

HASTEN APPLIED CNC

AS9100. D: 2016. SUPPORT



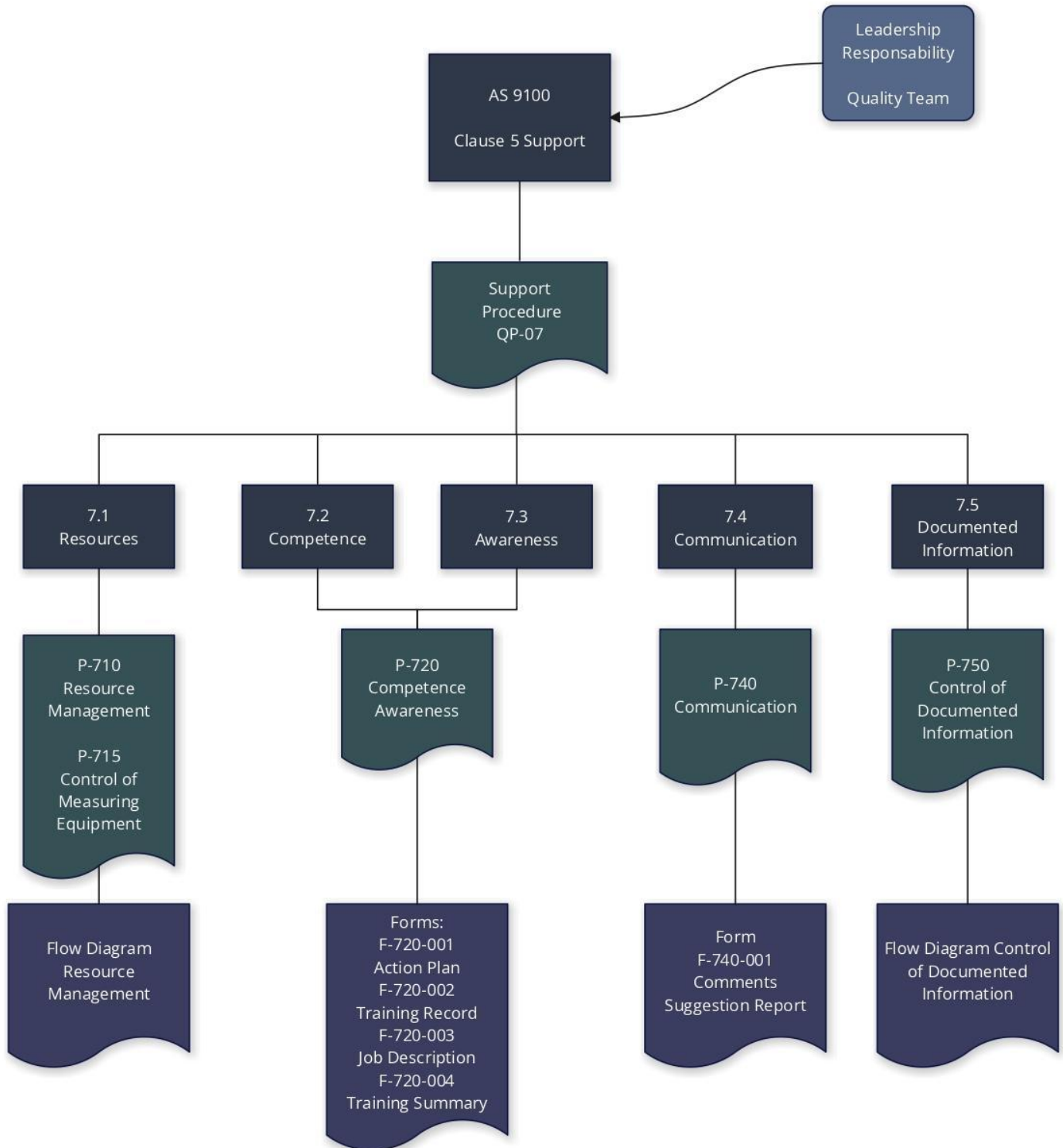
Document # QP-07

SUPPORT	
Procedure Title	SUPPORT
Document Number	QP-07
Standard	AS 9100 D: 2016
Scope	7.1, 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.2, 7.3, 7.4, 7.5, 7.5.1, 7.5.2, 7.5.3
Process Owner	Hasten Applied CNC SUPPORT
Related Forms/Records	F-720-004 Training Sum F-710-001 Equip. Maint. Schedules F-720-001, 003, 004 Employee Training F-751-002 Calibration Listing, Gauge Record F-750-001 Master Documents list F-820-003 Customer Contract Order Review F-750-002 Drawing Revision change Notice F-912-002 Customer Feedback F-912-003 Customer Complains F-912-004 Customer Satisfaction QF-750-003 Document Change Request QF-750-001 Master Document Listing F-710-003 Safety Inspection Checklist
Related Work Instructions	Referenced in the body of the Clauses
Related Procedures	QP-08

APPROVAL AND REVISION HISTORY			
DATE	REVISION	DESCRIPTION	APPROVED BY
01/26/22	A	Support procedure	R.H.

7 Support

QUALITY MANAGEMENT SYSTEM CLAUSE 7 – SUPPORT – FLOW DIAGRAM



7.1.1 General

The organization shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the quality management system.

The organization shall consider:

- a) the capabilities of, and constraints on, existing internal resources;
- b) what needs to be obtained from external providers.
 - Resource needs are reviewed not only by having the appropriate employees to get the job done, but also to make sure the organization provides the tools, training, and allocation of resources to meet the customer, regulatory and statutory requirements (People, equipment, and facility).
 - Resources provided by External providers are determined through the review of Customer Requirements.

7.1.2 People

The organization shall determine and provide the persons necessary for the effective implementation of its quality management system and for the operation and control of its processes.

- Managers review Personnel needs:
- Reviewing the need for additional employees to meet the customer requirements.
- The review is based on the customer and internal needs.
- If additional personnel are needed, the request is processed.

7.1.3 Infrastructure

The organization shall determine, provide and maintain the infrastructure necessary for the operation of its processes and to achieve conformity of products and services.

NOTE Infrastructure can include:

- a) Buildings and associated utilities;
- b) Equipment, including hardware and software;
- c) Transportation resources;
- d) Information and communication technology.
 - The infrastructure for the quality management system has been set up in such a manner to assure that customer requirements are met and conformity to the product is achieved.
 - Building workspaces, and associated utilities are properly managed to assure conformity to the product
 - Equipment is properly maintained and inspected including both hardware and software.
 - Equipment is reviewed to ensure the equipment and tools used meet the customer requirements, Management ensures the proper maintenance of the equipment.
 - Management assures that all calibration is completed and ensures that the appropriate amount of equipment is in place to address the customer requirements.
 - Supporting services are subcontracted out when required.

7.1.4 Environment for the operation of processes

The organization shall determine, provide and maintain the environment necessary for the operation of its processes and to achieve conformity of products and services.

NOTE A suitable environment can be a combination of human and physical factors, such as:

- a) Social (e.g. non-discriminatory, calm, non-confrontational);
- b) Psychological (e.g. stress-reducing, burnout prevention, emotionally protective);
- c) Physical (e.g. temperature, heat, humidity, light, airflow, hygiene, noise).

These factors can differ substantially depending on the products and services provided.

- Hasten Applied CNC provides a safe nondiscriminatory stress-free environment for its employees to enable them to effectively carry out its processes.
- Safety Inspection checklists (F-710-003) are maintained to ensure the safety of all employees.
- As required, Hasten Applied CNC ensures physical (temperature, heat, humidity, light, airflow, hygiene, noise).

7.1.5 Monitoring and measuring resources

7.1.5.1 General. The organization shall determine and provide the resources needed to ensure valid and reliable results when monitoring or measuring is used to verify the conformity of products and services to requirements.

The organization shall ensure that the resources provided:

- a) are suitable for the specific type of monitoring and measurement activities being undertaken;
- b) are maintained to ensure their continuing fitness for their purpose.

The organization shall retain appropriate documented information as evidence of fitness for the purpose of the monitoring and measurement resources.

Management is responsible for:

- Providing suitable environmental conditions for equipment. (Equipment Scheduling Data Placards)
- Providing proper safeguarding for equipment.
- Designate an Equipment Coordinator.
- Assign responsibility for calibration and maintenance of equipment.
- Gauges, instruments, and other MTE are selected on the basis of their capability to provide the necessary accuracy and precision of measurement.
- Quality Representative and Managers are responsible for selecting appropriate MTE.
- The QAR and Managers are responsible for: Maintain the Register of Hasten Applied CNC. equipment and associated files.

7.1.5.2 Measurement traceability. When measurement traceability is a requirement, or is considered by the organization to be an essential part of providing confidence in the validity of measurement results, measuring equipment shall be:

- a) calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; when no such standards exist, the basis used for calibration or verification shall be retained as documented information;
- b) identified in order to determine their status;
- c) safeguarded from adjustments, damage or deterioration that would invalidate the calibration status and subsequent measurement results.

The organization shall determine if the validity of previous measurement results has been adversely affected when measuring equipment is found to be unfit for its intended purpose, and shall take appropriate action as necessary.

The Quality Representative is responsible to:

- Maintain the Register of Hasten Applied CNC Equipment and associated files. (F-751-002 Calibration Listing, Gauge Record)
- Schedule calibration.
- Review calibration reports for subcontracted calibration services.
- Ensure that equipment is calibrated against measurement standards that are traceable to international or national standards.
- Calibrated MTE is labeled with a sticker indicating the due date for the next calibration **with a process in place for the recall of monitoring and measuring equipment requiring calibration or verification, as required.**
- **The QAR shall maintain the register of the monitoring and measuring equipment. The register shall include the equipment type, unique identification, location, and the calibration or verification method, frequency, and acceptance criteria.**
- When an item of MTE is found to be out of calibration or appears to give inaccurate readings, the item is checked. If it is confirmed the readings are outside of required accuracy, Quality Assurance investigates and assesses the validity of measurements for which the equipment was previously used.
- Identification of such equipment and the impact of its use on acceptance of products are reported on a F-850-004, NCRCAR. If suspect material has been shipped, the customer is notified.
- **All Calibration or verification of monitoring and measuring equipment shall be carried out under suitable environmental conditions.**

7.1.6 Organizational knowledge

The organization shall determine the knowledge necessary for the operation of its processes and to achieve conformity of products and services.

This knowledge shall be maintained and be made available to the extent necessary.

When addressing changing needs and trends, the organization shall consider its current knowledge and determine how to acquire or access any necessary additional knowledge and required updates.

NOTE 1: Organizational knowledge is knowledge specific to the organization; it is generally gained by experience. It is information that is used and shared to achieve the organization's objectives.

NOTE 2: Organizational knowledge can be based on:

- a) Internal sources (e.g. intellectual property; knowledge gained from experience; lessons learned from failures and successful projects; capturing and sharing undocumented knowledge and experience; the results of improvements in processes, products and services);
- b) External sources (e.g. standards; academia; conferences; gathering knowledge from customers or external providers).

7.1.6 Requirements	Organization: Hasten Applied CNC. Process Location: xxxxxxxxxxxxxx Process: Hasten Applied CNC manufactures the most complex precision parts for the commercial and aerospace industries requiring intricate assemblies with close tolerances maintained throughout production. Both commercial and high-tech industries are another outlet for our expertise that has gained us an unequalled reputation in the U.S.A.
Necessary Knowledge	Programming and Operating CNC Machining equipment including coordinate measuring machines (CMM) and Sheet Metal Production equipment and component assembly production.
Maintained how?	Maintained documented information by the Quality Representative with assistance from Human resources, Sales, Purchasing, Production, Inspection, and associated departments.
How is it made available?	Through the organization's intranet portal, it is available to all persons working for it (to the extent necessary) Also contained and made available in hard copy format by the Document Control Manager (version and distribution control). Also made available through the Quality Department.
Changing needs and trends?	Changing needs and trends are identified based on customer requests and input to new available Technology and market demand and internal feedback and observations.
How is additional knowledge acquired?	Lessons learned from past projects, information from customers, results of improvements made to previous revisions. Cross Training.
Required updates?	Identified through customer requests, need for improvement, Obsolete technology or material.

7.2 Competence

The organization shall:

- a) Determine the necessary competence of the person(s) doing work under its control that affects the performance and effectiveness of the quality management system;
- b) Ensure that these persons are competent on the basis of appropriate education, training, or experience;
- c) Where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken;
- d) Retain appropriate documented information as evidence of competence.
 - Management reviews the training needs of all personnel ensuring the proper training of all employees. Training is related to job function, customer requirements and associated quality procedure.

- Training has either been grandfathered for the employees that have been with the company over a year. Training Summaries F-720-004 shall be maintained for all employees to specifically identify each employee's education, training or experience.
- Additional training needs are planned by management. Training requirements reflect the training that is required for a specific position.
- An Employee Performance Overview can be used for each employee to evaluate their competency by on the job observation. (F-720-001, OJT Effectiveness reviews)
- Job Descriptions are issued to each employee and work Instructions are at the point of use, the importance of their role in achieving quality objectives is communicated to new hires via a New Employee orientation, and through training provided.
- Appropriate documented information as evidence of competence is updated in the employee's training records.

7.3 Awareness

The organization shall ensure that persons doing work under the organization's control are aware of:

- a) The quality policy;
 - b) Relevant quality objectives;
 - c) Their contribution to the effectiveness of the quality management system, including the benefits of improved performance;
 - d) The implications of not conforming with the quality management system requirements.
- Hasten Applied CNC communicates the Quality Policy and Objectives to all personnel at the time of hire, during training sessions and by conspicuous postings throughout the facility.
 - The effectiveness on the QMS of personnel contributions is reiterated during training sessions; this includes the benefits to Hasten Applied CNC of improved performance, and the implications of not conforming to the QMS requirements.
 - Managers provide relevant quality management system documented information and changes thereto.
 - Employees are continually made aware of their contribution to product or service conformity, contribution to product safety, where applicable and the importance of ethical behavior.

7.4 Communication

The organization shall determine the internal and external communications relevant to the quality management system, including:

- a) On what it will communicate.
- b) When to communicate.
- c) With whom to communicate.
- d) How to communicate.
- e) Who communicates.

Internal Communication

The Management of Hasten Applied CNC ensures internal communication takes place regarding the effectiveness of the management system. Internal communication methods include:

- use of corrective and risk management processes to report nonconformities or suggestions for improvement
- use of the results of analysis of data
- meetings (periodic, scheduled and/or unscheduled) to discuss aspects of the QMS
- use of the results of the internal audit process
- regular company meetings with all employees

Management's open-door policy allows any employee access to Management for discussions on improving the quality system.

Customer Communication

Hasten Applied CNC has implemented effective communication with customers in relation to:

- providing information relating to products and services.
- Handling enquiries, contracts or orders, including changes; (F-820-003 Customer Contract Order Review, F-750-002 Drawing Rev. Change Notice).
- obtaining customer feedback, customer satisfaction relating to products and services (F-912-002 Feedback, F-912-004 Customer Satisfaction), including customer complaints (F-912-003)
- Employee comment / suggestions
- Internal communication includes: a feedback system for personnel to make comments or suggest improvements to the QMS.
- Employees are encouraged to make comments and/or suggestions known to their supervisors or managers.
- Inputs are reported by completing the QMS comment and suggestion report form F-740-001, available at the company bulletin boards.
- The comments or suggestions are taken seriously and are investigated by the Quality team / Management representative.
- A response in the form of the completed report is provided to the person raising the comment or suggestion.
- The external communication of information relevant to the QMS is provided to interested parties through media such as:
 - o Sales and marketing with the company Marketing tool.
 - o Tours of plant facilities.
 - o Others as applicable such as feedback from interested parties.
 - o •Relevant documented information is controlled and retained as evidence of communication with QP-07.

ENTITY	WHAT	WHEN	HOW	WHO
Customer	Product/ service agreement Quality policy Delivery Improvement Risks	Contract initiation renewal or amendment. After changes to policies or processes	Contract Service reviews Internet	Sales/Marketing Quality. Senior Management
Suppliers	Contract agreement Quality Policy Contract amendments	Contract initiation and renewal. After changes to policies or processes	Contracts Service Reviews	Purchasing
Employees	Quality policy Applicable legislation and regulatory requirements Customer requirements Customer satisfaction All applicable policies and processes	At induction and refresher training. After changes to policies or processes.	Awareness training Meetings Notice boards Postings	HR Quality Leadership
Regulators	Applicable legislation and regulatory requirements Changes in legislation and regulation	At contract start and refresher training After changes to policies or processes/work	Awareness training Company/team meetings Notice boards	Legal Advisors Leadership HR

7.5 Documented information

7.5.1 General

The organization's quality management system shall include:

- documented information required by this Aerospace Standard;
- documented information determined by the organization as being necessary for the effectiveness of the quality management system.

This QMS serves as documented information required by this Aerospace Standard.

7.5.2 Creating and updating

When creating and updating documented information, the organization shall ensure appropriate:

- identification and description (e.g. a title, date, author, or reference number);
- format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- review and approval for suitability and adequacy.
 - The author submits the documents to the management team for review and the document is put on the Document Change Request Form (QF-750-002). The appropriate document controller enters When approved, the appropriate document controller enters the name and date in the revision

history and approval page as a record of the approval and the document number and/or recording of change is recorded on the Master Document List (QF-750-001). Approved documents containing the approver's name and the revision level and date are identified and are kept on the network for availability of prints at points of use and are entered into the Master Documents List.

- The current revision level of the document is identified by an alphabet letter following the document number. For example, when a document is revised the revision level will progress to the next alphabet letter (i.e. F-000-00 Rev A to F-000-00 Rev B). The revision level, as well as the date of change, is recorded on the master documents list. (Master Document List F-750-001).
- Work Instructions are numbered WI-XXX-001-A, where XXX is the related standard section number, and 001 is a number assigned sequentially as work instructions for that procedure are entered.
- Forms are generally (but not always) numbered using a (F- xxx-xxx). Authors obtain the document number from the Management Representative.

7.5.3 Control of documented information

7.5.3.1 Documented information required by the quality management system and by the International Standard shall be controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
 - The Document Control Administrator saves new and revised documents to the network and distributes pdf copies on request or hard copies in Binders and Work Instructions. Binders are kept in wall hangers at points of use and are updated according to the Master Documents List.
- b) It is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).
 - Hasten Applied CNC utilizes the Quality Manager who is also the document controller who in turn ensures that documents are protected and will only release documents when proper use is identified.
 - All documents are electronically stored and backed up as necessary.

7.5.3.2 For the control of documented information, the organization shall address the following activities, as applicable:

- a) Distribution, access, retrieval and use;
 - The QA Manager utilizes internal protocols to ensure proper distribution, access, retrieval and use of documents.
- b) Storage and preservation, including preservation of legibility;
 - Documents are indexed and grouped to facilitate their retrieval. Binders, drawers, cabinets, computer folders and disks, etc., containing records are clearly labeled with identification of their content.
 - These records remain legible, readily identifiable and retrievable and are archived for minimum of (7) years or in accordance with customer and regulatory requirements.
- c) Control of changes (e.g. version control);

- The current revision level of the document is identified by a number following the document number.
- For example, QP-04-A. When this procedure is revised and released, it will be QP-04-B. The current revision level and date are recorded on the Master Documents list. (F-750-001).
- Work Instructions are numbered WI-001-A, where XXX is the related standard section number, and 001 is a number assigned sequentially as work instructions for that procedure are entered.
- Forms are generally (but not always) numbered using the same format as the work instructions but using F in place of the WI. Authors obtain the document number from the Management Representative.

d) Retention and disposition.

- Documented information of external origin determined by the organization to be necessary for the planning and operation of the quality management system shall be identified as appropriate and be controlled.
- Documented information retained as evidence of conformity shall be protected from unintended alterations.

e) Prevention of the unintended use of obsolete documented information by removal or by application of suitable identification or controls if kept for any purpose.

Hasten Applied CNC records are kept both in electronic or hard copy format

- The QAR/Managers ensure that documents created and retained by a supplier or sub-contractor to substantiate, as applicable: procurement, production, calibration, certifications, chemical and physical properties, inspection, acceptance and other traceable information pertaining to the product produced and or delivered must be retained by the supplier/subcontractor for a period of three to seven years or that stipulated by the customer/regulating authority requirements.
- Records are indexed and grouped to facilitate their retrieval. Binders, drawers, cabinets, computer folders and disks, etc., containing records are clearly labeled with identification of their content. These records shall remain legible, readily identifiable and retrievable.
- Final record retention is maintained by top management. Records are stored in dry and clean locations where the requirements for identification, storage, protection, retrieval, retention and disposition can be maintained. They cannot be stored in private desk drawers or other obscure locations that are not generally known.
- Managers of each department provide for the prevention of the unintended use of obsolete documented information by removal or by application of suitable identification or controls if kept for any purpose.
- Documented information of external origin determined by the organization to be necessary for the planning and operation of the quality management system shall be identified as appropriate and be controlled.

Hasten Applied CNC

- Documented information retained as evidence of conformity shall be protected from unintended alterations.
- When documented information is managed electronically, data protection processes shall be defined to ensure protection from loss, unauthorized changes, unintended alteration, corruption, and physical damage is maintained.

