

GRAPHICAST, INC.

Jaffrey • New Hampshire • USA

Quality System Manual

ISO 9001

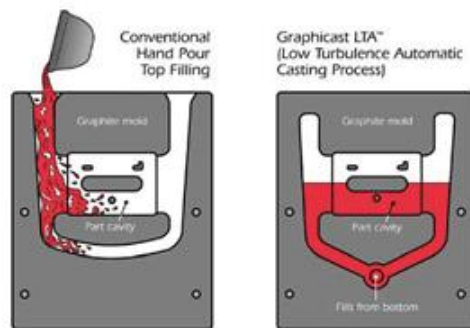
GRAPHICAST, INC. Jaffrey • New Hampshire • USA	Issue Date: 03/02/2011 Revision Date: 07/11/2018 Revision Number: G	Page 2 of 5
	Title: Quality System Manual	
		Reference: ISO 9001

Company Overview

Leslie Bunch started Graphicast in 1978. Graphicast's business is the production of precision zinc alloy castings using the ZA12 alloy exclusively (88% zinc, 12% aluminum) cast into permanent molds made of graphite. He had worked for a company producing this alloy and was active with them when this alloy and the graphite mold casting system were introduced.

The ZA-12 zinc alloy castings offer an excellent combination of mechanical properties, machinability, surface finish, and low cost. The material is 100% recyclable and is REACH and RoHS compliant and no conflict materials are used in the Graphicast process.

Over time Mr. Bunch developed the proprietary LTA™ (low turbulence automatic-fill) casting technology. Casting machines were designed and built by Graphicast using the LTA™ technology and were recently upgraded to incorporate PLC based control panels.



Graphicast became an ESOP company in 1996. In June, 2001, Mr. Bunch sold his controlling interest in Graphicast to The Zanchuk Group LLC. Walter Zanchuk is currently the majority owner and president of the company. Graphicast was an Inc 5000 company in 2007, making it one of the fastest growing companies in the US in that year. In 2009 and 2015, Graphicast received a PM100 award, naming it as one of the 100 most progressive manufacturers in the US. Graphicast was among the top ten to work for in New Hampshire twice in the past ten years.

Originally, Graphicast produced non-machined castings. Over time, added CNC machining capability and now have seven vertical machining centers. Most of the castings now sold by Graphicast are machined on these machining centers. Two CMM's, one programmable and one manually operated, as well as an array of other inspection equipment assure all machined features adhere to customer required specifications. The medical and diagnostic equipment business is Graphicast's largest market.

All of the molds in use are graphite permanent molds which are designed and built in-house. Graphite is a durable, low cost material which can produce relatively close tolerance parts with a superior surface finish. Graphicast has complete CAD/CAM capabilities. All mold and fixture designs and CNC programs are based on CAD models provided by the customer. Graphicast's Engineering Department works directly with the customers' designers to assure parts are properly designed for the Graphicast casting process.

Graphicast's principal headquarters is located at 36 Knight Street, Jaffrey, NH 03452. Contact can be made by phone @ 603-532-4481 or by fax @ 603-532-4261. Graphicast also maintains a website at www.graphicast.com.

Graphicast is an ISO 9001 registered company.

Consider "UNCONTROLLED" 24 hours after receipt or if printed

Approved by: Val Zanchuk Title: President

GRAPHICAST, INC. Jaffrey • New Hampshire • USA	Issue Date: 03/02/2011	Page 3 of 5
	Revision Date: 07/11/2018	
Title: Quality System Manual		Revision Number: G
		Reference: ISO 9001

The Graphicast Quality Policy:

Graphicast Inc. is committed to providing zinc cast parts and precision machined parts for a variety of applications. In pursuit of this, we are dedicated to the following points:

- To maintain a high level of customer satisfaction in the product provided while striving to meet and exceed all applicable requirements and expectations. Not only our customer's but all others that are relevant.
- To continually evolve and improve our casting and manufacturing processes and to make them more efficient as well as the entire quality system.
- To establish and review appropriate objectives to help communicate the company's direction and to drive improvements.

(Approved by Graphicast's President)

1.0 Context of the Organization

Graphicast has reviewed and analyzed key aspects of itself and its interested parties to determine the strategic direction of the company. This includes internal and external issues of concern, risks and opportunities.

These issues are monitored and discussed as part of the management review process.

The issues determined above are identified through an analysis of risks facing Graphicast and its interested parties. Interested parties are anyone who receives our products or who may be impacted by them, or those parties who otherwise may have a significant interest in the company.

2.0 Scope

This manual establishes the quality system and related practices used by Graphicast, Inc. to manage its business of casting and machining zinc parts to our customers' specifications, to improve its operations and to meet its customer's requirements and addresses customer satisfaction through the effective application of the quality system, including processes for continual improvement and the prevention of nonconforming product. Additional procedures have been developed for certain processes to establish additional process control. This quality management system and referenced procedures have been developed to meet Graphicast's needs and those established by the current ISO 9001 standard. Graphicast has determined that Sections 8.3, Design and Development, and 8.5.5, Post Delivery Activities, do not apply as Graphicast does not design or warranty the customers' end product or provide any maintenance services for these parts.

3.0 Compliance

Graphicast, Inc. is committed to complying with any and all requirements established under the Conflict Minerals Rule, the RoHS Directive and REACH Regulations.

4.0 Quality Management System Processes

Graphicast, Inc. has established, documents, implements, maintains, and continually improves its quality management system in accordance with the requirements of the ISO 9001 Standard.

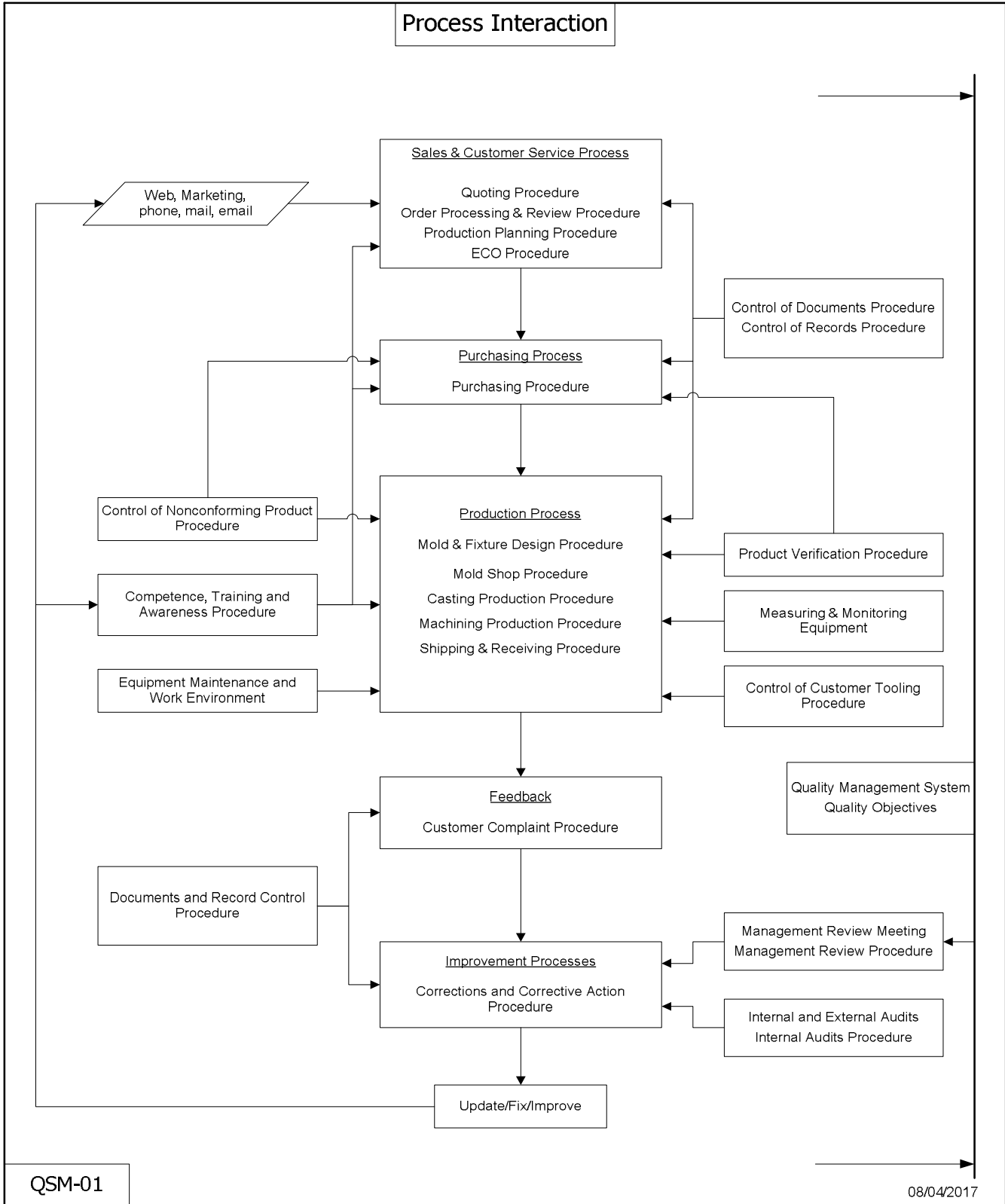
For implementing and maintaining the quality management system, Graphicast, Inc.:

- Identifies Interested Parties and determines risks, both positive and negative, that may affect the interaction of Graphicast and these Interested Parties.
- Identifies the processes needed for the quality management system;
- Determines the sequence and interaction of these processes;
- Determines criteria and methods required to ensure the effective operation and control of these processes;
- Ensures the availability of information necessary to support the operation and monitoring of these processes;
- Measures, monitors and analyzes these processes and implements action necessary to achieve planned results and continual improvement.

The sequence of interaction of these processes is illustrated on the next page.

Consider "UNCONTROLLED" 24 hours after receipt or if printed

Approved by: Val Zanchuk Title: President



Consider "UNCONTROLLED" 24 hours after receipt or if printed

Approved by: Val Zanchuk Title: President

GRAPHICAST, INC. Jaffrey • New Hampshire • USA	Issue Date: 03/02/2011	Page 5 of 5
	Revision Date: 07/11/2018	
	Revision Number: G	
Title: Quality System Manual		Reference: ISO 9001

Revision History

REVISION	DATE	NAME	CHANGE
-	04/11/2011	Dave Gregory	Initial release
A	06/07/2011	Dave Gregory	Major rewrite
B	08/08/2011	Dave Gregory	Removed Service Provision exclusion
C	12/12/2016	Dave Gregory	Rewritten for ISO 9001:2015
D	04/13/2017	Dave Gregory	Removed statement about Sect 8.3 Design & Development not applying
E	08/04/2017	Dave Gregory	Rewrote company overview
F	07/09/2018	Dave Gregory	Updated the Quality Policy section.
G	07/11/2018	Dave Gregory	Added compliance section

Consider "UNCONTROLLED" 24 hours after receipt or if printed

Approved by: Val Zanchuk Title: President