safety

The Supplier shall take actions to prevent breach or loss of documentation and data. Necessary precautions shall be implemented in form of fireproof cabinets, virus scans, up-to-date electronic backups etc. Electronic data shall be subject to back-ups stored in a separate building. There shall be implemented an effective document and data recovery plan.

# 5.8 Confidentiality

The Supplier shall have a confidentiality policy with all of its employees including temporary employees and resident subcontractors. Employees shall be made aware of the meaning of such agreements in practice.

#### 6 Contract review

# 6.1 Contract review system

The Supplier shall have a formal contract review system to convert customer requirements into Supplier's internal requirements. The requirements referred to may be: requirements specifically documented in DBI specification, purchase order, agreement, request for quotation or other documentation; requirements usually and typically associated to products in question; requirements of



applicable laws and regulations; and Supplier's internal requirements related to design standards and other procedures.

#### 6.2 Purchase document review

The Supplier shall adequately review all received purchase documentation to ensure its ability to meet all requirements prior to the acceptance of a purchase order.

#### 6.3 PPAP

Respective to separately specified products to DBI the Supplier shall be capable of providing PPAP submission on a level assigned by the customer to manage customer requirements fulfillment as well as to manage contract (product and process) changes. The PPAP will follow AIAG general requirements.

#### When is a PPAP required?

- A new part or product
- Correction of a discrepancy
- Product modified by an engineering change to design records, specification, or materials
- Production from new or modified tool, refurbishment or rearrangement of existing tool
- Production line move to new location
- Change of sub-contractor / sub-supplier
- Tooling more than one year inactive

### PPAP Level Requirements

Generally, PPAP level will be followed AIAG standard.

- Level 1 Warrant (PSW), Samples, Environmental compliance
- Level 2 Warrant, Samples, Dimensional, Fit, Function, Material Certificate, Environmental compliance
- Level 3 Warrant, Samples and completed supporting data, Environmental compliance
- Level 4 Warrant with other requirements as defined by customer
- Level 5 Warrant with product sample and completed supporting data available for review at supplier's manufacturing location

# 6.4 Contract changes

Contractual changes like engineering changes, renegotiated agreements, purchase order changes and other changes related to customer requirements shall be managed using the contract review system.



#### 6.5 Business contacts

The supplier shall nominate contact person(s) to manage the relationship between DBI and the Supplier. An escalation procedure shall be defined to manage issues, which cannot be solved between DBI Vendor Manager and the Supplier's nominated contact person(s). The contact persons shall have fluent skills in Native language and English.

# 7 Production process management

#### 7.1 Process flow

The supplier shall use 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 and the respective subcontractor shall be selected according to the Supplier's supplier qualification process; and managed as defined under "Sub-supplier and subcontractor control".

### 7.2 Process and material qualification

The supplier's process and materials including related changes shall be qualified and approved according to set procedures. The records of process and material qualification shall be available to DBI. All changes shall be communicated to DBI prior to their implementation.

#### 7.3 Work instructions

The Supplier shall have work instructions outlining specific product and process characteristics to be monitored throughout production. Criteria of workmanship, drawings or other illustrations and/or samples shall be available for all critical process steps at the location of the operation.

# 7.4 Production equipment

The Supplier's process equipment shall be qualified for the purpose. The production equipment shall be under preventive maintenance according to a specific plan. When applicable also equipment software versions shall be controlled.

# 7.5 Tool management and control

The supplier shall establish appropriate procedures for inspecting, maintaining and storing tools, fixtures and jigs. Respective records shall be created. The procedure shall also cover customer owned tools, fixtures and jigs.



# 7.6 Production process control

The supplier shall define production process metrics at appropriate stages of the process in order to keep the process under control. Respective controls shall be established using documented procedure to control processes through detailed work instruction sheets including assembly, processing, inspection and/or testing with results recorded (Control Plan). Process operators shall be trained to manage the control plan and have access to control data and instructions for out-of-control situations. The Supplier shall record in-process inspections to establish product conformance to specified requirements.

# 7.7 Statistical techniques

Whenever applicable the Supplier shall use statistical methods and techniques to analyze process data for continuous improvement. There shall be documented procedures for identifying and establishing suitable statistical methods. These methods shall be actively utilized to monitor process and/or product characteristics to reduce variation from the target

### 7.8 Rework policy

The supplier shall define allowable in-process rework and appropriate procedures for conducting it. Repaired and/or reworked products shall be re-inspected in accordance with appropriate documented procedures and records retained as quality records.

# 7.9 Failure analysis

The supplier shall conduct failure analysis on defective materials and products as well as on process failures according to set procedures. The results of these analyses shall be available as a quality record.

# 7.10 Release for delivery

Prior to releasing products for delivery, the Supplier shall assure that the products confirm with DBI's requirements. There shall be an evidence that the product is not released until all required inspection has been performed and proper documentation generated. A procedure shall exist to outline requirements for final inspection and testing to ensure that all requirements have been met. The Supplier shall provide evidence on request of conducting final inspection or QC approval of product prior to shipment. The respective records shall be available for DBI to review.

#### 7.11 Inspection and test equipment

The Supplier shall have a documented procedure for the calibration and maintenance of inspection, measurement and test equipment, in which the calibration frequency and obtained values are documented. Records indicating equipment type, frequency of checks, checking method and acceptance criteria shall exist. Where test hardware is used (i.e. jigs, fixtures, templates, patterns,



etc.) checks shall be made to prove their capability of verifying the acceptability of product prior to use.

# 7.12 Inspection and test records

The Supplier shall maintain inspection and test records as evidence of appropriate testing and inspection according to applicable procedures with acceptable results. The inspection and test records shall be regularly reviewed, and respective corrective and preventive actions shall be taken.

# 7.13 Product and material handling, storage, packing and delivery

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.

The Supplier shall establish methods and means for preventing damage to materials and products during handling and transportation. Secure and appropriate premises / stores shall be used to prevent damage.

The Supplier shall conduct checks at suitable intervals on the condition of the products while they are in stock.

The Supplier shall have procedures for the protection of the products after the final inspection / testing stage.

The Supplier shall pack and label the products appropriately prior to the delivery to avoid damage or loss.

The Supplier shall establish controls and procedures to assure on-time, right quantity deliveries.

#### 7.14 Control of non-conforming products

The Supplier shall have a documented procedure for ensuring that all products are positively identified to indicate their conformance or non-conformance throughout all process steps. There shall be timely feedback to DBI regarding quality related problems found internally or at other customers that may affect DBI.

Supplier parts found to be nonconforming will require the following actions:

Responding to Nonconformance's

- All requests for Supplier RGA (return goods authorization) <u>must</u> be provided within a <u>24 hrs</u> to DBI SQA and/or Buyer
- Initial 8D response for Non-conforming Parts must be provided within 24 hrs. (Emergency Actions/Containment) and final 8D response with corrective actions must be provided in 10 business days.
- Supplier's 8D Team should utilize a disciplined approach to problem solving, including the use of Quality tools (i.e. pareto, fishbone diagrams, 5xWhy, etc.) to determine root cause.
- Provide a system to certify conforming products for next 5 shipments or 90 days

**Processing Nonconforming Material** 



- All Supplier Nonconforming Reports will be subject to an automatic 100 € fee for processing nonconforming material at the time of rejection. If Supplier parts are deemed to be conforming by way of Supplier investigation and DBI concurs with findings, the supplier will be credited the 100 € fee.
- Material disposition: Inspection / Sorting / Rework / Repair will be documented on the Nonconforming Report and will require guidance / support from the supplier. Disposed material will be processed in the following order:
  - 1. By Supplier
  - 2. By 3rd party
  - 3. By DBI.

Where disposition is #2 or #3, DBI will provide a quotation to support.

Final disposition, liability and financial processing of Nonconforming material claim(s) must be submitted to DBI Quality and Accounting within 30 days of supplier claim receipt. If part receipt is not required by the supplier, the report date of the claim will be used instead. Claims not finalized within this 30-day period are subject to escalating Quality actions/reviews and automatic debits from DBI accounting.

# 7.15 Product identification and traceability

The Supplier shall establish a system allowing positive identification of the product throughout its manufacturing process. The Supplier shall also implement an adequate method of identification and traceability of individual piece 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.

# 8 Training

#### 8.1 Training plans

The supplier shall only utilize competent, appropriately trained personnel. The Supplier shall create and implement training and development plans pertaining to quality and the effects of non-conformance for all employees.

The Supplier shall retain documentation relating to training (in employee file or training file) for future reference.



# 9 Prototype support

# 9.1 Prototype services

When applicable the Supplier shall be able to provide effective and timely prototype support.

# 10 Design control

#### 10.1 Product development process

The Supplier shall have a documented product development process to ensure effective planning, execution and control of the product throughout its whole lifecycle. The product development process shall promote cross-functional alignment.

#### 10.2 Requirements management

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

# 10.3 Project planning and management

The supplier shall have project planning practices to ensure fact-based estimation of work effort, competent resourcing and scheduling. The Supplier shall clearly identify responsibility for engineering / design and development. Appropriate tools, such as DFMEA (Design Failure Mode and Effect Analysis) etc. shall be used. All members of the project team shall have clear roles and responsibilities. Project shall be managed according to planned targets in terms of resourcing, scheduling, product quality and costs.

#### 10.4 Design reviews

The Supplier shall perform formal design reviews to systematically analyze the progress of the product development activities and their output at certain milestones. Results of the reviews and related corrective action plans shall be available as a quality record.

#### 10.5 Product verification, qualification, and validation

The Supplier shall verify, qualify and validate products it develops according to a set procedure. The data created shall be available as a quality record



# 10.6 Engineering change management

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 DBI of all engineering changes made after the design has been released for delivery to DBI. Change histories shall be available as quality records.

#### 10.7 Early supplier involvement

The Supplier's product development process shall include practices to involve material suppliers in order to optimize the materials content from quality, cost, availability and functionality perspectives.

# 11 Purchasing

# 11.1 Purchasing organization

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

# 11.2 Supplier qualification process

The Supplier shall select and approve its sub-suppliers with care based on objective factors such as quality, reliability, technical capability, delivery and price without preference for personal reasons. A documented process or procedure shall be used. The criteria used shall not be in contradiction with DBI Supplier Requirements and shall especially support implementation DBI's requirements for quality management, environmental management, risk management and ethical considerations. Only adequately approved sub-suppliers shall be used. The Supplier shall create and maintain a list of approved sub-suppliers. The list and evidence of sub-suppliers' performance shall be available to DBI on request.

#### 11.3 Sub-supplier and subcontractor control

The Supplier shall continuously monitor its sub-suppliers' and subcontractors' performance using key performance indicators (for instance product quality indexes, delivery performance measurement, cost competitiveness, assessment results and process reviews). The Supplier shall have an active system to make claims and manage respective corrective and preventive actions effectively.

# 11.4 Purchasing documents

Purchase orders shall include all pertinent information regarding requirements for specification, quantity, delivery time, delivery term, price, quality, test and other relevant technical data.

The purchase orders shall include all pertinent information regarding required documentation (certificates etc.).



# 12 Cost control

# 12.1 Cost reduction programs

The Supplier shall have a program in place with processes for identifying cost improvement opportunities within the organization. Methods such as value analysis / engineering, Kaizen, and LEAN processes, may be used. There shall be evidence of the effectiveness of the programs, The Supplier shall have a process/program to stabilize and/or reduce supplier pricing.

The Supplier shall take actions to reduce waste of scrap to keep the overall cost of quality to a minimum.

# 13 Warranty

# 13.1 Warranty policy / administration

The Supplier shall have a documented warranty policy. It shall cover all expenses incurred by customer, including parts, labor and travel, if the supplier's product failed due to material or workmanship. It shall also cover costs associated cost of a field campaign, if deemed necessary.

The Supplier shall have a process to monitor, manage and reduce warranty issues and related cost.

The Supplier shall have a corrective action process to evaluate customer claims and returns in a timely manner; and to provide quick resolution and response back to the customer.

# 14 Product liability

#### 14.1 Product liability procedure

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

The Supplier shall take necessary steps from product development to product delivery to protect against potential product liability actions.

The Supplier shall have a liability insurance for finished products covering DBI's market areas.

# 15 Logistics

# 15.1 Worldwide deliveries

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

The Supplier shall have the ability to manage its deliveries using DBI Standard / Incoterms 2010 delivery terms.



The Supplier shall have ASN (advance ship notice) capabilities or equivalent. The supplier shall notify DBI in advance of any late deliveries.

# 16 Facilities and utilities

# 16.1 Facilities suitability

The Supplier's facilities shall be suitable and capable of handling production volumes, batch sizes and product dimensions required by DBI.

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

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.

# 16.2 Energy management

The Supplier shall ensure that all manufacturing and product development facilities have reliable sources of electricity, water, chemicals, gases etc. For critical equipment UPS, back-up generators or back-up batteries shall be used.