

# Glossary



## 1.0 Applicability

This glossary has been developed to provide working definitions for acronyms, words and phrases used at St. Vrain Manufacturing. This list is not all-inclusive.

## 2.0 Glossary

- A2LA: American Association for Laboratory Accreditation.
- Accredited Laboratory: Laboratory facility that meets all requirements for competence in measuring (See A2LA, NVLAP, Guide 25).
- Accuracy: How close the indicated value is to the actual value.
- Active: In reference to the calibration system, designation for any test and measuring equipment that regular tracking reports will capture. Typically items on the production floor and accessible.
- Activity: In reference to the quality management system, an organizational unit for performing a specific function or duty.
- Adjustment: The physical movement of components in an effort to move the indicated values of the instrument under test nearer the actual value.
- Adjustment Procedure: Generally a manufacturer's manual containing adjustment sequences. St. Vrain Manufacturing calibration procedures may contain adjustment procedures.
- Approved Supplier List: List of all suppliers qualified to provide materials and services.
- APQP: Advanced Product Quality Planning (generally referring to a cross-functional team).
- AQL: (Acceptable Quality Level). Numeric value upon which sample size is determined.
- AS9100: Aerospace standard upon which the SVM QMS is based.
- ASME: American Society of Mechanical Engineers
- Audit: Investigation of the QMS to determine implementation and effectiveness of the QMS.
- Average: Mathematical value determined by summing the value of the parts and dividing by the number of parts. See Mean.
- Burr: Raised or displaced material caused by machining or handling damage.
- C equal Zero: Lot sampling inspection acceptance criteria. If a defect is found within the sample, the entire lot will be inspected for that defect.
- CAD: Computer Aided Design (such as Master Cam, Pro E, AutoCAD, etc.).

- Calibration: The comparison of a known to an unknown to determine the unknown's actual condition. Process of verifying and adjusting measuring equipment to ensure it meets required specifications.
- Calibration Interval: The time between when an item is calibrated and when it is due for re-calibration.
- Calibration Procedure: This type of procedure provides guidelines for the step-by-step calibration of measuring instruments. It may contain adjustment procedures.
- Calibration Recall System: Documented system used to control calibrated test and measuring equipment.
- CAE: Corrective Action Request.
- CBU: (Calibrate Before Use) Stored items removed from the work area. Each item in this classification must be re-calibrated before it can be used. Items in this category must be stored separately from calibrated items. Access to these items must be limited.
- CDR: (Customer Deviation Request) Document submitted to the customer requesting a variance to current specification.
- C of C: Certificate of Compliance given to customer when product is delivered.
- Certificate of Compliance: Signed statement that states product meets customer requirements.
- Certify: To attest as being true or as represented or to meet a certain standard.
- CMM: Coordinate Measuring Machine
- CNC: Computer Numeric Control.
- COE: Customer Owned Inspection Equipment loaned to St. Vrain Manufacturing to facilitate inspection of customer's parts.
- Competence: Employees have the ability and resources to satisfy customer requirements.
- Continual Improvement: Process by which the effectiveness of the QMS is continually improved through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.
- Contract Review: Process of reading the customer contract and all related documentation to ensure every aspect of the job has been studied and that there are no problems.
- Control Plan: Lists methods, controls and reactions used for process control.
- Control of Documents: Controls for initiation, implementation, revision and storage of documents.

- Correction Charts/Labels: The curves or charts identifying the actual value or deviation from the standard.
- Correction Factor: A value opposite in sign and equal in amplitude to error.
- Corrective Action: Steps taken to correct the problem when non-compliance is identified. Process to remove the cause of the nonconformity and prevent its reoccurrence.
- CPK: (Process Capability) Statistical value that indicates if a process is capable of continuing to run acceptable product.
- Cross Functional Team: Team composed of members from different disciplines, i.e.: purchasing, production, quality, and engineering.
- CSR: Customer Sales Representative.
- Customer Contract: Same as customer purchase order.
- Customer Focus: All activities based on providing the customer with the best products and services possible.
- Customer Satisfaction: Measure of how well SVM is able to satisfy customer requirements.
- Defective Material Report: (DMR) used to document product nonconformity.
- DIN: German Standards Institute.
- Dock Audit: Audit of product on shipping dock or storage to determine if all specifications have been met through entire production process, up to and including packaging, marking, data entry, etc.
- Document: Generally considered a quality record that supports the effectiveness of the quality management system.
- Documented Procedure: Where the term "documented procedure" appears within the quality management system manual, this means the procedure is established, documented, implemented and maintained.
- EHS: Environmental, Health and Safety.
- Electronic Files: As applied to product specifications, files used personnel to manufacture customer product. File types include .dwg, iges, .dxf, pdf, etc.
- Error: The difference in value between the instrument under test and the actual value.
- External Audit: Audit performed by a registrar, customer or a designated third party.
- First Article Inspection: Documented measured results for first product taken from a new setup or new process.
- Final Inspection: Verification done on product after all processing is complete and product is ready to be shipped to the customer.

- FOB: In reference to shipping and receiving, Free On Board is the point at which a shipment becomes the customer's property.
- Gage: An instrument for measuring or testing; a device for determining whether specific dimensions are within specifications.
- Grand Master: First master in the chain of traceability. Master of the highest order of accuracy.
- GRR: (Gage Repeatability and Reproducibility) A statistical study used to determine the amount of specification used by the measuring system (operator and gage).
- Guide 25: Refers to ISO 17025, Guide for Accreditation of Competence for Measuring Laboratories.
- HR: Human Resources.
- IAW: In Accordance With.
- ICO: (Initial Calibration Only) these items by design and material are calibrated during manufacture and will change only if destroyed.
- Identification: Process used to ensure product can be identified and isolated from any other like product.
- Inactive: Designation for any test and measuring equipment that regular tracking reports will not capture. Typically items in storage. These items are not on the production floor and are generally inaccessible.
- Infrastructure: Buildings, workspace, associated utilities, process equipment, including hardware and software, and support service, including transportation and communications.
- In Process Inspection: Verification done on product, at a specified point in the process, to verify that features being created at that step meet specification.
- In Use: Designation for test and measuring equipment that is active and being used to measure product.
- Inspection: Verification activity to ensure product meets customer requirements.
- Instrument: Test, measuring and diagnostic equipment used to measure, test, or otherwise gage a feature.
- Internal Audit: Audit performed by SVM personnel.
- IR: (Inspection Report) Documentation listing product specification and actual measured values.
- IRCA: International Register of Certified Auditors.
- ISO: International Standards Organization.

- ISO 9001:2000: The international standard upon which the SVM QMS was based.
- ISO Certified: Proof that the QMS meets the requirements of the applicable standard.
- Job Packet: Compilation of all documentation associated with customer contract.
- LCCN: Library of Congress Catalog Number
- Lean Manufacturing: Method of manufacturing using reduced time and materials to process product that satisfies all customer requirements.
- Limited Calibration: A calibration given a measuring instrument when an actual value exceeds the specification, or the parameter has not been calibrated because of non-use.
- Limited Life Material: Materials that have a set shelf life are no longer usable when the expiration date is past.
- Management Representative: Member of the management staff with the specific responsibility of maintaining the QMS.
- Management Review: Annual review of the QMS to determine effectiveness and plan improvements.
- Material Certification: Signed statement that material meets specified requirements.
- Mean: Mathematical value determined by summing the value of the parts and dividing by the number of parts. See Average.
- Measurement: The overall process in which a person goes through to reach a decision as to the magnitude of some value.
- Median: The middle value in the sample.
- Metrology: The science of measurement.
- Metrologist: Professional specially trained in the science of measurement.
- MIL: Military standards defining materials and processes.
- MPP: Manufacturing process plan that outlines the steps taken to process product from start to finish.
- MRB: Material review board is comprised of representatives from Sales, Purchasing, Engineering, Manufacturing and Inspection and convenes to make decisions concerning nonconforming product.
- MRR: (Material Review Request) Documentation requesting that failure to meet specification be reviewed and a decision made as to the disposition of the affected product.
- MRS: (Metrology Recall System) A computer based software package used to track measuring instruments due for calibration.

- NAMAS: British Standards Institute.
- NADCAP: National Aerospace and Defense Contractor Accreditation Program
- NCR: (No Calibration Required) Any measuring instrument by its nature or use that does not provide for accuracy of measurement.
- NIST: (National Institute of Standards and Technology) United States Government Agency maintaining measurement standards of the highest order and providing national traceability to international measurement standards.
- Nominal Value: This is normally the target value.
- Noncompliant: Products or processes that fail to meet requirements.
- Nonconformance: Process, product or material that fails to meet specification.
- Nonconforming Material: Material that fails to meet specification.
- Nonconforming Product: Product that fails to meet specification.
- NOOOTC Letter: (Notification of Out of Tolerance Condition Letter) This document is used to notify user of test and measuring equipment that the item described was received out of specification and may have been used to accept non conforming product.
- NVLAP: (National Voluntary Laboratory Accreditation Program) Accreditation program for competence administered by NIST.
- Obsolete: Designation for test and measuring equipment that has been scrapped or taken home and is no longer in the calibration recall system.
- OEM: Original Equipment Manufacturer.
- ORG Chart: Organization chart showing top management inter-relationships and responsibilities.
- Out source: The use qualified suppliers when special processes are required that are beyond the scope of SVM capabilities.
- Packing Slip: As applied to SVM shipping, this document contains all job information and quantity being shipped.
- Para: Refers to paragraph in quality management system documentation.
- PFMEA: Process Failure Mode and Effects Analysis.
- PIE: Personal Inspection Equipment owned by company employees and used to verify compliance to specification of production parts.
- Positive Identification: As applied to nonconforming product, product is tagged in a manner so that there is no doubt as to what the condition of the product is.

- Preventive Action: Process used to eliminate cause of potential nonconformance to prevent its occurrence.
- Process: Set of activities intended to reach a defined goal or objective.
- Process Certification: Signed statement that a process meets specified requirements.
- PPAP: Production Part Approval Process.
- PPK: (Preliminary Process Capability) Statistical value used to determine if a proposed process is capable of producing acceptable product.
- Precision / Repeatability: i.e.: a measurement made a number of times with nearly the same value read each time is a precise and repeatable measurement, however, the reading may all be wrong. Do not confuse precision and repeatability with accuracy.
- Preventive Action: Steps taken to modify engineering, machines and processes to ensure that non-compliance conditions don't occur.
- Process Control: Methods used to determine process results, identify outside influences, and aid in making informed changes to improve the process.
- Product: Result of activities or processes.
- Product Realization: The entire process required for producing a product or service that satisfies all customer requirements.
- Purchase Order: Document from purchasing department to supplier to buy product.
- Purchase Requisition: Document requesting purchasing department to initiate the process to procure product.
- Purchasing: Process for obtaining the materials required for satisfying customer requirements.
- QMS: Quality Management System.
- QS2 Documents: Quality System Level 2 Documents that define who, what and when in the quality system.
- Quality Assurance: Department implementing techniques used to ensure all processes would perform to specification and produce and acceptable product.
- Quality Clause: Statement on customer contract that specific quality requirements apply to the product. These requirements are found elsewhere.
- Quality Document: Any document provided by a supplier or customer or any internal document which will have data recorded on it
- Quality Level: Numeric indicator of the percentage of product that can be sampled and indicate no nonconforming product is present in the lot based on zero defects found.
- Quality Management System: System of policies and procedures that govern the way we do business.

- Quality Manual: A document that states, in general terms, how SVM meets the requirements of the applicable ISO standard.
- Quality Plan: Document that details how quality will be achieved, controlled and verified.
- Quality Planning: The process of investigating, identifying, and putting in place everything required to reach product realization.
- Quality Policy: Defines commitment to product quality and continuous improvement.
- Quality Record: Any document that contains information concerning a decision or process that affects product quality and can be used to determine process effectiveness.
- Quote Folder: Folder which contains all information and documentation concerning a quote for a customer.
- Range: Mathematical value that is the difference between the lowest value and the highest value in the sample.
- Receiving Inspection: The inspection of items received from a supplier not associated with St. Vrain Manufacturing. These items will have been manufactured in accordance with drawings and specifications provided by St. Vrain Manufacturing.
- Record: Any document that can support the evaluation of the effectiveness of the quality management system.
- Reference Standard: Instruments of the highest order. These instruments are used to calibrate working standards. Generally these instruments have been calibrated by an outside source of calibration.
- Red Line: Revised document that exists only in a temporary approved state. Used to manufacture customer product in lieu of a controlled document from the customer's engineering system.
- Resources: Anything required by the process in order to reach the goal or objective. Includes manpower, raw material, machines, etc.
- Rework: Disposition on nonconforming product where modifications must be made before the discrepant parts can be returned to the order containing good parts.
- RFQ: Request for quote is an inquiry made by a potential customer to determine capability, pricing and delivery on a desired product.
- Root Cause: Basic cause of a nonconformance.
- Router: Documentation that identifies product and travels with product. Identifies and defines each step product goes through.
- SCAR: (Supplier Corrective Action Request) Form from our customer used to acknowledge noncompliance to specification, the cause and what steps have been taken to prevent reoccurrence of the noncompliance.

- Scrap: Disposition on nonconforming product where nonconforming product cannot be economically reworked and nonconforming product is thrown away.
- Segregate: As it applies to nonconforming product, nonconforming product is separated and isolated from conforming product to prevent any nonconforming product being shipped to the customer.
- Serviceability: Capability of an item to properly operate within controlled parameters.
- Source Inspection: Customer will make arrangements to come to SVM to verify product meets customer requirements.
- SPC: (Statistical Process Control) Process of using measured data, mathematically analyzing it, and based on results deciding if a process is in or out of control and what should be done.
- Special Process: Process subcontracted to a supplier such as: heat treat, tensile pull test, dye penetrant test, plating, ultrasonic testing, etc.
- Specification: Document that describes the condition that represents acceptable product.
- SRD: Supplier request for deviation. Determine usability of nonconforming parts.
- Standard: Anything taken as a basis of comparison.
- Standard Procedure: This type of procedure sets specific requirements or assigns responsibility to specific individuals.
- Statistical Tolerance: Modified tolerance applied to a dimension to control SPC analysis.
- Supplies: Include, without limitation, raw material, components, intermediate assemblies, service, special processes, and end products.
- Test and Measuring Equipment: Any item used to measure, gage, or test product.
- TIM: Technical Interchange Medium
- Tolerance: The amount an item can deviate from the specification and still be acceptable.
- Top Management: Management personnel that make decisions directing the course of company activities (see shaded boxes on CAI organization chart, Appendix A).
- Traceability: Documentation that provides a means to track what applies to an item in question.
- Training: Providing information to employees to allow them to satisfy customer requirements through the processes they impact.
- Uncertainty: This term refers to the amount of possible error in the measurement.

- Use As Is: Disposition for nonconforming product where no rework is required and product can be returned to processing.
- USR: (User) generally refers to User Calibrated instruments.
- Working Standard: Instruments calibrated by reference standards. Used to calibrate instruments.
- Vendor Survey: Document completed by vendor and used by requestor to determine if vendor is capable of meeting requestor's requirements.
- Work Instructions: Documentation that defines how and what is to be done to product to ensure specifications are satisfied.
- Working Standard: An item calibrated by a reference standard. These items are generally used to calibrate test and measuring equipment.

### 3.0 Document Maintenance

Custodian	: Quality Assurance Manager
Review Activity	: Department Managers
Approval Authority	: President Quality Assurance Manager