

# A Clarience Technologies Company

# Supplier Quality Manual

DAVCO Technology is committed to providing our customers with the highest quality products at the best value. Total customer satisfaction is our top goal.

As a supplier to DAVCO Technology, your company is a critical link in the on-time, quality and value chain. This manual has been developed to allow our suppliers to understand DAVCO's expectations for quality and delivery. Further, it becomes part of the acceptance of any purchase order that may be issued.

DAVCO Technology has adopted the standard known as IATF 16949 as the basis for our quality management system. We strongly urge our suppliers to adopt this standard as well. As a minimum, we require third party registration to ISO:9001, a plan to become certified, or agree to bi-annual audits by DAVCO if deemed necessary.

The scope of this manual extends to suppliers of materials, components or services deemed "mission critical" by DAVCO Technology and those having a direct effect on our customers' satisfaction.

It is impossible to cover every conceivable situation with a blanket statement or definition. If a situation occurs that is not covered by this Supplier Manual, contact DAVCO directly for specific questions and situations.

We thank you for helping us continue to be the "Supplier of Choice" to our customers.

Dave Baxter, Director of Operations

Barb Mick, Director of Quality

Molly Stabnau, Purchasing Manager



# **Table of Contents**

1.	Scope			
2.	Pu	rpose	$\epsilon$	
3.	. References			
4.	De	finitions	$\epsilon$	
5.	Со	de of Conduct	7	
ô.	Ac	knowledgement	7	
7.	Ge	neral	7	
	7.1	Requirements	7	
	7.2	Changes	7	
	7.3	Certifications	7	
	7.4	Communication	8	
	7.5	Terms and Conditions	8	
	7.6	Conditions of Business and Purchase Orders	8	
	7.7	Delivery/Quality Problems or Downtime Costs	g	
	7.8	Excess Transportation Charges	g	
	7.9	Record Retention	g	
3.	Ma	anagement	10	
	8.1	Responsibility	10	
Э.	Re	source Management	10	
	9.1	Competency	10	
	9.2	On-site Work	10	
	9.3	Treatment of Labor	10	
10		Purchasing	11	
	10.1	Approved Sub-tier Suppliers	11	
	10.2	Sub-tier Suppliers Statutory and Regulatory Conformance	11	
	10.3	Sub-tier Supplier Quality	11	
11		Planning and Design	11	
	11.1	APQP	11	
	11.2	Contract Review – Feasibility	11	
	11.3	Cross Functional Teams	11	
	11.4	PPAP	11	



11.5	Insp	pection	12
11.6	Spe	cial Characteristics	12
11.	6.1	Safety Critical	12
11.	6.2	Additional Requirements	12
12. F	Produ	ction	13
12.1	Safe	2 Launch	13
12.	1.1	Plan	13
12.	1.2	Minimum Requirements	13
12.	1.3	Data and Corrective Action	13
13.	Self-As	ssessment	13
14. \	Work	Instructions	13
14.1	Wo	rkstations	13
14.2	Set-	up	14
15. 7	Tracea	ability	14
15.1	Lot	Control	14
15.2	Sub	-tier Suppliers	14
15.3	FIFC		14
15.4	Con	tainer Labels, Core tags	14
16. (	Chang	e Control	14
16.1	Pro	cess	14
16.2	Not	ification and PPAP Required	14
16.3	Not	ification Not Required	15
16.4	Not	ification Method	15
16.5	Арр	roval	15
17. F	Produ	ction	15
17.1	Too	ling	15
17.2	Test	Equipment and Calibration Service Suppliers	15
17.3	Ano	dizing/Plating Services	15
18. F	Packag	ging and Logistics	16
18.1	Pur	chase Orders	16
18.2	Pacl	kaging Requirements	16
18.3	Pacl	kaging Slips	16



	18.4	Bill of Lading	17
	18.5	Pallet Requirements	17
19	9. N	Monitoring	17
	19.1	QMS Assessments	17
	19.2	Conformance to Specifications	17
	19.3	Risk Ranking and Auditing Scheme	18
	19.4	New Supplier	18
	19.5	QMS Continual Improvement	18
	19.6	Product Safety	18
	19.7	Non-conforming Product and Corrective action	18
	19.8	Non-conforming Product Found at Supplier	19
	19.9	Non-conforming Product Found at DAVCO	19
	19.10	Containment	19
	19.11	Sort/Rework	19
	19.12	Corrective and Preventive Actions	20
	19.13	On-site Verification	20
	19.14	Labeling Certified Product	20
	19.15	Cost	20
	19.16	Delivery Performance	20
	19.17	Supplier Performance	21
	19.18	Monitoring	21
	19.3	18.1 Monitoring Methods	21
	19.3	18.2 Performance Scoring Criteria	22
	19.3	18.3 Supplier Development	22
2(	). E	Environmental, Health, and Safety	23
	20.1	ISO 14001	23
	20.2	Waste Control	23
	20.3	Safety	23
	20.4	Safety Data Sheet (SDS)	23
2:	l. B	Business Interruption and Contingency Plans	23
	21.1	Business Interruption	23
	21.2	Contingency Plans	23



22.	Warranty	24
Attach	ment 1: Supplier Acknowledgement Form	25



# 1. Scope

This manual applies to external Suppliers of materials, products, processes, and services provided to DAVCO Technology, LLC, Inc. inclusive of current and future orders.

# 2. Purpose

The Supplier Manual was designed to inform suppliers of the general requirements and guidelines required to achieve our goals of safety, product quality, and overall customer satisfaction through collaborative partnership. The requirements in this manual shall be considered the base "Customer Specific Requirements" and may be audited for conformance by DAVCO. DAVCO reserves the right to require additional compliance depending on the nature of the specific product or customer requirements. If additional clarification is needed, please contact your DAVCO Supplier Quality Representative.

# 3. References

The Supplier shall maintain the latest revision level of each document as applicable, ISO 9001, IATF 16949, AIAG Core Tools Manuals (APQP, MSA, SPC, PPAP, FMEA) and CQI Standards. www.AIAG.com

DAVCO Policies and Forms available through the DAVCO Supplier Portal (Supplier Portal (davco.com)):

- DAVCO Technology, LLC Inc. Standard Terms and Conditions
- DAVCO Supplier Quality Manual, QAM-002
- Supplier Self-Assessment, QAF-006
- Quality and Environmental Systems Manual, QAM-001
- Supplier Waiver Form, QAF-007
- Attachment 1: Supplier Acknowledgement Form, QAF-008
- Prototype Identification Form, PUF-001
- Prototype Placard Template, PUT-001

# 4. Definitions

- DAVCO DAVCO Technology, LLC, Inc., referred to as DAVCO.
- **Automotive Industry Action Group (AIAG)** a North American association that develops and publishes standards for manufacturing with the automotive industry.
- International Automotive Task Force (IATF) a group of automotive manufactures which aims at providing improved quality products to automotive customers.
- International Material Data System (IMDS) a global data repository that contains information on materials used by the automotive industry
- **Nonconformance (NC)** product that doesn't meet agreed upon criteria at time of sourcing whether fit, form, or function, or causes disruption to manufacturing operations. Also applicable to quality systems (not meeting DAVCO Supplier Quality Manual Requirements).
- QMS Quality Management System



- **Safe Launch** a method beyond PPAP implemented for initial production of new product to ensure customer requirements are met.
- Safety Data Sheet (SDS)- a document that contains information on the potential health effects of exposure to chemicals, or other potentially dangerous substances, and on safe working procedures when handling chemical products.
- **Supplier** a third party that supplies goods or services to DAVCO.

# 5. Code of Conduct

Suppliers are expected to adhere to our parent company (Clarience Technologies) Code of Business Conduct, Term & Conditions, Conflict Minerals Policy, Whistleblower Policy, and Code of Ethics, available on our corporate website under Supplier Information.

This information can be found here: How to become a supplier to Clarience Technologies

# 6. Acknowledgement

The Supplier shall be familiar with and conforming to the requirements contained in this manual and all other documents referenced herein. The Supplier shall return a completed and signed Supplier Acknowledgement Form provided by DAVCO as Attachment 1 of this document, demonstrating that the Supplier has received and agrees to the requirements of this manual.

# 7. General

# 7.1 Requirements

This manual is a requirement for all Suppliers in conjunction with ISO 9001, AIAG Core Tools Manuals, Supplier Environmental, Health and Safety Manual, and referenced DAVCO policies. Any additional requirements noted specifically on a contract, purchase order, Terms and Conditions of Purchase, drawing, or specification must be complied with.

## 7.2 Changes

DAVCO reserves the right to make any changes to this manual. The Supplier will be notified of any changes and required to adhere to the changes.

#### 7.3 Certifications

DAVCO requires all Suppliers to be certified to the current IATF 16949 and ISO 9001 standards through third-party audits [1]. All Suppliers of automotive products or services without IATF 16949 third-party certification will be considered at risk to DAVCO and our customers. DAVCO may audit at risk Suppliers to IATF 16949 requirements, as an approach to developing Supplier quality management systems.

A current copy of the Supplier's ISO or IATF Certificate shall be submitted to DAVCO via <a href="Quality@DAVCO.com">Quality@DAVCO.com</a>. Upon expiry, DAVCO must be notified of any changes to the certification status, including initial certification, recertification, or transfer of certification to a new Certification Body, certificate withdrawal, and certificate cancellation without replacement.



[1] All suppliers of products and services that are exclusively non-automotive require certification to ISO 9001 through third-party audits. If a Supplier to DAVCO is so small as to not have adequate resources to develop a system according to IATF16949 or ISO 9001, certain specified elements may be waived by DAVCO.

#### 7.4 Communication

The Supplier shall have the ability to communicate necessary information in the DAVCO specified language and format (e.g. computer-aided design data, electronic data, advanced shipping notices (ASN's), etc.). DAVCO's official business language is English.

DAVCO's normal business hours shall be adhered to for receiving, business hours are Monday through Friday, 8:00 am to 5:00 pm EST.

#### 7.5 Terms and Conditions

DAVCO Terms and Conditions shall be adhered to. They may be found here:

<u>DAVCO Supplier Portal - Standard Terms and Conditions</u>

# 7.6 Conditions of Business and Purchase Orders

DAVCO purchasing information will be transmitted to the Supplier in the form of a Purchase Order (P.O.). The P.O. will describe the ordered product(s) and/or service(s) including, where applicable:

Precise identification, including name, part number, type, size, internal part number, quantity, price, etc.

Title and issue of relevant standards, specification, drawings, process requirements and other such data.

As a condition of business, all Suppliers must be prepared, on request, to provide any information required by DAVCO to substantiate the capacity to provide the necessary products, commodities and services. This includes, but is not limited to, technical capability systems/procedures to evaluate key product characteristics, price structure, and financial information. In addition, the Supplier must be prepared to provide proactive initiatives such as cost reduction proposals and recycling programs to DAVCO.

The extent of the purchase contract and order of precedence shall be:

- Compliance with all relevant local, state, and federal government legislation with special emphasis on hazardous waste and other environmental requirements.
- DAVCO Terms and Conditions of Purchase, Purchase Order
- Requirements as stated in this Supplier Manual which can be found on DAVCO's website.
- Any additional requirement(s) specified in writing by DAVCO.

All Suppliers must provide Country of Origin Certification and other documentation required under the US/Canada Free Trade Agreement and the North American Free Trade Agreement. All customs requirements must be met in a timely manner to ensure efficient transportation of goods.



All Suppliers shall have documented procedures for assessing, selecting, monitoring, and developing their Suppliers with adherence to a continuous improvement philosophy geared to complete customer satisfaction and cost reductions.

Suppliers shall submit all quotes in writing including their desired lead-time, required minimums, and standard packaging.

Suppliers shall establish and implement an Advance Product Quality Planning process. This should include the use of a multi-disciplinary team to prepare for production of new or changed products. It is recommended that the supplier use appropriate techniques identified in the AIAG Advance Product Quality Planning and Control Plan reference manual or similar techniques that accomplish the same intent.

DAVCO expects all Suppliers to manage their business for cost control. DAVCO's end customers, at a minimum, expect firm pricing for the life of their programs and some even mandate cost reductions with time and volume. DAVCO expects the same from its Suppliers. Suppliers benefit from DAVCO's participation in the markets it serves, they must bear the burden of cost control and reduction as well.

# 7.7 Delivery/Quality Problems or Downtime Costs

If past due parts or defective materials are deemed the fault of the Supplier, the Supplier will bear the cost of all expedited freight required to meet DAVCO's requirements. It is the supplier's responsibility to <u>automatically</u> expedite should the Supplier foresee or incur a past due situation. The Supplier will also be liable for all costs associated with but not limited to downtime, scrap, sorting, rework, replacement materials, etc. at DAVCO and/or billed to DAVCO by its customer.

# 7.8 Excess Transportation Charges

Excess transportation costs may be debited back in full to the Supplier for reasons such as:

- Unauthorized multiple shipments
- Expedited freight as a result of past due requirements
- Expedited freight utilized to avoid past due requirements
- Expedited freight as a result of defective material
- Using unauthorized truck lines
- Wrong shipment classification

Excess freight or labor costs that DAVCO may incur in order to meet our deliveries are not passed on to our customer, no matter the circumstance. Because of this, we require our Supply base to provide the same level of flexibility and support.

## 7.9 Record Retention

In addition to the requirements for the life of part through service requirements + 1 year for PAPP, tooling design, and purchase orders, the following table lists the requirements for record retention based on document types:



Document Type	<b>Retention Period</b>
Test plans and results	5 years
Process capability studies	5 years
Process data control	5 years
Receiving inspection	15 years
Analysis reports	15 years
Inspection results	15 years
Calibration	15 years
Training	15 years
Safe launch	15 years
Regulatory compliance	20 years
Change point control	20 years
Change point inspection data	20 years
Audit records of sub suppliers	20 years
Product lot control	20 years
Lot Control Traceability	20 years
Quality problem history with corrective and preventative actions	20 years

# 8. Management

# 8.1 Responsibility

It is the responsibility of the Suppliers management team to ensure that all the requirements established by this manual are met throughout the Supplier's quality management system. Suppliers are expected to support all activities necessary to meet the final Customer requirements.

# 9. Resource Management

# 9.1 Competency

The Supplier shall maintain evidence of training for personnel in any current, new, or modified job affecting product quality, including contract or agency personnel, and show competency verification. Personnel performing assessments of special processes and dedicated special process experts must be competent based on appropriate education, training, skills and experience.

## 9.2 On-site Work

The Supplier shall have people, equipment, and facilities to support all DAVCO sample requests and production requirements that will ensure no interruption to DAVCO manufacturing processes. Any work done off-site must be approved by DAVCO in advance.

# 9.3 Treatment of Labor

DAVCO Suppliers shall abide by the tenets of respectful treatment of all employees. These items include the following of local labor laws as it applies to child labor, forced labor, and compensation. Harassment and discrimination of employees shall not be tolerated, and employees shall be able to communicate openly with management regarding their work conditions without fear of reprisal.



# 10. Purchasing

# 10.1 Approved Sub-tier Suppliers

It is recommended that the Supplier selection process should follow CQI-19 Sub-tier Supplier Management Guideline.

# 10.2 Sub-tier Suppliers Statutory and Regulatory Conformance

DAVCO communication of statutory and regulatory requirements to the supplier may take place through direct communication such as Engineering prints, our company or corporate website/s, or through our Environmental Manual & Policies.

Upon request the Supplier shall report to DAVCO on the conformance to all applicable statutory and regulatory requirements of all purchased products or material used in the product delivered to DAVCO facilities. DAVCO will ask the supplier to submit confirmation of compliance. Supplier response to our request may be reflected in the supplier score card.

# 10.3 Sub-tier Supplier Quality

The Supplier shall monitor the quality of DAVCO Sub-tier Suppliers and is responsible for the quality of the product received from the Sub-tier Supplier. This applies to both directed and non-directed Sub-tier Suppliers.

# 11. Planning and Design

#### 11.1 APOP

APQP is required, for guidance on product/process planning the AIAG APQP manual shall be used.

## 11.2 Contract Review – Feasibility

The Supplier shall investigate, confirm, and document the manufacturing feasibility of the proposed products in the contract review process, including risk analysis. Waiving the requirements of a formal review related to the product may only be granted by the DAVCO Director of Quality or their designee.

#### 11.3 Cross Functional Teams

A multidisciplinary approach shall be used to prepare for product realization including:

- Development and review of FMEA including actions to reduce potential risks
- Development/finalization and monitoring of special characteristics
- Development and review of control plans

#### 11.4 PPAP

Process Flow Charts, Failure Mode and Effects Analysis (FMEA), and Control Plans may be requested for DAVCO's review and approval prior to PPAP submission.

The applicable control plan (prototype, pre-launch, mass production) shall be available at the appropriate stage during the APQP process. The control plans shall include the Design FMEA (if applicable) and manufacturing Process FMEA outputs. The control plan shall be reviewed and



updated when any change occurs affecting product, manufacturing process measurement, logistics, supply sources, or PFMEA. The control plan shall address every step in the PFMEA. For guidance on Failure Mode and Effects Analysis the AIAG & VDA FMEA manual shall be used. The PFMEA shall be reviewed if a Customer Quality Concern occurs.

The PPAP must be submitted to DAVCO at the requested submission level on or before the date requested by DAVCO. All PPAP documentation shall be submitted in English. Any certification provided as part of the PPAP submission must be accompanied by a laboratory scope. For guidance on PPAP, the AIAG manual shall be used.

# 11.5 Inspection

A description of the gauges, testing equipment, and measurement techniques that will be used to evaluate components may be requested by DAVCO. This includes, but is not limited to, drawings and details of special gauges, holding fixtures, or coordinate measuring machine (CMM) setups. Whenever practical, duplicate gauging or holding fixtures should be produced for use at DAVCO in order to facilitate the coordination of measurement techniques. Measurement Systems Analyses (MSAs) are required for all gauges used to measure characteristics as well as measurement systems referenced in the control plan. For guidance on Measurement System Analyses the AIAG MSA manual shall be used.

# 11.6 Special Characteristics

## 11.6.1 Safety Critical

The following requirements apply to Safety Critical and Safety Regulated components, assemblies, or processes:

- Defined process monitoring.
- Increased part monitoring.
- Nonconforming product control with localized disposition.
- Product or Poka Yoke verification in process or directly following processing prior to movement to the next process may be required.
- Downstream product verification to prevent escape.
- DAVCO Suppliers shall ensure that all safety critical item requirements are passed down to sub-tier Suppliers when applicable.

#### 11.6.2 Additional Requirements

Must be identified on the DFMEA's, PFMEA's, Drawings, List of Exceptions, Control Plans, Standard Operating Procedures, Work Instructions, Check sheets and on the process itself (where applicable).

If the process capability is between 1.33 and 1.67, the inspection frequency shall be more frequent than other characteristics.

If the process capability is below 1.33, 100% inspection is required unless 100% inspection cannot be performed due to the destructive nature of the inspection. If 100% inspection cannot



be performed, DAVCO must be notified with the process parameters used and shall be continually monitored.

For guidance on control of special characteristics, the AIAG SPC manual shall be used.

DAVCO reserves the right to request inspection data for any characteristic at any time.

# 12. Production

#### 12.1 Safe Launch

#### 12.1.1 Plan

All new parts supplied to DAVCO shall follow a Safe Launch Plan, unless waived by the DAVCO representative. The Safe Launch plan shall include additional off-line inspection for a predetermined time or quantity of parts after PPAP approval. The Safe Launch Plan shall be documented in a pre-launch control plan, work instruction, or other format agreed to by DAVCO.

#### 12.1.2 Minimum Requirements

The Safe Launch Plan shall include the following details:

- Minimum duration. (# of parts, # of tool runs, # of production days, etc.)
- Labeling requirements
- Scope (characteristics to be inspected, inspection method, inspection frequency)
- Exit criteria

#### 12.1.3 Data and Corrective Action

The Supplier shall collect and maintain internal data documenting non-conformances found during the Safe Launch period. Corrective actions shall be implemented to eliminate non-conformances. Safe Launch data shall be provided to DAVCO upon request.

# 13. Self-Assessment

Annual self-assessments shall be completed before the anniversary date of the previous year and made available to DAVCO within 1 week upon request. The CQI self-assessments may be requested by DAVCO before the expiry date for review and approval by DAVCO.

# 14. Work Instructions

#### 14.1 Workstations

The Supplier shall prepare documented work instruction(s) for all employees having responsibilities for the operations that impact conformity to product requirements. These instructions shall be accessible for use at the workstations. They shall be communicated to and understood by the employees performing the work. The work instructions shall be in the language of the personnel responsible to follow them.



# 14.2 Set-up

Job set-ups shall be verified whenever performed, such as initial run of job, material changeover, or job change. Evidence of this verification shall be maintained. Work instructions shall be available for set-up personnel. The Supplier shall use statistical methods of verification when applicable. First-off/Last-off verification shall be performed.

# 15. Traceability

#### 15.1 Lot Control

Suppliers shall establish and maintain documented procedures for unique identification of product lots or batches. Lot numbers shall be traceable from raw material receipt through all stages of production by the Supplier, including components, processes, and shipments to DAVCO. Supplier must also provide Certificates of Conformance (CoC) and material certifications with each shipment (where applicable).

# 15.2 Sub-tier Suppliers

The Sub-tier Suppliers shall have a documented system(s) to trace product to a raw material lot number and date of manufacture or processing.

#### 15.3 FIFO

All product shall be shipped on a "first in/ first out" (FIFO) method. FIFO shall also be applied to stock room inventory as product is pulled to be used for production.

# 15.4 Container Labels, Core tags

Each container must have two labels (this also includes any items not in cartons such as bundles, drums, etc.). The labels must be affixed to the upper right-hand corner of two adjacent sides. Materials provided on master rolls must have at least one core tag.

Labels and/or tags must conform to AIAG requirements.

Trial material / Prototypes must be clearly labeled with Prototype Placard Template, PUT-001, available on the DAVCO website.

# 16. Change Control

#### 16.1 Process

The Supplier shall have a process to control and react to changes that impact product realization. The process shall include evidence that customer notification was considered. DAVCO shall be notified, at a minimum, 90 days prior to any planned changes to part design, manufacturing process, manufacturing location, or manufacturing supply chain.

## 16.2 Notification and PPAP Required

For production-approved parts, the following changes require DAVCO notification prior to implementation and PPAP approval. This is a limited list, additional items listed in AIAG PPAP manual also apply.



- Any changes to a safety critical component, assembly or process shall require notification to DAVCO prior to change implementation regardless of perceived level of change.
- Changes to part software updates and modifications
- Change to Manufacturing method, machine or equipment

Any change affecting a special characteristic on related parts

# 16.3 Notification Not Required

For production-approved parts, the following changes DO NOT require DAVCO notification; however, changed parts must meet standard before, during, and after change and must have internal quality verification, tracking, traceability, and FIFO.

- Normal machine repair and Preventative Maintenance
- Change of manpower / staff
- Minor day-to-day kaizen activity
- Wear replacement of expendable tools, dies, and molds (not including perishable)

#### 16.4 Notification Method

The Supplier shall notify the DAVCO Supplier Quality via email at <a href="Quality@Davco.com">Quality@Davco.com</a>.

# 16.5 Approval

Written approval from an authorized DAVCO representative is required <u>prior</u> to implementing any proposed change. PPAP requirements will be communicated to the Supplier. The Supplier shall conform to requested PPAP and required Safe Launch activities for any approved change.

# 17. Production

## 17.1 Tooling

Any tooling owned by DAVCO, or DAVCO's customers (including: manufacturing, test, and inspection) shall be permanently marked so the ownership of each item is visible. The Supplier shall maintain the tooling and equipment in good working order. In all cases, tooling or material that becomes unusable must be reported to DAVCO as soon as possible. DAVCO owned tooling cannot be used for any other customers or jobs.

## 17.2 Test Equipment and Calibration Service Suppliers

Suppliers of measurement equipment, inspection, test, or calibration services must be accredited to ISO/IEC 17025 by an accreditation body of the ILAC MRA (e.g. - A2LA). Calibration reports provided must include the accreditation body logo. DAVCO may ask for Supplier's accreditation certificate to confirm compliance.

# 17.3 Anodizing/Plating Services

Suppliers providing anodized finish or plating services must meet the following:

1) A copy of the latest relevant specifications must be on file at the location performing the anodizing operation



- 2) The supplier must have the capability to measure and accurately report on each required specification. (Use of an accredited outside testing laboratory is an acceptable alternative if results can be reported in a timely manner.)
- 3) Meet all requirements of each specification which may include:
  - Coating thickness
  - Corrosion resistance (e.g. salt spray, fog chamber, etc.)
  - Appearance (e.g. color, finish, etc.) where applicable.
- 4) Provide certification with each production lot stating that each lot conforms 100% to relevant specifications.
- 5) At least annually, provide DAVCO with a laboratory report, A2LA or similarly accredited, listing each specification, actual test results and a "Statement of Conformance."

Where coating thickness is a function of process controls (cycle times, solution concentrations, etc.) the appropriate use of Statistical Process Controls (SPC) is strongly advised. Copies of relevant control charts should be available to DAVCO upon request.

# 18. Packaging and Logistics

## 18.1 Purchase Orders

The purchase orders will be sent to the Supplier via email unless otherwise approved by DAVCO.

# 18.2 Packaging Requirements

Supplier packaging, including pallet and strapping, must be of design such that product contained within, remains undamaged during shipping, handling, and storage. If damage occurs, replacement material shall be sent within 24 hours to DAVCO. DAVCO's approval is required for mutual decision on packaging type (i.e., returnable, expendable), carton size, carton quantity, and pallet quantity. Individual boxes shall not exceed 35 pounds. No changes can be made to existing packaging without the appropriate approval from DAVCO. All expendable packaging material should be recyclable.

# 18.3 Packaging Slips

The packaging slip must be attached to the shipment in a visible position.

The quantity shipped must include DAVCO's unit of measure as indicated on the release or purchase order.

The packaging slip must be neat and legible and include the following:

- Date shipped
- Ship Via
- Purchase Order Number
- Lot Number(s)
- DAVCO Part Number
- Total quantity for each part clearly identified



Freight requirements (prepared or collect)

# 18.4 Bill of Lading

The Bill of Lading must include the following information:

- Total number of containers shipped EXAMPLE:
  - o 20 cartons on 1 skid or 1 skid @ 20 cartons
  - 50 cartons on 3 skids or 2 skids @ 20 cartons each + 1 skid @ 10 cartons
- Number of Cartons per skid and/or number of loose cartons
- Total weight
- Freight requirements (prepared or collect)

## 18.5 Pallet Requirements

All pallets must meet the following specifications:

- Must be banded and/or stretch wrapped
- Boxes must fit on pallet with no overhang
- Height limit is 48"
- Designated label for "DO NOT STACK", if applicable
- Cartons for same part number must be on same skid, unless, less than skid quantity is required
- Mixing of program parts is not authorized (i.e., multiple part numbers per skid)

# 19. Monitoring

#### 19.1 QMS Assessments

DAVCO reserves the right to conduct quality assessments on all Suppliers. The purpose is not to duplicate an ISO/IATF 16949 audit (although it may cover some of the same elements) but is intended to identify a good fit between DAVCO's needs and the Supplier's quality system and process controls.

# 19.2 Conformance to Specifications

DAVCO requires all supplied products and services to conform completely to all relevant specifications. Typically, "relevant specifications" will mean the engineering drawings and specifications provided by DAVCO. However, in some cases, industry standards or Customer Specific Requirements may dictate additional requirements or industry standard practices (CQI Assessments, equipment calibration, etc.). Any deviation from specifications requires written authorization from DAVCO prior to shipment from your facility.

Annual Layouts should be completed and available for DAVCO upon request. DAVCO may request for the following reasons (including but not limited to): Customer Specific Requirements, ongoing Quality Assurance, critical component, etc.



# 19.3 Risk Ranking and Auditing Scheme

Periodic onsite audits will be performed based on a risk ranking classification, as determined by quality and delivery performance, certification status, safety critical nature of the supplied product, part complexity, and previous assessment results, at a minimum. The following table outlines the Supplier score classifications:

Classification	Score	Audit Criteria
Superior	91 – 100 points	N/A
Good	81 – 90 points	N/A
Average	71 – 80 points	Self-assessment
Fair	61 – 70 points	Self-assessment
Poor	1 – 60 points	Onsite DAVCO Audit as needed

If the Supplier is not ISO/IATF 16949 certified, they shall complete an annual self-assessment using DAVCO's form and may be subject to an annual DAVCO on-site audit. If the supplier provides product for the automotive industry, they shall have a plan with the ultimate objective of becoming certified to IATF 16949.

Supplier audits may also be required as part of a corrective action resulting from poor Supplier Performance Rating, repeat non-conformances, or as required by DAVCO customers.

Typically, DAVCO will conduct assessments only on Suppliers that supply direct to DAVCO. However, DAVCO reserves the right to selectively conduct Supplier Quality Assessments on Sub-tier Suppliers.

## 19.4 New Supplier

DAVCO Supplier Quality Assessments will be conducted with all new Suppliers before the award of any contracts.

#### 19.5 QMS Continual Improvement

The Supplier shall have a defined and active continual improvement process in place.

# 19.6 Product Safety

The Supplier shall have a procedure to meet all the requirements of the IATF standard concerning Product Safety.

## 19.7 Non-conforming Product and Corrective action

The Supplier shall perform containment, root cause analysis, and corrective action activities utilizing 8D methodologies and have a determined default time frame. Containment action and responses are required within 24 hours and completion of the 8D through root cause and corrective action plan within 14 calendar days. The corrective action process shall include a yokoten / read across step. Nonconformances are expected to be closed within 30 days unless discussed and approved by DAVCO when the plan is submitted. The Supplier shall send all relevant corrective action documentation to Quality@DAVCO.com unless otherwise directed.



# 19.8 Non-conforming Product Found at Supplier

The Supplier is responsible for supplying product that meets all design record specifications. The Supplier shall not ship any product that does not meet DAVCO specifications unless a deviation request is granted in writing by the DAVCO Quality Representative. DAVCO shall be informed within 24 hours if nonconforming product has been shipped.

When non-conforming product or abnormal conditions are found for a safety critical product, assembly or process, the following controls shall be utilized.

- Stop the line
- Contact location management and/or leadership
- Control part disposition such as a locked scrap bin
- A controlled process restart
- Quarantine product to last known Good material
- Root cause analysis with tools such as Fault Tree Analysis (FTA) or 5 Why
- Non-conforming parts/product shall be properly tagged and/or placed in an appropriate container such as a red scrap bin or locked box

# 19.9 Non-conforming Product Found at DAVCO

If non-conforming product is found, DAVCO will generate a Problem Report with an assigned nonconformance number and send directly to the Supplier. Containment actions are required within 24 hours. Non-conforming product may be returned to the Supplier if on-going production is not affected. Any returned product will affect the Supplier's quality metric. If On-going production is affected, chargebacks to the supplier may include but will not be limited to downtime, scrap, processing time, expedited freight, etc.

#### 19.10 Containment

Containment actions are required within 24 hours of notification of the problem. Containment activities may include sorting, rework, or replacement. Third party services may be required and will be billed back to the Supplier.

# 19.11 Sort/Rework

If DAVCO is required to sort and/or rework nonconforming product to maintain production requirements, the Supplier will be charged a \$150 hourly rate.

In the event the Supplier uses a third party sort company ("Sort Company(ies)"), the Supplier must obtain DAVCO approval prior to any work performed by the Sort Company. The Supplier shall ensure that such Sort Company complies with the DAVCO Terms and Conditions. Further, the Supplier shall be liable for any claims which result from the services provided by the Sort Company, including, but not limited to breaches of the DAVCO Terms and Conditions.

DAVCO can provide a list of pre-approved Sort Companies that can be used, if requested.

The instructions for the sort work to be performed must be approved by DAVCO before any work can be done.



#### 19.12 Corrective and Preventive Actions

Corrective and preventative action implementation is required within 14 calendar days unless otherwise agreed. The corrective action process shall include a yokoten / read-across or parallel development step. Nonconformances are expected to be closed within 30 days unless discussed and approved by DAVCO when the plan is submitted. The Supplier shall send all relevant corrective action documentation to Quality@DAVCO.com unless otherwise directed.

#### 19.13 On-site Verification

DAVCO reserves the right to send a Purchasing and/or Quality representative to visit the Supplier's production facility to ensure that corrective and preventative actions were implemented and currently in place.

# 19.14 Labeling Certified Product

Certified product shall be labeled per DAVCO's specified requirements until corrective actions have been approved and verified. This includes sorted product, reworked product, and corrective action clean points.

#### 19.15 Cost

The Supplier shall be liable for all costs associated with the sorting, handling, and disposition of discrepant product. This may include, but is not limited to, engineering costs, manufacturing downtime, test lab costs, supervision costs, and administrative costs (\$150 per incident). The Supplier may also be responsible for the cost of any customer-related activities imposed on DAVCO if the root cause is found to be discrepant product from the Supplier. This includes, but is not limited to, sorts of finished product at DAVCO, customers, field actions, or recalls.

# 19.16 Delivery Performance

100% on-time delivery is required. "On-time" is defined by DAVCO as no more than one week early nor more than one week later than the date specified on the schedule provided by DAVCO. "Correct Quantity" is defined by DAVCO as no more than 10% over or under the order amount. Scheduled services must be completed by the date agreed. In the event of a potential late delivery, please contact your DAVCO representative as soon as you are aware that a late delivery may be possible. This will allow DAVCO to adjust production schedules (where possible) in order to maintain the satisfaction of our customers.

Delivery performance applies to all shipments to DAVCO including initial samples, prototype, and mass production requirements.

Supplier responsibilities include:

- On Time Delivery
- Initial and follow releases
- Correct Barcode labeling according to DAVCO Specifications
- Proper packaging according to DAVCO Specifications
- Expedites of past due product according to DAVCO specifications



# 19.17 Supplier Performance

Suppliers are an integral, interested party that provide materials and services that directly impact the quality of the products supplied by DAVCO to its customer base and must be approved prior to use. Suppliers will be selected and approved based on their ability to meet DAVCO's requirements. Customer designated sources must also be approved, or requirements waived by the customer, prior to purchasing products or services for production use.

# 19.18 Monitoring

Supplier overall performance is evaluated quarterly by combining information from multiple disciplines within the DAVCO organization. Overall performance is assessed based on performance indicators in quality, delivery, and purchasing.

Suppliers may be rated on:

- Sort time and cost associated.
- Number of nonconformances issued
- Repeat issues, for which corrective actions have previously been implemented
- Nonconformance response time
- 8D closure time
- Supplier PPM
- Delivery performance
- On Time Delivery
- Number of Occurrences of Expedited Freight
- Advanced Shipping Notice (ASN) accuracy
- Cost reduction
- Financial Risk Assessment
- Response time
- DAVCO on-site audit findings closed on time

If the product is received into inventory by DAVCO, it will be considered for Supplier rating information.

# 19.18.1 Monitoring Methods

**Quality performance** will be monitored by tracking the Supplier's PPM. Quality performance will make up 40% of the Supplier's overall performance rating. It will be assigned accordingly:

PPM	Score by Percentage
0 – 50	100%
51 – 500	75%
501 – 1,000	25%
1,001 – 2,000	0%



Response timeliness will be monitored and reported as it relates to the Supplier conforming to required containment, root cause analysis, corrective and preventative action implementation and verification actions. The goal for quality performance is 100% (zero defects).

**Delivery performance** will be monitored by tracking compliance to shipment due date(s) and quantity accuracy from receipts. Delivery performance will make up 40% of the Supplier's overall score and will be expressed as a percent. For example, if 8 out of 23 shipments were either late, early, short, or over (e.g. not conforming to DAVCO requirements), the Supplier will receive a score of 65% for Delivery Performance for that month. **The goal for delivery performance is 100%**.

**Service** will be monitored by tracking timeliness to Buyer requests for information including, but not limited to packing slip accuracy, compliance with packaging requirements, purchase order acknowledgement, SDS submittal, material certifications, PPAP documentation, and nonconformance responses. Service performance will make up 20% of the Supplier's overall performance rating. **Customer Service and Communication goal is 100%.** 

# 19.18.2 Performance Scoring Criteria

Supplier performance will be determined by the following:

Classification	Score
Superior	91 – 100 points
Good	81 – 90 points
Average	71 – 80 points
Fair	61 – 70 points
Poor	1 – 60 points

A written response to DAVCO is required within five working days of the score card receipt should the Supplier not agree with their performance rating.

#### 19.18.3 Supplier Development

Unsatisfactory Supplier performance will result in development actions and additional monitoring using the following methods:

- Corrective actions submitted as requested and monitored for compliance
- On-site audits
- Placement on Controlled Shipping 1 (CS1), requiring 100% inspection of all product prior to shipment to DAVCO
- Placement on **Controlled Shipping 2 (CS2)**, requiring 100% inspection by a third-party auditor, agreed to by DAVCO, of all product prior to shipment to DAVCO. This expense will be the responsibility of the supplier
- · Continued non-compliance will result in product de-sourcing



# 20. Environmental, Health, and Safety

#### 20.1 ISO 14001

Suppliers are encouraged to have an environmental system that conforms to the requirements set forth in ISO 14001. DAVCO encourages Suppliers to certify/register the environmental management system. Proof of certification may be sent to <a href="mailto:Quality@DAVCO.com">Quality@DAVCO.com</a>.

#### 20.2 Waste Control

Any waste generated as a result of actions performed by Suppliers, Contractors, and Supplier Representatives shall be controlled so as not to impact the environment inside the building as well as the natural environment. Appropriate containers shall be utilized and proper labeling attached, consistent with Local, State, and Federal regulations.

# 20.3 Safety

Suppliers should be aware of DAVCO's commitment to have safe work processes and practices in the value streams that support DAVCO product manufacturing. DAVCO encourages their Suppliers to conform to the requirements set forth in OSHA and MiOSHA. Additionally, suppliers shall provide a safe work environment, compliant to applicable regulation.

# 20.4 Safety Data Sheet (SDS)

A Safety Data Sheet (SDS) must be sent to DAVCO for review prior to any shipments as notified by DAVCO. Hazardous materials supplied to DAVCO must comply with all environmental regulations. All materials that contain conflict minerals must be from conflict-free sourcing.

The Supplier shall meet all the requirements in the DAVCO Quality and Environmental Systems Manual (QAM-001).

# 21. Business Interruption and Contingency Plans

# 21.1 Business Interruption

Suppliers should be aware of DAVCO's commitment to ensuring continuity of supply. Suppliers shall provide geographical location with inherent natural catastrophe risk associated with the location as requested by DAVCO. Suppliers shall produce business interruption plans, as requested by DAVCO, to provide evidence of supply resiliency for threats that are appropriate for each Supplier such as, but not limited to; earthquake, tsunami, flood, pandemic, and fire.

# 21.2 Contingency Plans

Contingency plans shall be in place to satisfy DAVCO requirements in the event of an emergency such as, but not limited to; utility interruptions, labor shortages, key equipment failure, and field failures. In the event any of these interruptions occur that would create an unscheduled halt to production, the Supplier shall notify DAVCO as soon as possible with information concerning the nature of the problem and plans for immediate actions to assure DAVCO supply of material is not interrupted. If the Supplier has a unionized work force, they must notify DAVCO annually of the union affiliation and contract expiration date.



# 22. Warranty

The Supplier will be expected to adhere to DAVCO Technology, LLC Inc. Terms and Conditions of Purchase for warranty and service guidelines.



# Attachment 1: Supplier Acknowledgement Form



DAVCO Technology, LLC 1600 Woodland Drive, Saline, MI 48176 800-328-2611 Quality@DAVCO.com DAVCO.com

# **Acknowledgement Form of Supplier Quality Manual Requirements**

DAVCO Technology, LLC, requires suppliers to acknowledge receipt of the Supplier Quality Manual. Please complete the form and return it to <a href="Quality@DAVCO.com">Quality@DAVCO.com</a>.

Signing this document acknowledges agreement, by the supplier, to abide by the rules and policies set forth in the Supplier Quality Manual.

Suppliers shall return this acknowledgement form within one (1) week of receipt of the Supplier Quality Manual. Failure to return this form will affect the supplier's service rating.

Date of Receipt	-
Company Name	
Printed Name	Title
Signature	Date of Acknowledgement

