

 VIRGINIA LASER CORPORATION	Management Approval	
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QUALITY ASSURANCE MANUAL

The Controls, Procedures, and Work Instructions contained in this document define the Virginia Laser Corporation Quality Management System. Controlled copies of the QAM are numbered and a record of distribution is maintained. When updates to the manual are necessary, revised pages are issued with instructions to replace the outdated page in each QAM – Controlled copy. Pages are sequentially numbered and documents reflect the date of last revision.

QUALITY MISSION STATEMENT

We, the employees of Virginia Laser Corporation, will endeavor to meet our customer’s requirements and exceed their expectations with superior service. Our culture will reflect an uncompromising focus on safety, an emphasis on teamwork and empowerment, as well as a commitment to continuous improvement to form a partnership with employees, customers, and suppliers.

QAM Controlled Copy # _____

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 VIRGINIA LASER CORPORATION	Introduction	
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Virginia Laser Corporation is a locally owned and operated laser cutting service and fabrication shop. Products fabricated include carbon steel, aluminum, stainless steel, and other non-ferrous metals, as well as various exotic materials. Processing capabilities include CNC Laser Cutting, CNC Forming, Drilling, Tapping and Countersinking.

The Virginia Laser Corporation Quality Management System (QMS) is based on the eight principles of the ISO 9000 quality management series. Components of the QMS include internal audits, process improvement projects, root cause analysis of deficiencies, and tracking of Key Performance Indicators. QA Controls, Procedures and Work Instructions are implemented to regulate all aspects of inventory control and order fulfillment in our shop operations and processing facility. QA Controls (QAC's) communicate quality-related programs while QA Procedures (SOP's) define the methods implemented to perform job-specific duties. Work Instructions (WI's) provide a visual process flow of the Standard Operating Procedures.

Objectives of the Quality Management System are as follows:

- To support and uphold safe workplace initiatives
- To focus attention on quality and drive continuous improvement
- To benchmark current performance
- To ensure products and services satisfy customer requirements
- To maintain the high standards that has been successfully implemented
- To improve performance in areas where refinement is needed
- To promote teamwork across shifts, departments, and locations
- To reduce operating costs through efficiency and reduction of waste

The scope and purpose of this **Quality Assurance Manual (QAM)** is to define and describe the quality management system, to define authorities and responsibilities of the personnel involved in the operation of the system, and to provide required procedures for activities comprising the quality management system. Senior Management reviews the QMS annually to encourage continuous improvement within the organization. Resources are allocated for training, equipment, and personnel to ensure an effective program.

In addition to our in-house processing capabilities, Virginia Laser Corporation works closely with pre-approved subcontractors to perform secondary processing services. This network of qualified suppliers works within our QMS guidelines including tolerance control, inspection, and packaging. With regard to the outsourcing of non- in-house services, Virginia Laser Corporation can obtain procedures and certifications from our service providers. These documents will be forwarded to any customer requesting these processes for their review and approval prior to execution of the service.

 VIRGINIA LASER CORPORATION	Organization	
	Doc. Number	QAM-03 Organization
	Issue Date:	01/01/2019

1.0 Purpose:

The following provides a summary of the quality assurance responsibilities of Virginia Laser Corporation personnel affecting the final quality of items and services provided under this document. The summary level Virginia Laser Corporation organizational chart is presented in Figure 1.1

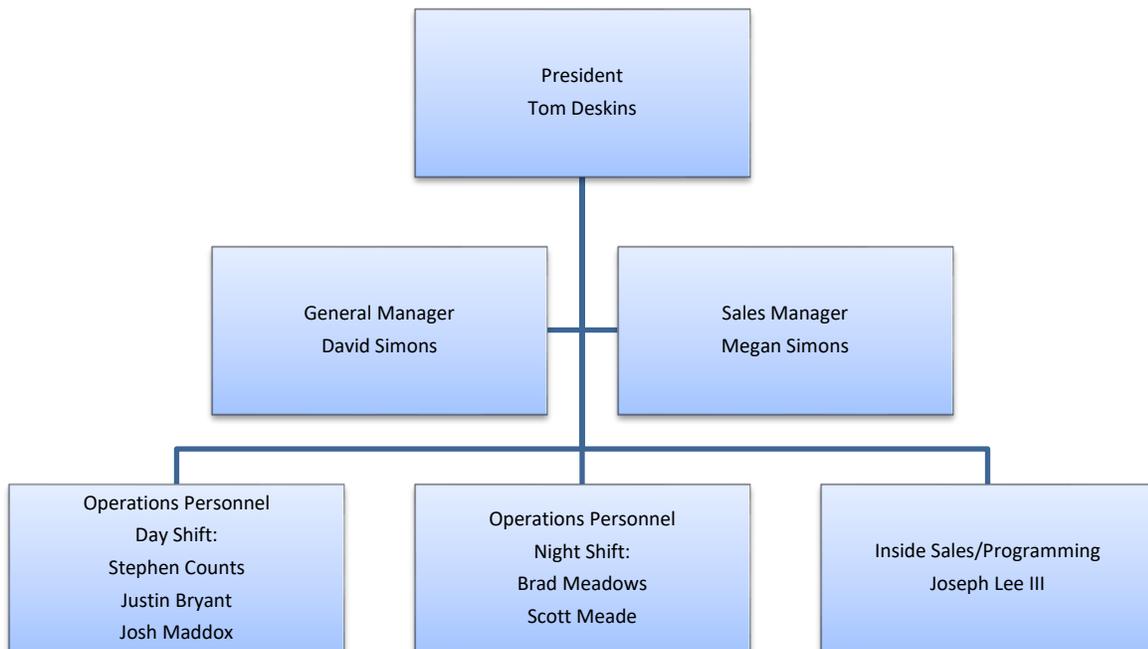


Figure 1.1 Corporate Organizational Chart

2.0 Responsibilities:

- 2.1 Senior Management is responsible for setting policies, expectations, and priorities. They provide leadership, develop strategies, and allocate resources necessary to accomplish the Virginia Laser Corporation Quality Assurance objectives
- 2.2 All Operations personnel are responsible for verification that activities affecting quality are in compliance with the controls, procedures, and work instructions reported in this document. Senior Management will maintain the Quality Assurance Manual, perform internal audits, evaluate outside suppliers, and track key performance indicators to promote continuous improvement.
- 2.3 All Operations personnel are responsible for implementation of Quality Assurance programs at our location. The Management Team will evaluate customer specifications,

monitor procedures affecting quality and review key performance indicators to promote continuous improvement.

- 2.4 Operations personnel are responsible for the preservation of inventory and the maintenance of material handling and processing equipment. Senior Management will ensure that receipt, in-process and final inspection activities are performed, and that all personnel are trained in the processes and procedures that affect quality.
- 2.5 All Virginia Laser Corporation employees will perform their job-specific duties in accordance with procedural requirements.

3.0 Training:

All Virginia Laser Corporation employees will have a thorough understanding of the quality assurance procedures associated with their job-specific duties.

 VIRGINIA LASER CORPORATION	Capabilities	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

Mitsubishi EX CO2 Laser 120"x60" Table

Dener Puma XL Press Brake 193 US Ton 12ft Bed

FlexArm Tapping Arm

PRM Milling & Drilling Machine

Miller MIG Welder

Giant Vibratory Finisher

 VIRGINIA LASER CORPORATION	Safety	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This program provides guidance to the Quality Assurance Dept. with regard to the support and promotion of Virginia Laser Corporation Safety directives.

2.0 Responsibilities:

2.1 All Personnel are responsible for the evaluation and reporting of safe workplace practices during each internal QA audit.

2.2 All personnel are responsible for implementation of counter measures required to address legitimate safety violations discovered through the internal QA audit process.

2.3 All employees are held accountable for failure to follow safety directives. Warehouse and office facilities are constantly scrutinized for adherence to safe workplace requirements.

3.0 Training:

3.1 Operations personnel will be trained and have a thorough understanding of this program.

4.0 Detail:

4.1 Training for Operations personnel includes monthly OSHA-based employee training sessions and weekly attendance of Safety meetings.

4.2 Annual safety audits are performed by Senior Management. Evaluations include the following areas:

- 4.2.1 Processing and Material Handling Procedures
- 4.2.2 Investigation of Recordable Injuries and Near-Miss Accident Reports

4.3 Emergency Readiness

Virginia Laser Corporation Internal Quality Assurance Audits include evaluations of the following areas:

- 4.3.1 Adherence to the requirements for Personal Protective Equipment
- 4.3.2 Good Housekeeping Practices
- 4.3.3 Safe Operation of Material Handling Equipment
- 4.3.4 Appropriate Storage of Materials to minimize the risk of accident or injury

4.4 Resources: Virginia Laser Corporation refers to www.osha.gov annually to ensure we follow the most up to date safety procedures.

 VIRGINIA LASER CORPORATION	Purchasing	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This program provides the general requirements and methods used by Senior Management or designee to procure products from pre-approved suppliers.

2.0 Responsibilities:

2.1 Senior Management or designee is responsible for implementation of procedures associated with Purchase Order Control. Senior Management or designee is involved in qualification of suppliers based on capabilities and historical performance.

2.2 Senior Management or designee is responsible for sourcing decisions and daily interaction with approved suppliers to determine their commitment to quality and continuous improvement.

2.3 Senior Management or designee is responsible for maintaining pre-determined inventory levels. Senior Management or designee communicates issues associated with non-conformance to their supplier contacts in order to facilitate final disposition of defective or suspect product.

3.0 Training:

Personnel involved with Procurement decisions and Purchase Order Control has a thorough understanding of this program.

4.0 Detail:

4.1 Purchase orders and the process of purchasing materials are controlled. Inventory levels of all products are closely monitored.

4.2 Senior Management or designees generate orders to suppliers. Upon request suppliers can provide Mill Test Reports.

4.3 Discrepancies are taken to Senior Management or designee for resolution.

 VIRGINIA LASER CORPORATION	Inventory Management	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This control defines the methods used by Virginia Laser Corporation to maintain accurate inventory records. The item-specific method of cycle counting is defined in the Summary of Receiving, Shipping and Counting Procedures. The records are updated automatically when materials are received, used internally, or invoiced.

2.0 Responsibilities:

- 2.1 Senior Management is responsible for training and implementation of Inventory Management procedures.
- 2.2 Inventory Control personnel are responsible for verification of quantities on randomly-selected inventory items and for making necessary adjustments in the inventory stock record.
- 2.3 Senior Management is responsible for review and approval of the monthly inventory adjustment summary report
- 2.4 Senior management is responsible for the annual audit of cycle count procedures.

3.0 Training:

- 3.1 Operations personnel are trained on the procedures for inventory management, cycle counting, and adjustments to the inventory record.

4.0 Detail:

- 4.1 Each item stocked at Virginia Laser Corporation is counted on a monthly cycle.
- 4.2 Senior Management instructs what materials are to be counted.
- 4.3 Inventory Control personnel search stocking locations, overflow areas and staging or lay down areas to ensure an accurate count.
- 4.4 The total count is recorded on the appropriate blank on the cycle count form.
- 4.5 The inventory stock record is reconciled based on the physical count results. Items are updated on the same day they are counted.
- 4.6 Adjustments automatically update the perpetual inventory records.

 VIRGINIA LASER CORPORATION	Tool Calibration	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This program establishes the methods and practices to be used by Virginia Laser Corporation for the control and calibration of Inspection and Measurement tools.

- 1.1 Tape measures used in product acceptance or to verify cut to length materials are inspected weekly for accuracy, functionality and damage. Tape measures that are found to be unacceptable will be discarded and replaced. Radius gages, rulers and other such devices are NOT governed by a need for calibration. The Senior Management Team will evaluate reference tools periodically for damage that could result in false measurements. These items will be replaced as accuracy or legibility of such devices is suspected.
- 1.2 Calipers are replaced with new factory calibrated devices annually.

2.0 Responsibilities:

- 2.1 Senior Management or designees are responsible for the implementation and maintenance of a calibration program for instruments used in acceptance of product and inspection of processed components.
- 2.2 Operations personnel are responsible for notifying Senior Management of defective tools.

3.0 Training:

Operations personnel will be trained and have a thorough understanding of this program.

4.0 Detail:

- 4.1 Measuring and Inspection equipment used during the acceptance of product or the inspection of processed components can be hand-held or fixed equipment. Handheld calipers and micrometers shall be calibrated to standards traceable to National Institute of Standards and Technology (NIST) at prescribed intervals and appropriately identified. Personal equipment shall not be used.
- 4.2 When a determination is made that an instrument is suspect of or is found to be out of calibration, it shall be removed from service and replaced.

 VIRGINIA LASER CORPORATION	Internal Audit	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This control defines the criteria, scope and methods used to conduct internal quality assurance audits. The goal of the internal audit program is to verify compliance with controls, procedures and work instructions. In addition, the audit uncovers opportunities for improvement and best practices.

2.0 Responsibilities:

2.1 Senior Management is responsible for the planning and performance of bi-annual evaluations at Virginia Laser Coproration. The audits focus on activities and documentation related to the QA program as reported in the Quality Assurance Manual.

2.2 Senior Management and Operations Personnel will participate in the internal audit exit meeting.

2.3 Senior Management is responsible for conducting root-cause analysis of deficiencies uncovered as part of the internal audit process.

3.0 Training:

3.1 Senior Management and Operations Personnel will have a thorough understanding of the internal audit process.

4.0 Detail:

4.1 The internal QA audit program consists of three parts:

4.1.1 Document Review

4.1.2 Observation of controls, procedures and work instructions

4.1.3 Exit meeting to review observations and findings with Management representatives. Key Performance Indicators (KPI's) are discussed along with a summary of the sales order documents reviewed. Finally, past Corrective Action projects are reviewed for the purpose of closure. Senior Management makes recommendations for future corrective action projects to be conducted based on deficiencies found during the audit process. ***See QA Forms – Internal Audit template***

- 4.2 For document review, randomly-selected order files are pulled and reviewed for proper documentation including dimensioned drawing or customer print, work order, and completed inspection sheet. Work order information must include verification of quantity, source material type, extra processes noted.
- 4.3 With regard to floor observations, an evaluation of shift-specific procedures and work instructions is conducted in the following areas:
 - 4.3.1 Safety Procedures
 - 4.3.2 Receiving Procedures
 - 4.3.3 Material Identification
 - 4.3.4 Processing Procedures
 - 4.3.5 Pulling, Loading, and Shipping Procedures

 VIRGINIA LASER CORPORATION	Corrective Action	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This control defines the methods to identify and document opportunities for improvement within the Quality Management System. Corrective Action and Developmental Action are improvements to procedures implemented to eliminate causes of nonconformance or to promote efficiency. The concept focuses on root cause analysis to determine origin and prevent reoccurrences.

2.0 Responsibilities:

- 2.1 Senior Management is responsible for the implementation and oversight of the Corrective Action process.
- 2.2 Sales representatives are responsible for initiating corrective action documentation when prompted by a customer complaint or return of product.
- 2.3 Operations personnel is responsible for the completion and documentation of Corrective Action projects resulting from the internal audit process.
- 2.4 Senior Management is responsible for submitting and tracking Corrective Action projects as part of the internal audit process. QA designees may also participate in corrective or developmental Action projects generated by customer concerns or employee suggestions.

3.0 Training:

- 3.1 All Virginia Laser Corporation employees are encouraged to offer suggestions with regard to improved safety or enhancements to job-specific duties.
- 3.2 Sales personnel have a thorough understanding of the corrective action process as it pertains to customer complaints and/or material returns.

4.0 Detail:

- 4.1 When program deficiencies are discovered, an investigation is performed to determine the root cause of the issue. Determination of the root cause dictates the direction of the procedural review.
- 4.2 Factors that can generate investigation include returns, complaints, audits, calibration discrepancy, and failure to meet customer specifications.
- 4.3 To begin the process, a Corrective Action report may be initiated by the QA Designee or any Virginia Laser Corporation employee.

- 4.4 Changes are proposed and reviewed for implementation to prevent recurrence or to improve performance.
- 4.5 After changes are implemented, a follow up with Senior Management is conducted to determine the effectiveness of the change. If the result is an effective change to the QA Procedure, the adjustment is noted in the Corrective Action report and signed by the Operations Personnel as well as Senior Management. If any changes are deemed customer-specific, the information is also added to the customer-specific instructions which print on every work copy for the shop. Results will also be evaluated for effectiveness with related procedures.
- 4.6 Developmental Actions are projects implemented to promote operational efficiency.

 VIRGINIA LASER CORPORATION	Indoctrination and Training	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This control communicates the reference tools and methods used to introduce Siskin Steel employees to quality assurance objectives and job-specific duties.

2.0 Responsibilities:

2.1 The Human Resources Department is responsible for the testing and evaluation of job applicants. New hires are communicated to the Quality Assurance Department to allow for Indoctrination and Review of job-specific responsibilities. Human Resources maintain training records for each active employee.

2.2 The Quality Assurance Department is responsible for conducting and documenting the following QA-related training:

2.2.1 Introduction to Siskin Steel’s Quality Assurance Program

2.2.2 Review of Siskin Steel’s QA Manual, latest revision

2.2.3 Introduction to the Barcode Inventory Management System

2.2.4 Review of job-specific work instructions

2.2.5 Shop Floor Processing Management (Equipment Operators)

3.0 Training:

Siskin Steel employees will have a thorough understanding of the Quality Assurance program and their job-specific duties that impact quality and customer service.

4.0 Detail:

4.1 As part of new hire orientation, new employees to Siskin Steel are introduced to the Quality Assurance Manual and the objectives of the Quality Management System.

4.2 Warehouse personnel continue their training by “shadowing” a supervisor or veteran employee to obtain job-specific knowledge of duties and responsibilities. Safety topics such as overhead crane operation and proper lifting techniques are emphasized along with material identification procedures and documentation requirements.

4.3 Training on shop floor data collection, new procedures and other QA topics will be provided as needed and documented on the Training Sign-in sheet.

4.4 Division Management is encouraged to develop training programs for new hires in the areas of sales and administration.

4.5 Sales personnel are introduced to the ERP system through a training portal which allows data input without paperwork production or impact on the inventory record. A Training Sign-in sheet provides a record of sales meetings and topics discussed.

4.6 Employee training records provide a platform for performance reviews and career path evaluations.

 VIRGINIA LASER CORPORATION	Records Retention	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This quality control defines the Virginia Laser Corporation parameters for retention of records. Documents associated with Quality Assurance are stored electronically and backed up daily. All accounting and personnel files are maintained and stored off-site at CPA firm.

2.0 Responsibilities:

Senior Management or designee is responsible for the maintenance of the programs associated with retention of records.

	Description	Number of Years
Invoices & Sales Documents:		
	Sales invoices to customers and Credit Memos	7 + current
	Purchase orders	7 + current
	Mill Test Reports	7 + current
Safety:		
	Accident Reports/Injury Claims	7 + current
	Fire Inspection and Safety Reports	7 + current
	Material Safety Data Sheets	permanent
	OSHA & Training documents	permanent
Employment:		
	Personnel Corrective Action	Employment + 7

 VIRGINIA LASER CORPORATION	Receiving	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose

The following procedure defines the methods used by the receiving personnel to ensure proper receipt of incoming products from distributor or subcontractor.

2.0 Responsibilities

- 2.1** Receiving personnel is responsible for reviewing and verifying delivery paperwork
- 2.2** Production personnel are responsible for performing receipt inspection to verify product, quantity and documentation.
- 2.3** Production personnel are responsible for notifying management immediately of any discrepancy or non-conformance issue.

3.0 Training

All personnel are trained on the procedures of receiving materials or subcontracted products.

4.0 Procedures

- 4.1** Receiving personnel review incoming shipment paperwork and verify product matches description listed.
 - 4.1.1 Receiving personnel inspect material for correct quantity, grade, flatness and surface condition raw materials.
 - 4.1.2 Receiving personnel inspect subcontracted products for correct quantity.
- 4.2** Production personnel places inventory/Product in the correct storing location.
- 4.3** Production personnel verify subcontracted product conforms to customer's print.
- 4.4** Production personnel identify any defect or non-conforming items and place them in a quarantined location and management is notified.
- 4.5** Management or designee notifies the responsible parties and awaits further instruction from the Supplier or Subcontractor.

 VIRGINIA LASER CORPORATION	Product Identification	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

The purpose of this procedure is to provide a method for ensuring materials used to fulfill customer orders are easily identified and accessible for production personnel. As well as provide traceability on raw materials.

2.0 Responsibilities:

- 2.1 Production personnel are responsible for marking and placing raw materials in designated areas.
- 2.2 Production personnel are responsible for legibly marking all drops and maintaining an organized drop station/rack
- 2.3 Production personnel or designee is responsible for maintaining customer stock in designated area.
- 2.4 Management or designee is responsible for saving Mill test reports in designated Network file for easy accessibility.

3.0 Training:

- 3.1 All personnel will hold a thorough understanding of this procedure.

4.0 Procedure:

- 4.1 Mill test reports are saved to Network file by office personnel once supplier has provided.
- 4.2 Upon receipt stock materials are marked and placed in designated area until items can be stored in stock locations.
- 4.3 Customer provided raw materials are marked and stored in separate location from our stock material.
- 4.4 Blanket order and customer stock parts are stored and maintained in the designated space for these items.
- 4.5 Inventory counts are conducted on a regular basis to maintain all stock items.

 VIRGINIA LASER CORPORATION	Nonconforming Material	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This procedure provides the method for identification and control of non-conforming stock materials.

2.0 Responsibilities:

- 2.1 Production personnel is responsible for notifying management of the non-conformance
- 2.2 Management or designee is responsible for contacting the supplier or subcontractor and following through until issue has been resolved.

3.0 Training:

All personnel will have a thorough understanding of this procedure.

4.0 Detail:

- 4.1 Incoming product is visually inspected for damage or defect.
- 4.2 Material determined to be non-conforming is marked and moved to quarantined area.
- 4.3 Production personnel notify management of the non-conforming material.
- 4.4 Management or designee contacts supplier.
- 4.5 Instructions are then provided to production personnel on how to address the non-conforming material.
 - 4.5.1 Material is Returned to Vendor
 - 4.5.2 Material is Scrapped

 VIRGINIA LASER CORPORATION	Sales Order Review	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This procedure defines the sales order/purchase order/contract review processes implemented to ensure that customer requirements are defined and understood throughout the organization. Customer requirements are initially determined and clarified during the quotation process then formalized through the contract review process.

2.0 Responsibilities:

- 2.1 Management has the responsibility for implementing and adherence to the sales order/purchase order/contract review process.
- 2.2 Sales personnel are responsible for oversight of the sales order review process.
- 2.3 Virginia Laser Corporation customers are responsible for the communication of requirements regarding material specification and tolerances, documentation, packaging and delivery.
- 2.4 Sales personnel are responsible for obtaining customer requirements and confirming alignment with Virginia Laser Corporation capabilities.
- 2.5 Sales personnel are responsible for confirming order receipt to customer.

3.0 Training:

- 3.1 Management and Sales personnel are trained on the procedure for review and acceptance of customer orders and contracts.
- 3.2 Management or designee is responsible for communicating any changes to Virginia Laser Corporation that may influence order acceptance.

4.0 Detail:

- 4.1 Orders and inquiries are obtained via direct customer contact, phone, fax, e-mail or electronic data interchange.
- 4.2 A sales representative evaluates the request to align customer requirements with Virginia Laser Corporation capabilities and provides a quotation to customer.
- 4.3 A purchase order contract awarded by the customer prompts the sales representative to convert quotation into Work Order. Order details including quantity, item description, part number, delivery date, PO#, packaging/shipping requirements and if certs are required is noted on work order cover sheet.

- 4.4 All corresponding prints and documentation for completing customer's requirements are assembled in a Work Order Packet.
 - 4.4.1 Prints are provided by customer.
 - 4.4.2 Prints created by Virginia Laser are included with customer approval noted.
- 4.5 Work order packet follows parts throughout the production process until completion and is returned to management.

 VIRGINIA LASER CORPORATION	Programming	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

The following procedure defines the methods used by processing Sales, Programming and Production personnel to create and review job specific order packets for the fabrication of processed parts.

2.0 Responsibilities:

- 2.1 Sales representatives are responsible for reviewing customer request for quote and confirm alignment with Virginia Laser Corporation capabilities.
- 2.2 Programming is responsible for reviewing customer drawings, converting into CNC software and nesting parts from source material.
- 2.3 Production personnel are responsible for reviewing the cut Program and Work Order for accuracy of dimensions, quantities and inspection of parts during fabrication.

3.0 Training:

Programming and Production personnel are trained on the procedures associated with Diamond Soft programming, work instruction and have a thorough understanding of this procedure.

4.0 Procedure:

- 4.1 The sales representative reviews a customer’s request for the quotation of processed parts. Sales may gather input from the programmer regarding equipment capabilities, achievable tolerances, etc. to generate a response.
- 4.2 After customer has awarded the project with written or verbal purchase order, sales receives the customer’s engineered drawing in CAD or PDF file format.
 - 4.2.1 If customer provides a sketch or physical sample Virginia Laser Corporation will create a cut file from these items.
 - 4.2.2 The customer has to provide approval on created cut file before Virginia Laser Corporation will proceed on order.
- 4.3 Programming verifies scale by provided dimensions. If no dimensions are noted it is assumed that DXF file is accurate and parts are cut to file size.
- 4.4 Programming creates nest based on the quantities listed on Work Order.
- 4.5 Work Order packet is placed in a lineup to be worked. All extra processes are noted on Work Order cover sheet.

 VIRGINIA LASER CORPORATION	Processing Equipment Operator	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This procedure defines the methods and documentation used by Equipment Operators to fabricate processed parts.

2.0 Responsibilities:

2.1 Equipment operator is responsible for reviewing order for accuracy, preparing table for processing and in-process inspection of fabricated parts.

2.2 Equipment Operator, Material Handler or designee is responsible for locating source material and safely loading Equipment operators table for processing.

3.0 Training:

Production personnel are cross trained on the procedures associated with CO2 Laser cutting, CNC Press Forming/Bending, Drilling, Tapping, Countersinking, MIG welding, De-burring and Vibratory finishing.

4.0 Procedure:

- 4.1 Operator locates cut program on Network Drive.
- 4.2 Work order special instructions and line comments are reviewed.
- 4.3 Operator sets up a new job or continues a job already in process.
- 4.4 Equipment Operator or Material Handler or designee locates source material and then by reason of physical inspection with the use of calipers the correct material is loaded on table.
- 4.5 Equipment table and source material are prepared for processing. The operator loads cut program from Network Drive.
- 4.6 Operator identifies critical characteristics against work copy description and/or customer print. Operator begins processing and inspects first part. Measurements are recorded and initialed on inspection sheet. If accurate, the operator proceeds with completion of the work order and required inspections.
- 4.7 Finished parts are identified with markings or tags and moved to the parts cleaning area, if applicable, for cleaning and packaging. Legal drops are identified with material grade, description and then restocked for future use.

(Customer specific identification procedures are followed if applicable)

4.8 Operator reviews inspection sheet for completion of required data, verifies piece count and closes job.

 VIRGINIA LASER CORPORATION	Standard Packaging	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

In the absence of customer-specific packaging instructions, production personnel will refer to the following standard packaging procedures.

2.0 Responsibilities:

Production personnel or designee are responsible for ensuring proper packaging of fabricated parts.

3.0 Training:

Production personnel and Equipment Operators are trained on the procedures associated with packaging of fabricated parts.

4.0 Procedure:

4.1 Fabricated parts are to be packaged either by skid or dual walled cardboard boxes based on customer shipping specifications.

4.1.1 Fabricated parts packaged on skids are to be wrapped neatly and securely with multiple layers of stretch wrap.

4.1.2 Fabricated parts packaged in boxes are to be wrapped or bagged to prevent lost parts if exterior carton is damaged. Packages are not to exceed 50 lbs. each.

4.2 Fabricated parts are to be packaged in new boxes or on undamaged skids

4.3 Packages are to be filled with filler paper to avoid any space for parts to shift and potentially break packaging.

4.4 Cones are to be placed on all skids instructing Freight Carriers to not stack skids during transit.

4.5 All packages/Skids are to include packing slips detailing what is included in shipment.

 VIRGINIA LASER CORPORATION	Packaging-Special Handling	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

In the absence of customer-specific packaging instructions, production personnel will refer to the following special handling packaging procedures for aluminum, stainless steel or coated parts.

2.0 Responsibilities:

Production personnel or designee are responsible for ensuring proper packaging of fabricated parts.

3.0 Training:

Production personnel and Equipment Operators are trained on the procedures associated with packaging of fabricated parts.

4.0 Procedure:

4.1 Fabricated parts are to be packaged either by skid or dual walled cardboard boxes based on customer shipping specifications.

4.1.1 All aluminum or stainless parts are to be free of and burr or slag before packaging/shipping

4.2 Fabricated parts are to be wrapped individually or wrapped together in small lots to ensure minimal movement that could cause surface damage. Foam sleeves or sheets can also be used to further protect surface quality.

4.3 Packages are to be filled with filler paper to avoid any space for parts to shift and potentially break packaging.

4.4 Cones are to be placed on all skids instructing Freight Carriers to not stack skids during transit.

4.5 All packages/Skids are to include packing slips detailing what is included in shipment.

 VIRGINIA LASER CORPORATION	In-process Inspection	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

1.0 Purpose:

This QA Control describes the methods and formulas associated with inspections of processed components during fabrication.

2.0 Responsibilities:

- 2.1 Equipment Operators and Production personnel are responsible for the review of work order instructions, dimensioned drawings and customer prints in order to identify critical characteristics associated with components to be processed. Equipment Operators are responsible for performing the in-process inspection procedure and the recording of measurements taken.
- 2.2 Inside Sales representatives and Processing Sales representatives are responsible for inquiry with the customer as to the critical dimensions and tolerance requirements of processed parts during the quoting process.
- 2.3 Operations Management is responsible for implementation and monitoring of the in-process inspection procedure.
- 2.4 Management is responsible for conducting Document Review as part of the internal audit program.

3.0 Training:

- 3.1 Equipment Operators are trained in the use of measuring tapes and precision measurement tools required to verify critical dimensions on processed components.
- 3.2 Inside Sales and Processing Sales representatives have a thorough understanding of the quoting process which includes collection of dimensional and tolerance requirements on processed components.

4.0 Detail:

- 4.1 The processing inspection sheet is generated by programming personnel and reflects each sales order line item coded with a process to be performed.
- 4.2 The document header section notes the process to be performed and provides the sales order number.
- 4.3 The equipment operator completes fields for part number, initials, and comments
- 4.4 A Header Box is available for the operator to record Program and/or Nest number.

4.5 Each line item to be inspected contains the following information fields:

4.5.1 Customer Name

4.5.2 Part number

4.5.3 Purchase Order number

4.5.4 Material Type and Thickness

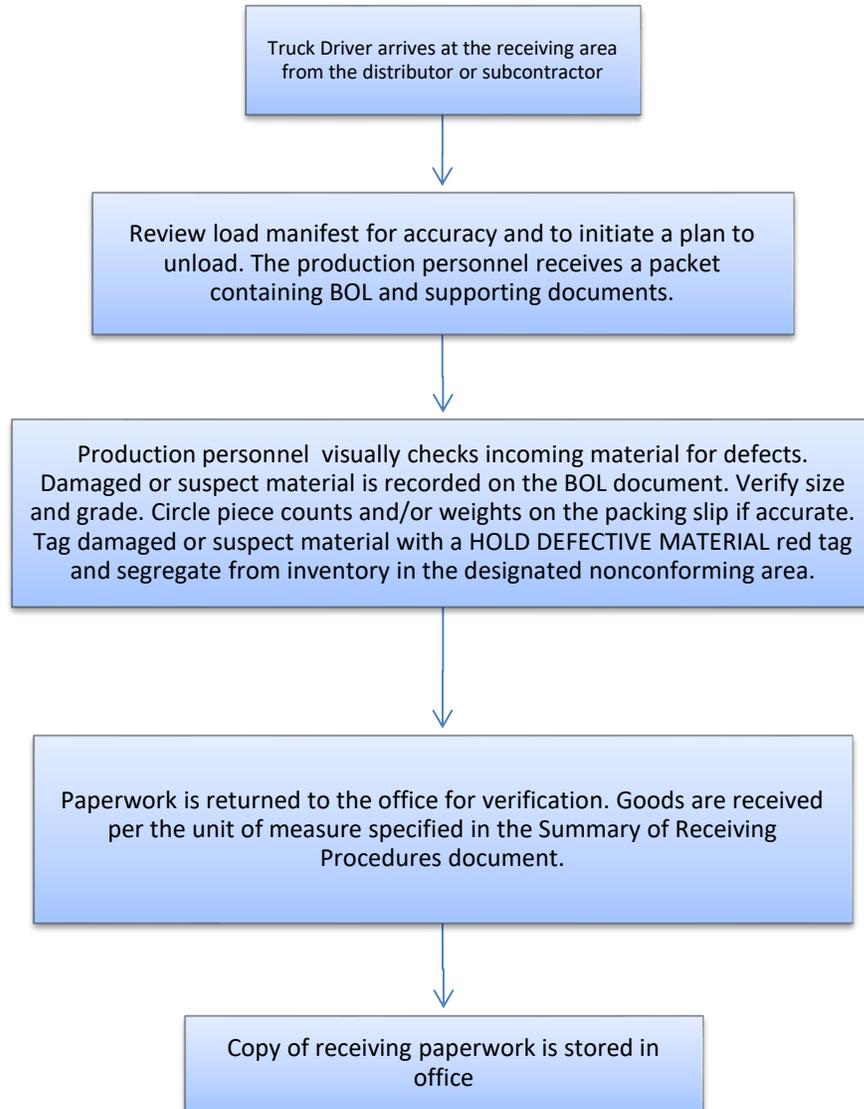
4.5.5 Overall dimensions

4.5.6 Extra Process

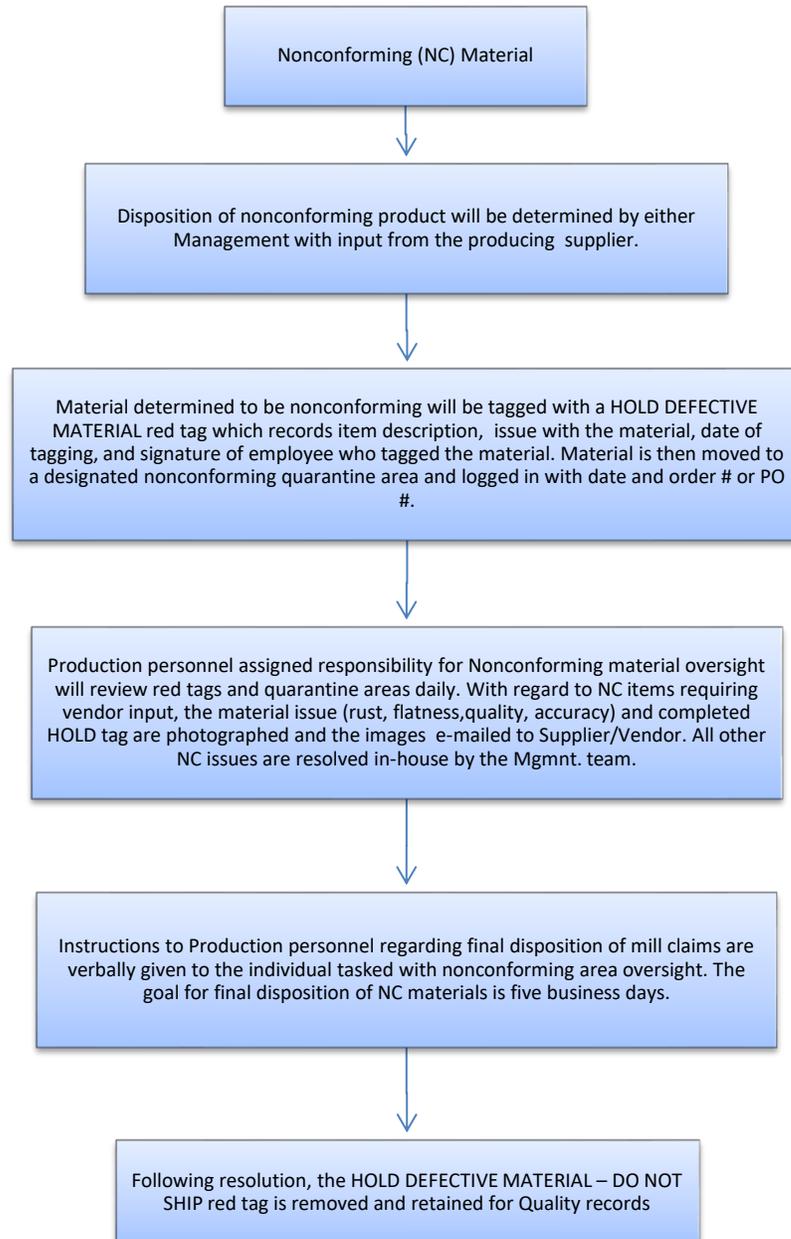
4.5.7 Part Count

4.5.8 Notes

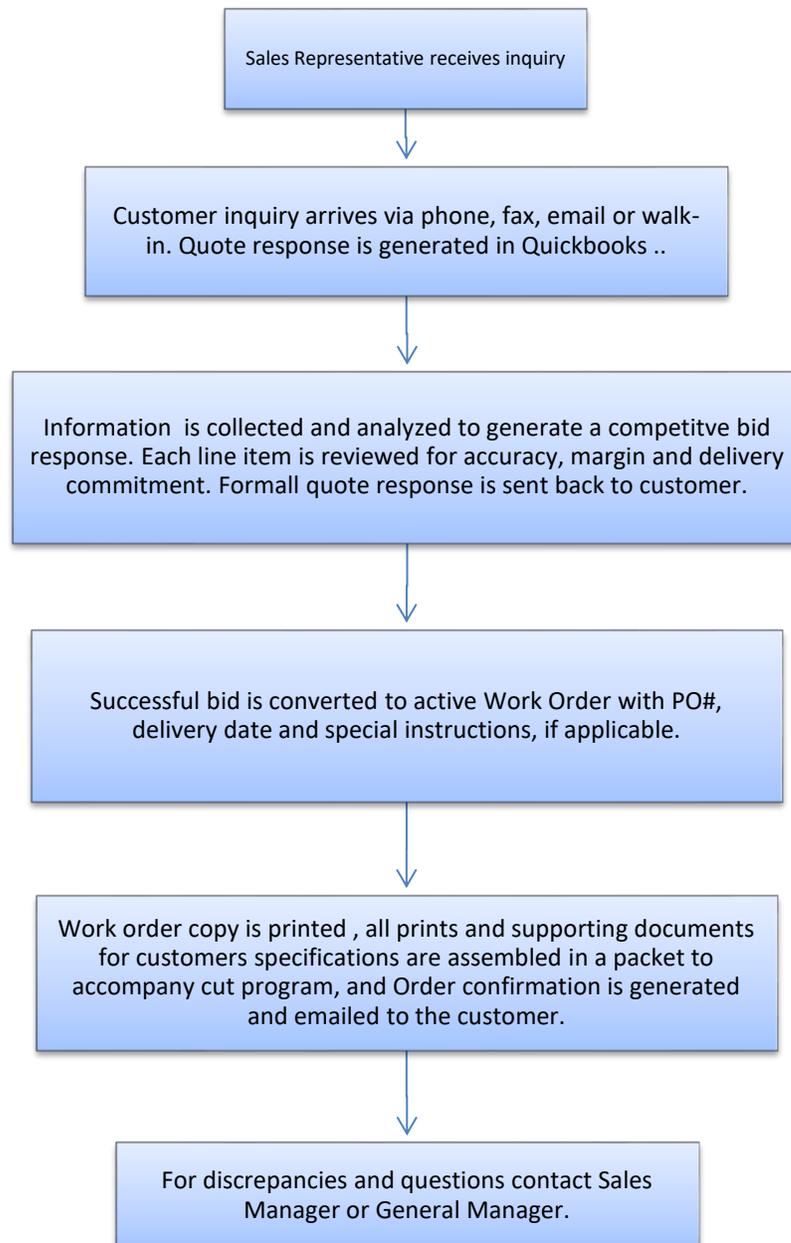
WI-RCV	Rev. 1	01/01/2019	Page 30	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Receiving Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



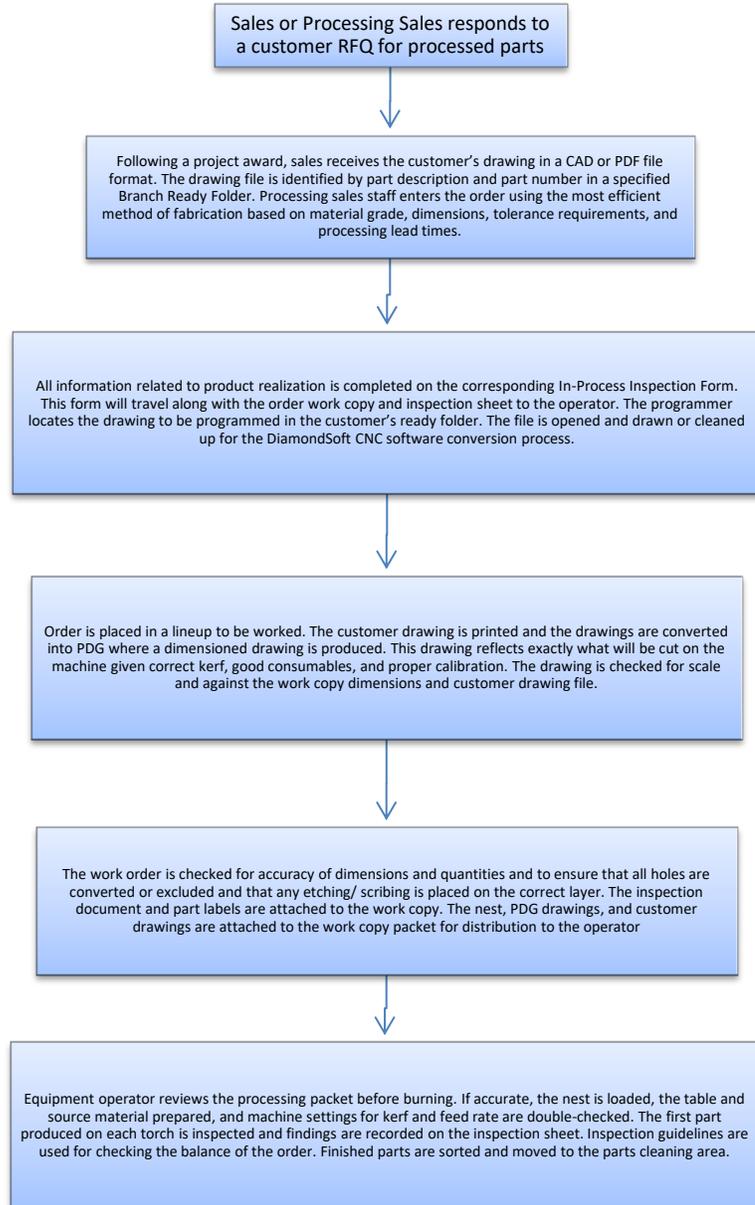
WI-NCM	Rev. 1	01/01/2019	Page 31	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Non-conforming Material Control Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



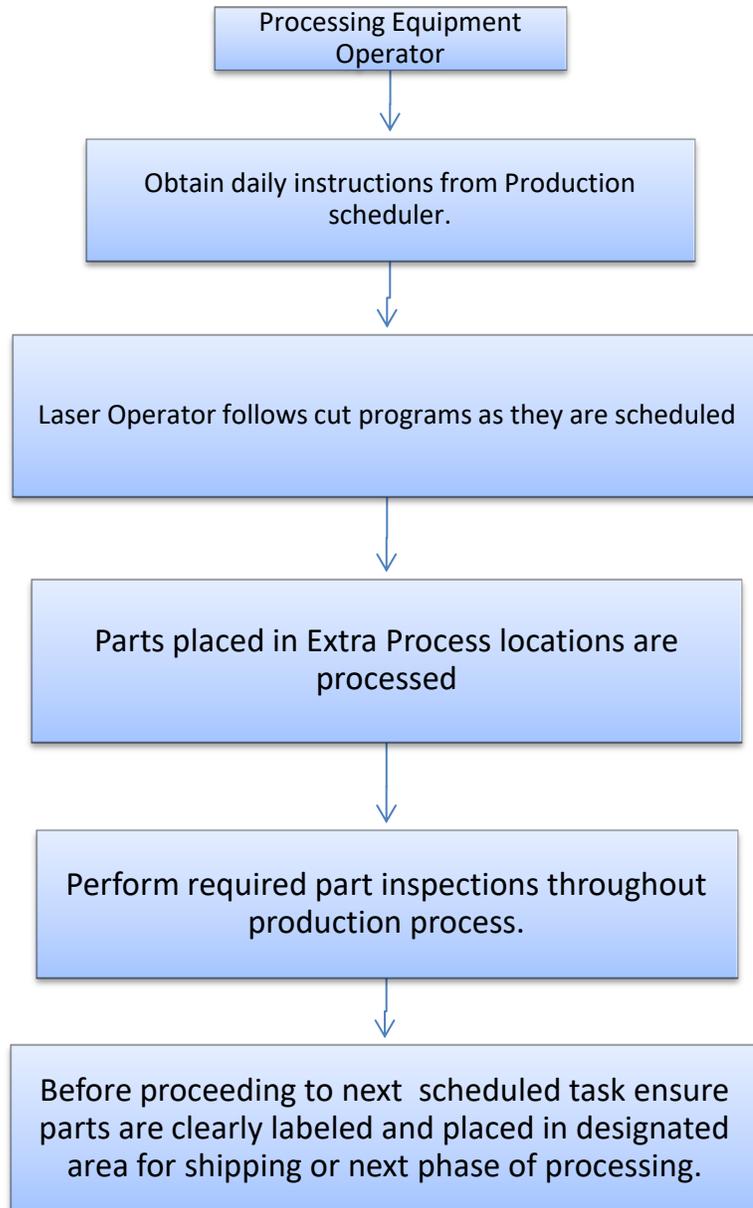
WI-OECR	Rev. 1	01/01/2019	Page 32	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Sales Order Entry/ Contract Review Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



WI-PRG	Rev. 1	01/01/2019	Page 33	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Programming Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



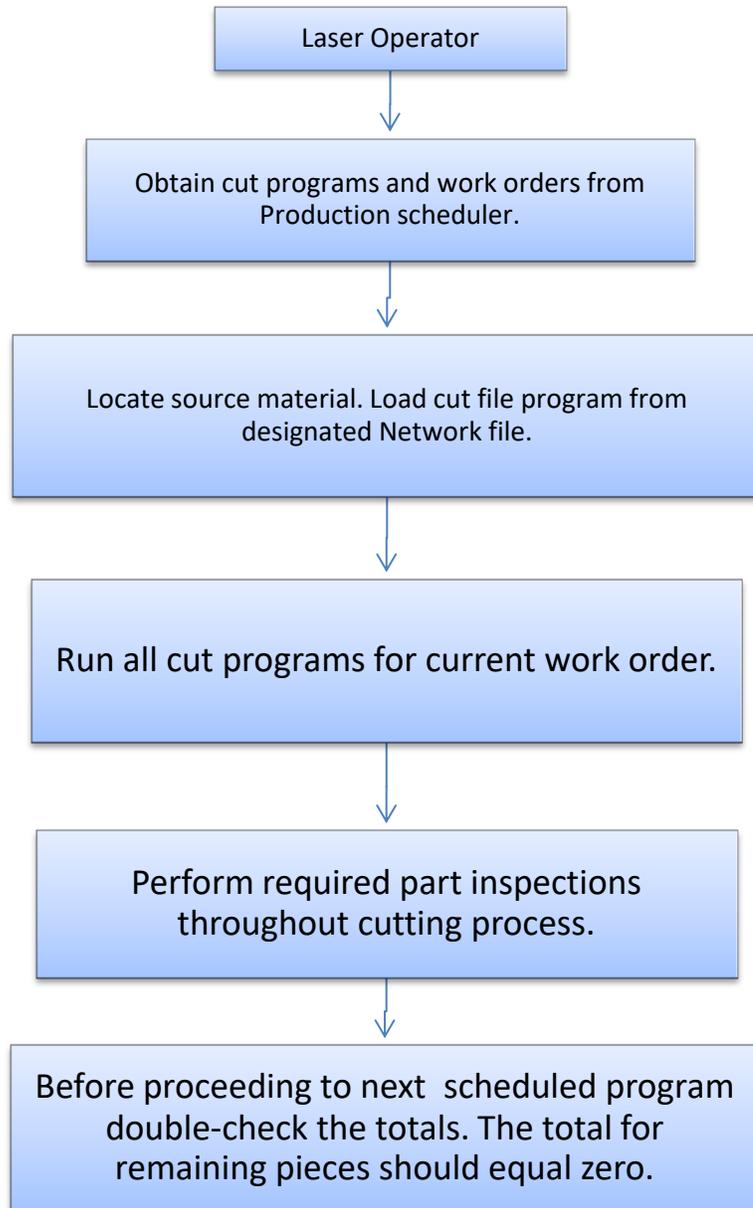
WI-SFPM	Rev. 1	01/01/2019	Page 34	 Virginia Laser Corporation Where Quality and People Matter
Shop Floor Processing Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



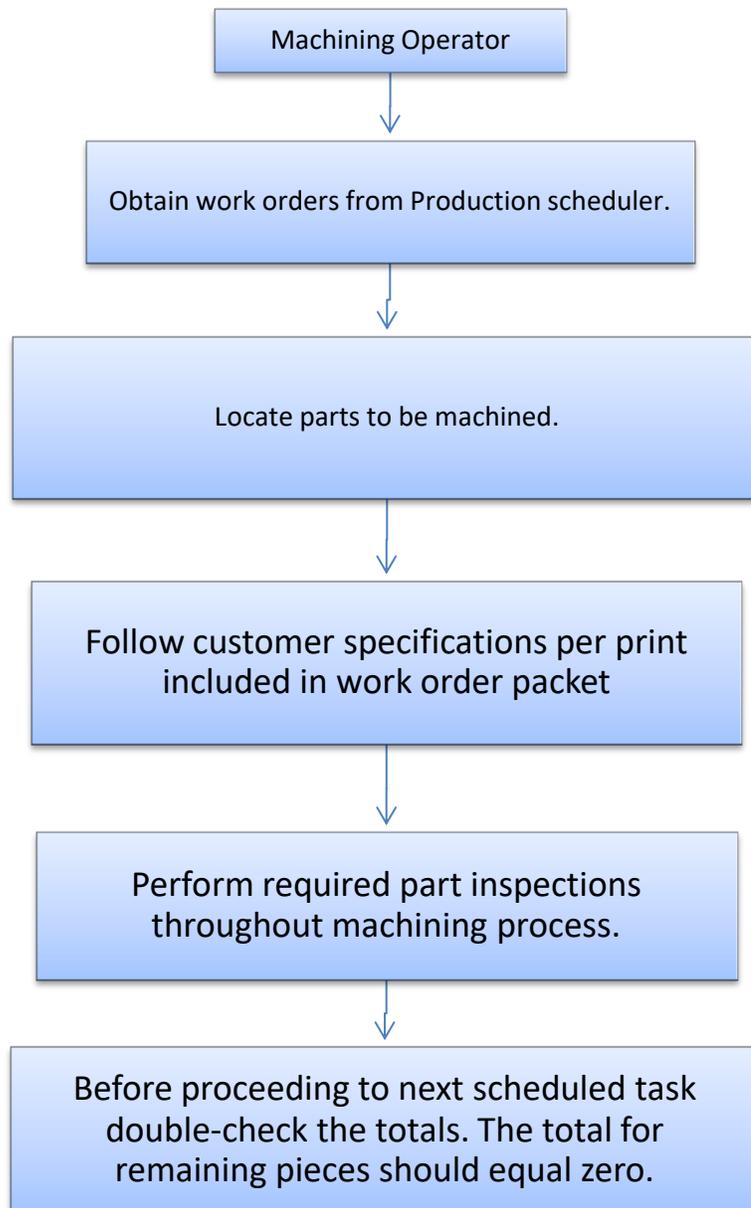
WI-SPT	Rev. 1	01/01/2019	Page 35	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Standard Processing Tolerance Guideline				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			

If tolerances on the work order are not specified, default to this standard tolerance guideline.		
Laser Cutting (Up to 1" thick)	Dimensions up to 59" wide x 119" long	+/- .004"
Forming (Up to ½" thick)	Dimensions up to 44"	+/- .030"
Machining	Drilling, Tapping, Countersinking	+/- .030"
MIG Welding	Weld Bead Circumference	+/- .250"

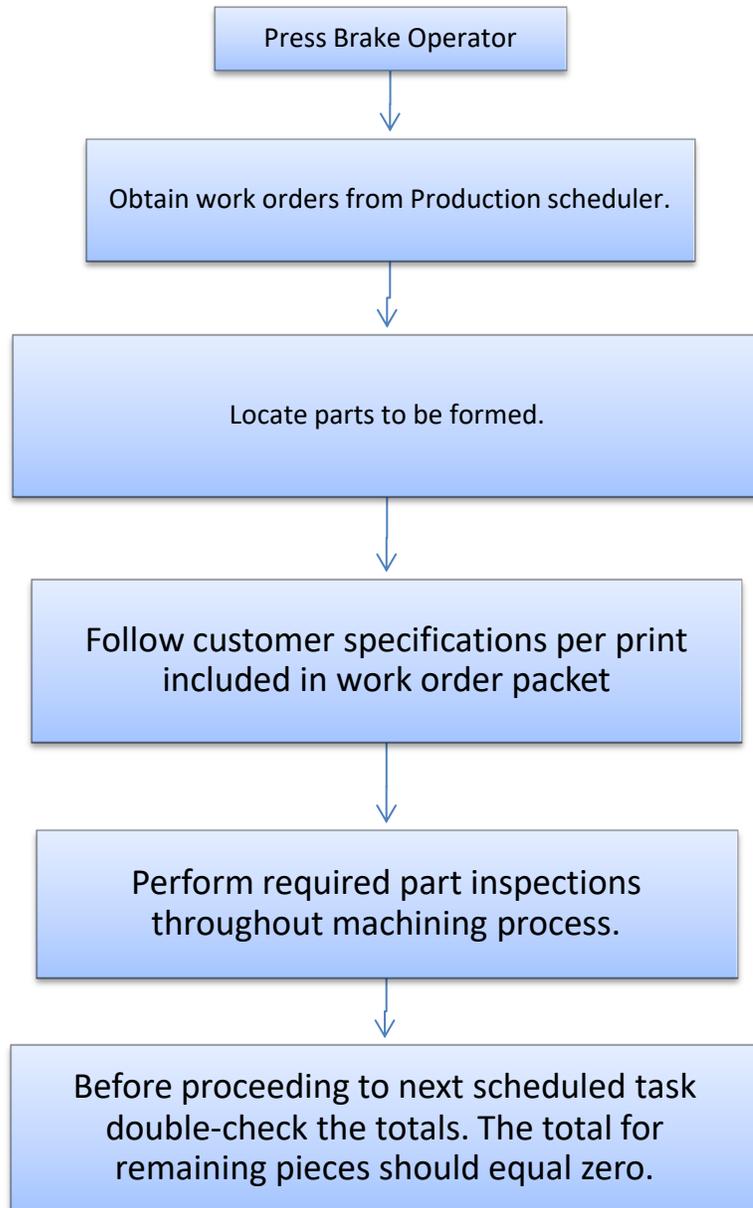
WI-LC	Rev. 1	01/01/2019	Page 36	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Laser Cutting Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



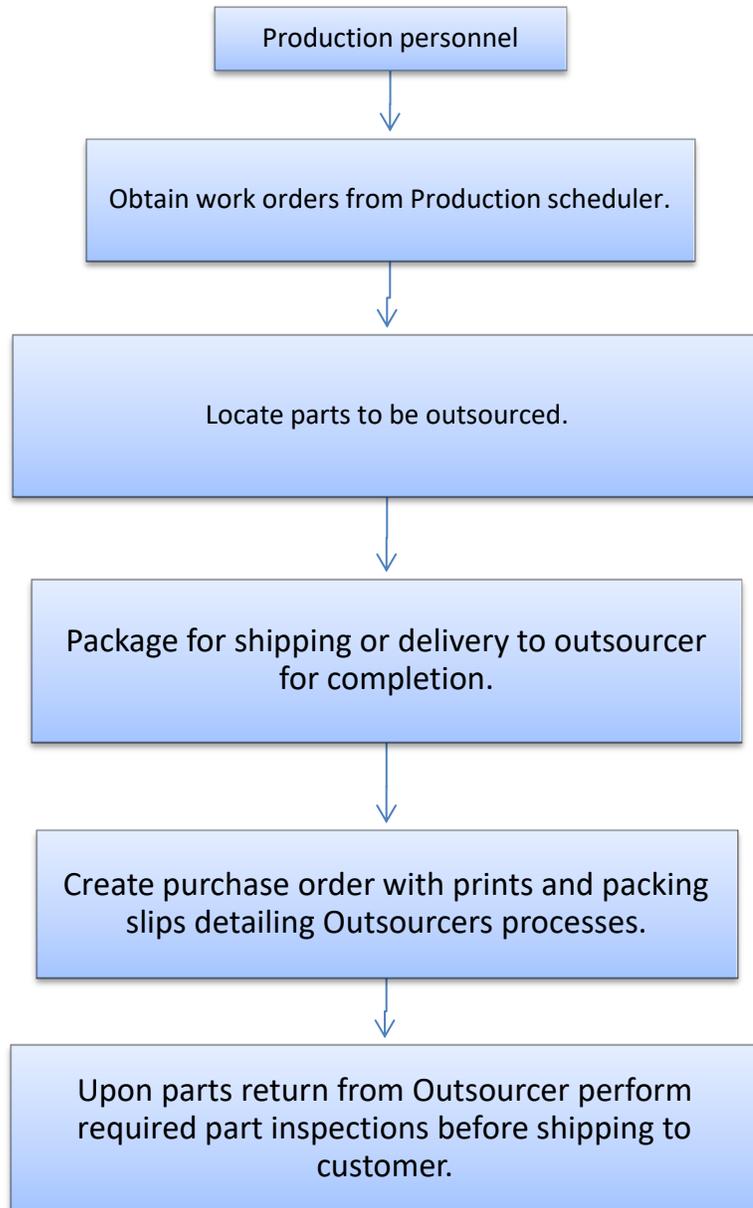
WI-LM	Rev. 1	01/01/2019	Page 37	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Light Machining Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



WI-PBF	Rev. 1	01/01/2019	Page 38	 Virginia Laser Corporation Where Quality and People Matter
Press Brake Forming Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



WI-OS	Rev. 1	01/01/2019	Page 39	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Outsourcing Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



WI-SPSH	Rev. 1	01/01/2019	Page 40	 <p>Virginia Laser Corporation Where Quality and People Matter</p>
Standard Packaging/ Special Handling Work Instruction				
Issued By	Megan Simons	Approved By:		
Controlled By	Megan Simons			



Virginia Laser Corp.
 18284 Oak Park Drive
 Abingdon, Va. 24210



Credit Memo

Date	RMA #
1/1/19	14319

Name/Address		P.O. #		Packing Slip	
Description		Qty	Rate	Amount	
SAMPLE					
			Total	\$0.00	
Phone #	E-mail		Invoices	\$0.00	
1-276-676-0056	accounting@virginialaser.net		Balance Credit	\$0.00	

Drop Schedule

Mild/Tool Steel	All thicknesses	Minimum 12" x 48" or 60"
Stainless Steel	All thicknesses	Minimum 12" x 48" or 60"
Aluminum	All thicknesses	Minimum 12" x 48" or 60"



Virginia Laser Corporation
Where Quality and People Matter

Supplier Corrective Action Request

Date Issued: _____ Location: _____

Issued By: _____

Item#/Part #: _____

Item/Part Description: _____

Va. Laser PO#: _____

Description of nonconformance: _____

What allowed the nonconformance to occur? (Root Cause Analysis):

Describe Corrective Action: _____

Completion date for implementation: _____

Supplier Corrective Action completed by: _____

Title: _____

Laser Cutting Quality Inspection Sheet

Quality Control Sheet

2019-01-02 10:19:40

Customer	bailey		
Part#	792298	Purchase Order	1258817
Material	MS07 0.18697	Part size	11.68258 x 1.6615
Extra process	bead	Part Count	70

Refer to print for checking dimensions. All dimensions on this page reference only.

Programmed by:	Revised by:	Time required to cut part
----------------	-------------	---------------------------

Laser Operator:

Part#:	Initial:	Comments:
Final Comments:		

Extra Processes:

Part#:	Initial:	Comments:
Final Comments:		

Final QC:

Part#:	Initial:	Comments:
Final Comments:		

Name / Address		 Virginia Laser Corporation Where Quality and People Matter		<h2 style="text-align: center;">Work Order</h2>			
						107890	
Date		P.O. No.		Due Date		Ship Via	
1/1/19				1/1/19			
Item	Description	Quantity	Total Piece Count				
SAMPLE							
<input type="checkbox"/> Form: In House or Outsourced (Circle One) _____				<i>Material Type</i>			
<input type="checkbox"/> Wall: In House or Outsourced (Circle One) _____				<input type="checkbox"/> Mild Steel _____			
<input type="checkbox"/> Job				<input type="checkbox"/> Stainless Steel _____			
<input type="checkbox"/> Clean By Hand				<input type="checkbox"/> Aluminum _____			
<input type="checkbox"/> Vibration				<input type="checkbox"/> Special _____			
<input type="checkbox"/> Machining In House: Drill/Tap/Comms etc. (Circle all that apply)				<i>Material Supplied</i>			
<input type="checkbox"/> Machining Outsourced: Drill/Tap/Comms etc./Chamfer/Comms etc./Other (Circle all that apply) _____				<input type="checkbox"/> By Va Laser _____			
<input type="checkbox"/> Powder Coating/Zinc Plating (Circle One) _____				<input type="checkbox"/> By Customer _____			
<input type="checkbox"/> Care MUST BE sent with shipment				<input type="checkbox"/> Special Vendor _____			

Virginia Laser
18284 Oak Park Drive
Abingdon, Va. 24210



Order/Price Confirmation

Name / Address

Ship To

Date	Work Order #		Terms	P.O. No.	Ship Via
1/1/19	107890				
Approx Delivery Date		1/1/19			
Item	Description	Ordered	Price Each	Amount	
SAMPLE					
				Total	\$0.00

Virginia Laser Corp.
 18284 Oak Park Drive
 Abingdon, Va. 24210



Virginia Laser Corporation
 Where Quality and People Matter

Quote

Date	Quote #
1/1/19	2506

Name / Address

FOB	Lead Time

Item	Description	Qty	Cost Each	Total
SAMPLE				

Due to the volatile nature of raw material at this time we can only guarantee pricing for 24 hrs.

Total	\$0.00
--------------	--------

Name / Address



Virginia Laser Corporation
Where Quality and People Matter

Stock/Inventory Replenish

Date	P.O. No.	Due Date	Ship Via
1/1/19		1/1/19	

Item	Description	Quantity	Total Piece Count
SAMPLE			

<input type="checkbox"/> Form: In-House or Outsourced (Circle One) _____ <input type="checkbox"/> Weld: In-House or Outsourced (Circle One) _____ <input type="checkbox"/> Fab <input type="checkbox"/> Clean By Hand <input type="checkbox"/> Vibratory <input type="checkbox"/> Machining In-House: Drill/Tap/Counter sink (Circle all that apply) _____ <input type="checkbox"/> Machining Outsourced: Drill/Tap/Counter sink/Chamfer/Counterbore/Other (Circle all that apply) _____ <input type="checkbox"/> Powder Coating/Zinc Plating (Circle One) _____ <input type="checkbox"/> Cert MUST BE sent with shipment	<table border="1" style="width: 100%;"> <tr> <td colspan="2" style="text-align: center;"><i>Material Type</i></td> </tr> <tr> <td><input type="checkbox"/> Mild Steel</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Stainless Steel</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Aluminum</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Special</td> <td>_____</td> </tr> <tr> <td colspan="2" style="text-align: center;"><i>Material Supplied</i></td> </tr> <tr> <td><input type="checkbox"/> By Va Laser</td> <td></td> </tr> <tr> <td><input type="checkbox"/> By Customer</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Special Vendor</td> <td>_____</td> </tr> </table>	<i>Material Type</i>		<input type="checkbox"/> Mild Steel	_____	<input type="checkbox"/> Stainless Steel	_____	<input type="checkbox"/> Aluminum	_____	<input type="checkbox"/> Special	_____	<i>Material Supplied</i>		<input type="checkbox"/> By Va Laser		<input type="checkbox"/> By Customer	_____	<input type="checkbox"/> Special Vendor	_____
<i>Material Type</i>																			
<input type="checkbox"/> Mild Steel	_____																		
<input type="checkbox"/> Stainless Steel	_____																		
<input type="checkbox"/> Aluminum	_____																		
<input type="checkbox"/> Special	_____																		
<i>Material Supplied</i>																			
<input type="checkbox"/> By Va Laser																			
<input type="checkbox"/> By Customer	_____																		
<input type="checkbox"/> Special Vendor	_____																		

Corrective & Developmental Action

Report Date _____									
Location _____									
Issued By _____									
Source	Internal Audit					Date	_____		
	Customer Complaint					Date	_____		
	Other Source _____								
Description of Issue:									
Root Cause Analysis- include Theme Selection, Narrow Down Process & Fact Finding Steps									
Proposed Action- identify short term and long term countermeasures to eliminate the issue									
Date of Implementation (ST & LT)									
Verified By _____					Date _____				

Hold Defective Material DO NOT SHIP

Purchase order # _____ Vendor _____ Heat # _____

Gauge & Size _____ WT _____ No. Pcs. _____

Description of Defect _____

Rejected by _____ Date _____

Disposition _____

Authorized by _____ Date _____

 VIRGINIA LASER CORPORATION	Revision History	
	Doc. Number	QAM-03 Rev 1
	Issue Date:	01/01/2019

Virginia Laser Corporation Quality Assurance Manual

Revision Level	Issue Date	Description of Change
QAM-01	1/1/2012	QAM format created as a basic resource guide.
QAM-02	1/1/2017	QAM format changed to start implementing ISO 9000 basis for the Quality Management System.
QAM-03	1/1/2019	QAM format changed to better reflect ISO 9000 basis for the Quality Management System. QAM Sections clearly defined as QA Controls, QA Procedures and Work Instructions. Management Approval page includes Quality Manual Control and QA Mission Statement. Internal Audit Report revised to better reflect critical areas for evaluation including “Employee QA Training”. Receiving Distributor Shipment and Receiving Vendor Buy Out Work Instructions are combined