

Business Management System: Manual

00-BMS-001

-



Preface

This manual defines the Business Management System (BMS) established by GM Nameplate. The BMS is comprised of the processes needed to support GM Nameplate's purpose and to achieve its strategic direction. As a contract manufacturer, GM Nameplate exists to discover innovative ways to meet customer expectations and bring customers' designs from conception to completed product. Though GM Nameplate's strategic direction may change and evolve with time because of the needs of its interested parties, its identity as an innovative, customerfocused organization remains constant and unchanged.

The BMS is an integrated approach to managing the needs and requirements of our interested parties: suppliers, customers, employees, government regulatory bodies and shareholders. The BMS integrates quality, environmental, and health and safety management systems requirements into BMS Processes by focusing on who we are, what we do, and how we do it.

This manual describes how GM Nameplate:

- **Plans** for the design and manufacturing of products to ensure that we can meet customer requirements;
- Produces products to ensure customers receive the value that we offer;
- Evaluates products to ensure that customer requirements are met;
- **Plans** for the management system to ensure that performance objectives and resources support our strategic direction, and risks are identified;
- **Manages** resources to ensure that documented information is controlled, employees are trained and competent, raw materials and services needed are obtained and available for use, and measuring and monitoring resources are calibrated and maintained; and
- **Evaluates** the management system to ensure that performance objectives are met, corrective actions are taken to address deficiencies, additional resources are identified, and continuous improvement is attained.

This manual is organized into two sections:

- 1. Overview—this section summarizes Who We Are, What We Do and How We Do it.
- Compliance—this section details the international quality system standards we follow, the scope of our management systems, our permissible exclusions and non-applicable clauses.

This manual has been approved by Executive Management. Records of approval are retained in our eQMS database and are available upon request.

The Appointed Management Representative for GM Nameplate is Jeff Root VP of Quality. The management representative shall have the responsibility and authority for the oversight of the requirements of quality management issues plus the administration of GM Nameplate's Business Management System.

Records of approval are retained in our eQMS database and are available upon request.



Table of Contents

1.0	OVERVIEW	1
1.1	Who We Are	1
1.2	What We Do	3
1.3	BMS Processes	3
1.4	How We Do It	9
1.5	BMS Documentation Structure15	5
1.6	BMS Documentation Distribution16	3
1.7	Documented Procedures16	3
0.0		-
2.0	COMPLIANCE	1
2.1	Scope17	7
2.2	Not Applicable17	7
2.3	Applicability18	3
2.5	Corporate Organization Chart19	9





1.0 OVERVIEW

1.1 Who We Are

GM Nameplate (GMN) is a privately-owned custom manufacturer with over 60 years of experience serving nearly every industry, providing excellent customer service, ingenious solutions and supply chain stability.

Our mission is to provide products and services that meet or exceed customer expectations every time and to continually improve in everything we do.

GMN provides product development assistance and a broad range of manufacturing capabilities to take customer projects from inspiration through implementation. We have a long successful history of adapting to market changes and customer needs. We identify opportunities to grow our business. We help our customers identify their brand by providing custom cosmetic and functional solutions across any market within our competencies. Our core competencies include:

- Electronics & user interface technologies: Backlighting, elastomer keypads, front panel integration & bonding, membrane switches, and printed circuit boards.
- Graphic products: Graphic overlays, labels, and nameplates.
- Functional products: Die-cut components, optical encoders, and printed electrodes.
- Production services: Engineering, rapid prototyping, research & development, testing, and value-added assembly.

Our core business is custom industrial printing for product identification and user interface solutions. Printing, (including related print finishing, assembly and fulfillment services), is our key competency. We are technically competent to fulfill our customer's mechanical, functional, and esthetic requirements as these areas relate to the product we provide. We use our knowledge, our skill, our technologies and our equipment to support our customer's needs, but our solutions are not limited by our current manufacturing capabilities.

We have the capability and the capacity to serve a diverse variety of industries including Aerospace, Appliance, Automotive, Cosmetics, Electronics, Heavy Equipment, Industrial Controls, Medical, and Wine and Spirits labeling. GMN employs over 1,000 individuals across North America and Asia at the following locations:

- Seattle, Washington Division corporate headquarters
- Seattle, Washington Division superGraphics
- San Jose, California Division
- Beaverton, Oregon Division dba Elite Plastics
- Monroe, North Carolina Division
- Singapore Division
- China Division



Our vision is to be the leader in supplying custom solutions for a full range of product needs. We are positioned to provide the technical expertise necessary to assist our customers with achieving the best possible application given their cost and quality needs. Our goal is to further strengthen our position as the leader in the domestic and global marketplace through best in class customer service, innovative technical solutions and financially sound business decisions.

We continue to be leaders in the communities where we reside through active community service, philanthropy, and planned efforts to reduce our environmental impact, while fulfilling our obligation to provide for our employees and our shareholders.

Our values define who we are as a corporation and as individuals:

- We operate our business with the highest standards in all relationships with customers, our employees, suppliers, the community, and the environment of the world.
- We provide products and services that fulfill customer expectations every time, on time.
- Our employees are our most important assets. We foster a climate to encourage superior customer service, technical innovation, and diligence in the performance of daily tasks, and we reward behavior accordingly.

We—shareholders and employees—value our customers, our suppliers, our communities, our planet, and we value each other.

We are GM Nameplate.

The Quality Policy of GM Nameplate is to provide products that meet or exceed customer expectations, comply with all applicable regulations, continually improve in everything we do, and continually improve the effectiveness of the business management system.



1.2 What We Do

The BMS processes are organized into two groups: product-related processes and system-related processes. Product-related processes consist of product planning, design, production and product evaluation. System-related processes consist of system planning, resource management and system evaluation. These processes and their application throughout GM Nameplate are described below:



Figure 1 – BMS Processes – Product and System Related



We **plan for products** by: identifying requirements; determining our ability to meet those requirements; preparing design/quality/manufacturing plans (quotes) using the appropriate planning tools i.e. Advanced Product Quality Planning (APQP); creating manufacturing plans that contain or reference the production, testing, inspection, sampling

and shipping activities needed to supply products to customers; and assembling job ticket packages containing these manufacturing plans.



We **produce products** by: reviewing job ticket packages; setting up workstations; processing materials, performing test activities; and completing records.



We **evaluate products** by: inspecting completed products for cosmetic defects; packaging and labelling them for protection and traceability; sampling manufacturing lots for conformance to requirements; releasing conforming product for shipment to the customer; and dispositioning nonconforming product.





We **plan the management system** by: establishing objectives and thresholds e.g. product conformity, on time delivery; determining the resources and actions needed to achieve those objectives; as well as identifying and managing risks to the achievement of those objectives.



We **manage resources** needed for the management system by: providing for the control of documented information; purchasing, verifying and storing materials/services needed for to achieve product conformity; hiring and training competent employees; and maintaining calibrated monitoring/measurement devices and/or equipment.



We **evaluate the management system** by: gathering, analyzing and reporting data; conducting internal audits; evaluating internal and external feedback; reviewing performance to objectives, customer feedback, and the results of audits, corrective actions, and continuous

improvement activities; identifying resources and actions needed; and implementing corrective action when necessary to achieve intended results.

The individual processes needed for the BMS, including their sequence and interactions are identified on the follow page.



1.3 BMS Processes





Expanded view of processes above:



Figure 3 - Expanded view of business processes



1.4 How We Do It

1. Product Planning

GM Nameplate **processes requests for quotation** received through several communication channels. Customers may submit these requests through Sales, Marketing, and directly to Customer Service. Request for quotation may include supporting documentation such as customer drawings, specifications, and statements of work. After a request is received, a customer's specified requirements for products as expressed to, and understood by, GMN at the time are documented on a Request for Quotation form.

The Request for Quotation form and supporting documentation are reviewed to identify requirements. These requirements are used to determine the processes, activities, and resources needed to plan, manufacture, inspect, and ship the product to the customer. Risks and exceptions to GMN's ability to meet these requirements are identified, including the need for Advanced Product Quality Planning (APQP). Pricing, margin, and any other costs are reviewed to determine if adjustments are needed. The output of processing a request for quotation is a preliminary design and manufacturing plan (i.e. a quote.) The quote, including GMN's exceptions and any other information related to the product or service being offered, is then formally submitted to the customer for consideration.

After consideration, customers may submit purchase orders through existing communication channels. GMN **processes customer orders** by reviewing the purchase order and associated documentation to identify customer requirements. Requirements are communicated to relevant functions throughout the organization who then determine and verify that GMN has the ability to meet these requirements. Based on the scope and complexity of the order, quality planning may require the use of APQP. If it is required, then a project plan is created to initiate the APQP process. If it is not required, then relevant functions complete and finalize the manufacturing plan, evaluate risks and identify appropriate actions, and complete the verification of additional requirements. A job ticket package is created, which contains the job ticket (i.e. the manufacturing plan), a product drawing, and any other associated documentation (e.g. purchase order, art work). After the job ticket is printed, the customer is formally notified of GMN's commitment to supply the product.

The **APQP process** begins by creating a project plan that identifies risks, actions and resources needed to meet requirements. The plan is then implemented to include actions for developing a quality plan, validating processes where required, finalizing and completing the manufacturing plan, evaluating managing risks, and obtaining a first part production approval from the customer where required. Relevant functions complete the verification of additional requirements. Once the project plan is completed, a job ticket package is created, which contains the job ticket (i.e. the manufacturing plan), a product drawing, and any other associated documentation (e.g. purchase order, art work.) After the job ticket is printed, the customer is formally notified of GMN's commitment to supply the product.



2. Production

Production processes vary at each GMN division, but generally include some methods of:

- Printing;
- Fabrication;
- Assembly, and/or
- Injection molding.

Regardless of the production process, GMN **manufacturing** begins when relevant functions in the organization receive a job ticket package and instructions to begin production work. The job ticket package is reviewed to identify job ticket and process instructions, workstation outputs, product acceptance criteria, and any other information needed to setup the workstation.

Once all required resources have been gathered (e.g. tooling, fixtures), the workstation is setup per documented information. Documented information defines actions needed to setup, evaluate, and adjust the workstation as needed to achieve product conformity. Actions to reduce relevant Foreign Object Debris (FOD), Environmental, and Safety risks are also identified and implemented. Once the product process is verified and product conformity is achieved, a secondary review occurs to verify that the product conforms to requirements. If the secondary review indicates that the product conforms to requirements, then the workstation setup is "approved" and processing the job may begin. Workstation setup is re-evaluated and corrected until product conformity is verified.

While processing the job, product characteristics are monitored and measured at established frequencies to verify that the production process continues to produce conforming product. If a product nonconformance is detected, the process stops to verify the nonconformance and determine if the nonconformance affected previously processed product. Any nonconforming product is identified and segregated. Process characteristics may also be monitored and measured during processing to verify that the process remains controlled. During and after processing, all product is handled, transferred, and routed by methods appropriate to the product that preserve conformity and prevent damage and contamination.

Once processing is complete, all workstation sign-offs are properly documented. Sign-offs include: evidence of product acceptance; identification of the persons who performed the work; and accountability for all raw materials and product processed. The job ticket package and completed product are routed to the appropriate stations for evaluation and, if authorized, release to the customer.



3. Product Evaluation

Product evaluation consists of inspection and packaging, sample audit, and shipping activities. The job ticket package, including completed parts, and nonconforming product (where applicable) are routed to relevant functions in the organization who evaluate the manufacturing lot against product acceptance criteria. Conforming product is identified, packaged, audited, and shipped to the customer.

GMN inspects and packages completed product to verify part characteristics and appropriate cosmetic requirements. The job ticket package is reviewed to identify job ticket, inspection and packaging instructions, product acceptance criteria, and any other information needed to setup the workstation. Resources are obtained (e.g. inspection fixture) and a sample completed part is randomly selected for inspection to verify applicable part characteristics. A 100% cosmetic inspection is performed on the remaining manufacturing lot. Nonconforming product detected throughout inspection is identified and segregated. Complete, conforming parts are packaged to protect product conformity and labelled to maintain traceability. The order is considered complete if there are enough conforming parts to satisfy the order quantity. Appropriate action is taken, including escalation, if there are not enough conforming parts to satisfy the order quantity. Once processing is complete, all workstation sign-offs are properly documented. Sign-offs include: evidence of product acceptance; identification of the persons who performed the work; and accountability for all product processed.

GMN approves and **releases product** to the customer after the manufacturing lot is verified through a sample audit. The job ticket package is reviewed to identify job ticket, sample audit criteria, and product acceptance criteria. A part is randomly selected and applicable part characteristics, packaging and labelling requirements are verified. A sample audit is performed to verify applicable part characteristics. If zero nonconformances are detected from the sample audit, the product is authorized for release to the customer. If a nonconformance is detected, the sample audit has failed. The job ticket package is then returned to relevant functions for re-inspection. Once processing is complete, all workstation sign-offs are properly documented. Sign-offs include: evidence of product acceptance; identification of the persons who performed the work; and accountability for all product processed. The job ticket package, including any documentation required to ship with the product, is routed to shipping.

Shipping product includes reviewing the job ticket package to identify shipping instructions, packaging the product to prevent damage, creating packing slips and shipping labels, and scheduling the shipment with the appropriate shipping carrier. Once product has shipped, the job ticket package is routed to Accounting for invoicing and job ticket closure.



GMN **dispositions nonconforming product** received as the result of product being rejected internally, provided by suppliers, and/or returned by customers. Nonconforming product and associated documentation (e.g. job ticket, drawing) are reviewed before disposition to verify the nonconformance. Once verified, a cross-functional group, where applicable, reviews the nonconforming product to determine the disposition and identify actions needed to correct the product. Dispositions may include: rejecting, scrapping, rework or repairing product; using the product as is, sorting the product and returning the product to the supplier. The decision to repair, rework, or use-as-is (UAI) is only considered if it is appropriate for the products (i.e. non-medical). Corrective action is determined for customer returned product that is validated as nonconforming. Corrective action for all other nonconforming products is determined by criteria established by Quality Management Representatives.

4. System Planning

System planning at GMN occurs at the different levels within the organization. Executive Management, embodied by the Board of Directors, determines the organization's mission, vision and strategic direction based upon the needs of its interested parties. Performance objectives and annual goals are established for the corporation and communicated throughout the organization. Division Management, embodied by Division Presidents and supporting management, establish thresholds for performance objectives; determine actions and resources needed to achieve performance objectives; annual goals and to manage risks.

Management Planning is a cyclical process performed by Executive Management and Division Management within their scopes of responsibility. Executive Management establishes the organization's strategic direction, business strategy and business plan. Performance objectives and annual goals for the corporation are determined and communicated throughout the organization to Division Management. Risks to the implementation of the business strategy and the achievement of performance objectives are identified and evaluated. Actions to manage risks are determined and assigned to the appropriate persons and functions within the organization. Resources needed to achieve performance objectives, annual goals and manage risks are identified. Division Management determines a division's thresholds for performance objectives and the division's annual goals, which are needed to support the achievement of annual corporate goals and the division's contribution to the overall business strategy. Division Management supports the implementation of actions to manage risks and identifies division resources needed to achieve performance objectives, annual goals and manage risks. Division Management also identifies and manages environmental and safety hazards associated with their processes, equipment and work environments.



5. Resource Management

Resources needed to meet requirements are determined through system planning and system evaluation processes. These processes identify the infrastructure (buildings and associated utilities), work environment, process equipment (including preventive maintenance), materials, support services, documents, and employee competencies needed to support the achievement of objectives.

GMN controls documented information to ensure that information needed for the control of processes is provided, and information needed to provide evidence of product and system conformity is retained. Documents (e.g. procedures, work instructions, forms) are reviewed, approved (where applicable), changed and reapproved (where applicable) before release. Once released, documents are controlled via document number and revision. Documents showing evidence of conformity or results achieved are records. Records are controlled to ensure they remain legible, identifiable, retrievable, and are stored to protect against damage. Records may be disposed or destroyed once the established retention periods have passed.

GMN **purchases materials and services** needed to supply product to customers. Suppliers of materials and services are evaluated and selected based on their ability to meet requirements. Once a supplier is selected, a purchase order is created and reviewed before submission. The purchase order contains all required information that applies to the materials or services being purchased, and to the supplier's management system.

GMN receives and verifies materials and services received from suppliers. The methods and frequency of verification activities are based upon the supplier performance and the results of material risk assessments. Stocked, commodity "off-the-shelf" products are often received, verified and placed into storage for production use. Specified materials and components are received and inspected before storage to verify conformance to specified requirements. Nonconforming materials or services, including suspect counterfeit materials, are identified and segregated. Conforming materials or services, including customer property are stored to prevent damage and deterioration. Where appropriate supplier corrective actions are initiated per the corrective action process.

GMN **maintains calibrated equipment** to ensure that evidence of product conformity is reliable and traceable to national industry calibration standards. Equipment, including monitoring and measuring devices, are obtained as needed and evaluated for adequacy and suitability to measuring requirements before being included in the calibration system. A register of calibrated equipment is maintained to identify equipment, calibration frequency and previous calibration results. Equipment is calibrated and identified before being put in to use. The identification methods enable recall and accountability of the equipment. When not in use, calibrated equipment is safeguarded from adjustments and protected from damage.



GMN **hires employees** to ensure that the knowledge, skills, and experience needed to achieve product conformity is provided, verified, and maintained. When the need arises, hiring criteria is defined including the competencies, skills, and experience for a given job position. Candidates are interviewed and evaluated through the employee requisition process based upon this criterion. After a suitable candidate has been hired, the candidate is on-boarded through the New Employee Orientation (NEO) process.

GMN trains employees to ensure the knowledge and competencies needed to perform their jobs is communicated and verified. Training methods are determined based upon the training requirements assigned to an employee's job code. Training progress is evaluated to identify additional training needed and to determine when the employee is ready for certification. Certification includes an evaluation of an employee's competency and readiness to perform the duties assigned.

6. System Evaluation

GMN evaluates internal and external feedback at different management levels of the organization. **Management Review** is the process of evaluating feedback concerning BMS performance. Executive Management evaluates feedback within the scope of the corporation and the overall BMS. Executive Management holds recurring meetings throughout the year to evaluate: the results of corporation's performance; the current business environment, including identification of new risks; the effectiveness of actions to manage known risks; and the status of annual goals. The effectiveness of Management Planning is evaluated, and if appropriate, additional actions and/or resources are identified and assigned to achieve objectives and goals.

Division Management evaluates performance feedback during recurring management review meetings and independent department meetings. The recurring management review meetings are structured to ensure that clearly defined inputs are evaluated. Inputs include but are not limited to: actions assigned during previous meetings; division performance; audit results; customer satisfaction and complaints; supplier performance; corrective action results; and environmental and safety incidents. Outputs include: new actions assigned; and identification of the need for addition resources; and corrective action.

GMN **audits** BMS processes per approved audit schedules to verify that the processes conform to BMS, customer, and statutory requirements. GMN is also audited by customers, regulatory and other third-party organizations to verify compliance to applicable requirements. The results of audits, including audit findings, are reported, internally and externally (where required). Audit findings are processed per the corrective action process.





1.5 BMS Documentation Structure

- 1. BMS documents are organized into four documentation levels:
 - Level 1 documents: Manual, Requirements, Objectives;
 - Level 2 documents: Policies, Procedures;
 - Level 3 documents: Work Instructions; and
 - Level 4 documents: Reference documents and records.



Figure 4 – Documentation Structure

- 2. BMS Manual, 00-BMS-001 is a brief, clear description of GMN's business management system and GMN's BMS Processes.
- 3. BMS Requirements, 00-BMS-002 defines international standards requirements and their application to BMS Processes.



- 4. BMS Procedures, 00-BMS-003 defines the inputs, activities and outputs involved in each BMS Process.
- 5. Work Instructions define how to perform the activities defined in BMS Procedures. GMN Corporate and each Division maintain individual Work Instructions.
 - Corporate Work Instructions apply to the GMN Divisions identified in the scope of this manual; and
 - Divisional Work Instructions apply to their respective Division.
- 6. Reference Documents contain information that needs to be consulted in order to follow a procedure or work instruction. The most common reference documentation used at GMN is the manufacturing plan (job ticket) which contains the specific requirements for each order, including the part number, materials, specifications, drawings, schedule, stations sequence, ship date and method.
- 7. Records show evidence of meeting requirements and the effectiveness of the BMS.
- 1.6 BMS Documentation Distribution
 - 1. The following documents may be distributed externally:
 - BMS Manual, 00-BMS-001; and
 - BMS Requirements, 00-BMS-002.
 - 2. BMS Procedures, 00-BMS-003, may not be distributed externally, except when provided by GMN to external parties who obtain the document while on-site at a GMN Division.
 - 3. Work Instructions and reference documents may not be distributed externally, except when provided by GMN to external parties who obtain the document while on-site at a GMN division.
 - 4. Records
 - Contact Corporate Quality to determine if a document may be distributed externally.
- 1.7 Documented Procedures
 - 1. Documented procedures required by international standards are partially contained in BMS Procedures, 00-BMS-003.
 - 2. Work instructions maintained by each Division and Corporate contain additional information needed to meet requirements for documented procedures.



3. Each Division referenced in the scope of this manual maintains matrices that define the relationship between BMS Procedures, 00-BMS-003 and Corporate and Division Work Instructions.

2.0 COMPLIANCE

2.1 Scope

The scope of the BMS as defined by this manual is indicated below for each Division. <u>Only the four Divisions identified below are included in the scope of the BMS.</u>

- 1. Beaverton, OR scope includes:
 - Manufacture and Value-Added Assembly of Graphic, Functional, Electronic, and User Interface Technology Products for Aerospace, Automotive, Medical, Computer, Appliance, Industrial, and Other Industries. (ISO 9001, AS 9100)
 - The Manufacture and Value-Added Assembly of Graphic, Functional, Electronic, and User Interface Technology Products for Aerospace, Automotive, Medical, Computer, Industrial, and Other Industries. (ISO 13485)
- 2. Monroe, NC scope includes:
 - Manufacture and assembly of nameplates, graphic overlays, labels and panels for automotive, aerospace, appliance, cosmetic and industrial applications. (ISO 9001)
- 3. San Jose, CA scope includes:
 - Manufacture and Value-Added Assembly of Graphic, Functional, Electronic, and User Interface Technology Products for Aerospace, Automotive, Medical, Computer, Appliance, Industrial, and Other Industries. (ISO 9001, AS 9100)
- 4. Seattle, WA scope includes:
 - Design, Manufacture and Value-Added Assembly of Graphic, Functional, Electronic, and User Interface Technology Products for Aerospace, Automotive, Medical, Computer, Appliance, Industrial, and Other Industries. (ISO 9001, AS 9100)
 - Manufacture of Graphic and Functional Components for Medical Device Industry. (ISO 13485)
 - Parts Manufacturer Approval (PMA) under 14 CFR 21.303.
- 2.2 Not Applicable
 - GMN Beaverton OR, Monroe NC, San Jose CA do not perform any product design and development activities because they manufacture parts using existing customer designs. Therefore, the following requirements are not applicable for these three Divisions:
 - ISO13485:2016 §7.3 Design and Development
 - AS9100D and ISO 9001 §8.3 Design and Development of Products and Services



2.3 Applicability

The following requirements do not apply to the GM Nameplate Divisions identified in the scope of this manual.

- 1. GMN is a component-only design and manufacturer with no serviceable consumer products. Therefore, the following requirements are not applicable:
 - ISO13485:2016 §7.5.6 Validation of Processes for Production and Service Provision.
- 2. GMN produces neither sterile medical products nor active implantable medical devices and has no particular requirements for these types of products. Additionally, GMN neither installs a medical product nor is required to provide further servicing activities for these types of products. Therefore, the following requirements are not applicable:
 - ISO13485:2016 §7.5.2 Cleanliness of product and contamination control;
 - ISO13485:2016 §7.5.3 Installation Services;
 - ISO13485:2016 §7.5.4 Servicing activities;
 - ISO13485:2016 §7.5.5 Particular requirements for sterile medical devices;
 - ISO13485:2016 §7.5.7 Particular requirements for validation of processes for sterilization and sterile barrier systems; and
 - ISO13485:2016 §7.5.9.2 Particular requirements for implantable medical devices.
- 2.4 Roles undertaken by GMN
 - 1. The following divisions are registered with the Food and Drug Administration as Contract Manufacturers:
 - Seattle, WA
 - Beaverton, OR
 - 2. GM Nameplate is registered with the Directorate of Defense Trade Controls.



2.5 Corporate Organization Chart



Figure 5 – Corporate Organization Chart

<u>Note:</u> Departments and positions vary within each function listed. Current organization charts, by title are available through local HR departments.