

DEXTER MAGNETIC TECHNOLOGIES

SUPPLIER QUALITY ASSURANCE

REQUIREMENTS MANUAL

(SQAR)

Rev R (10/27/2023)



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PURPOSE

This document establishes quality assurance requirements for Suppliers to Dexter Magnetic Technologies (Dexter). The Supplier shall flow down requirements to its own sources. All work shall be performed by qualified personnel.

If Supplier has questions or concerns about the requirements, they are to contact Dexter's Purchasing Department prior to performing any work. All correspondence, including Dexter responses, shall be in written format.

The Supplier is required to maintain this document on file for reference.

SCOPE

This SQAR shall apply to suppliers of parts that Dexter procures to manufacture, package, and ship Dexter products. This document does not apply to suppliers of indirect materials and equipment.

All documents specified or referenced, including drawings and specifications regardless of origin, including (Dexter, the Government, or Dexter's customers), are considered part of the purchase order (PO) requirements. Document revisions are effective as of the PO issue date, unless otherwise stated.

NOTE: Revision R changes the order and numbering of the sections in this manual. For clarification, the previous revision section numbering is included in (blue).

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QUALITY ASSURANCE REQUIREMENTS

General Quality Assurance Requirements

Access to the Supplier's Facility: Dexter representatives and regulatory authorities reserve the right to access the Supplier's facilities and their lower-tier Suppliers to assure that Supplier's product(s) complies with the requirements of applicable PO.

Awareness: Suppliers are to ensure their employees are qualified and aware of their contribution to product or service conformity, product safety, and the importance of ethical behavior.

Conflicting Requirements: In the event of conflicting technical requirements, the order of priority to be followed is the PO, PO terms and conditions, drawing, then any additional technical requirements. Contact Dexter Purchasing immediately with any conflicting requirements.

Counterfeit Parts: Suppliers are responsible for preventing delivery of counterfeit parts to customers as appropriate.

Corrective Action: The Supplier is responsible for prompt replies to nonconforming material reports, and when requested, shall provide effective corrective action responses.

Data Transmission: Suppliers are to send electronic files and documents to QCROI@dextermag.com. Suppliers may also be required to submit paper copies of receiving documents with shipments.

Deviations: Any deviations in product or process shall be approved by Dexter Management in writing prior to shipment.

Measuring and Test Equipment: The Supplier shall establish and maintain documented procedures to control, calibrate, and maintain inspection, measuring, and test equipment.

Notification of Defective Product: Written notification to Dexter Purchasing Contact is required in the event a Supplier determines that material previously delivered to Dexter is defective.

Preservation of Product: Parts are to be protected from damage and corrosion through processing and delivery to Dexter.

Quality Management System (QMS) Requirements: Dexter requires all material and components delivered to in conformance with specifications. The Supplier is required to meet all contract requirements including any supplemental agreements.

Dexter requests Suppliers acquire the following certification:

- 1) At a minimum, ISO9001 or applicable standard
- 2) Parts for medical: ISO13485
- 3) Parts for aerospace: AS9100
- 4) ITAR compliance

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Record Retention: All records including test reports and certifications shall be retained for a minimum of 10 years after the final shipment unless otherwise specified in the PO. Dexter shall be contacted prior to destruction of documentation.

Rework/Repair: The Supplier shall not perform any repair or rework to completed parts without prior Dexter authorization.

Safeguarding Covered Defense Information and Cyber Incident Reporting: Suppliers shall handle covered defense information for Dexter orders and report cyber incidents in accordance with DFARS 252.204-7012. The Supplier shall also flow down this requirement to sub-tier sources as applicable.

Supplier Change Notification: The Supplier shall notify Dexter in writing of all process, design, fabrication, testing, facilities, and material changes affecting the form, fit, function, reliability, or interchangeability of end item requirements during the performance of this contract or previous contracts. The Supplier shall notify Dexter about any change of lower-tier Suppliers.

Quality Assurance Requirements by Codes

#	Category
QA100	Certifications
QA200	Inspections
QA300	Regulatory

Mandatory quality assurance requirements for each specific category of material apply as listed below:

Category of Material	Mandatory Quality Assurance Requirements
Permanent Magnet Materials - Raw Material Example: blocks, rods, bars, disks	QA100, QA120, QA220, QA335, QA350, QA360, & QA365
Permanent Magnet Materials - Finished Parts Example: finished parts per a particular drawing	QA100, QA110(as applicable), QA120, QA125/QA130, QA220, QA335, QA350, QA360, & QA365
Catalog and SEP (Specialized Electronic Products) Example: toroids, beads, ferrite U, E, I cores	QA100, QA220, QA335, QA350, QA360, & QA365
Hardware Components Example: steel, aluminum parts	QA100, QA110 (as applicable), QA125/QA130, QA220, QA335, QA350, QA360, & QA365
Subcontracted Operations	QA110

Example: plating, coating, NDT	
Age Sensitive Materials Example: adhesives, epoxies	QA105
Testing Labs	QA145

QA100 – Certifications

QA100 Certification of Conformance

(QA01)

The Supplier shall furnish, with each shipment, a Certificate of Conformance that shall be signed by the responsible representative and must show the part number, revision level (if applicable), PO number, quantity shipped, date of shipment, country of origin, and statement confirming the material supplied contains no conflict minerals (3TG). Serialization must be listed on C of C (if applicable). Suppliers of magnetic materials must list material description and/or grade, as appropriate.

QA105 Shelf Life Certification

(QA02)

Each shipment of age / environmentally sensitive materials shall include a Certification signed by a responsible representative and show the part or specification number, PO number, lot or batch number of the material, quantity shipped, the date of manufacture, the shelf life, the date of expiration, and special handling procedures that need to be followed (if applicable). The Supplier shall not deliver materials with less than 85% of shelf life remaining at the time of delivery.

QA110 Special Process Certification

(QA03)

The Supplier shall furnish, with each shipment, a Certification that includes a statement of conformance to any special process (e.g., plating, NDT, welding, anodizing, heat treatment, annealing) performed on the material to the specification(s) listed on the PO and / or engineering drawing. It must also include the PO number, part number, revision level (if applicable), serial number (if applicable), lot code & date code showing on the Dexter PO (if applicable), and quantity shipped.

1. **Coating & Plating:** The Supplier shall include valid information about thickness, country of origin of material, and statement confirming the material supplied contains no conflict minerals (3TG). (“coupon attached” is the preferred method)
2. **Radiographic Inspection:** The Supplier shall attach X-Ray film(s) and report(s)
3. **Ultrasonic Inspection:** The Supplier shall attach test examination report(s)
4. **Welding:** The Supplier shall include welding procedure qualification, welding procedure specification, and the procedure qualification record.

QA115 Customer Required Approved Vendor List

(QA12)

The Supplier must use a vendor already listed on Dexter’s Customer’s Approved Vendor List for any special process(es) or raw material(s) used to manufacture product(s) listed on PO.

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QA120 Material Certification - Magnetic Properties (QA04)

The Supplier shall furnish, with each shipment, a material certification showing the actual magnetic properties of material that the Supplier is sending to Dexter. Certification shall also list the part number, PO number, and be signed by an authorized representative.

QA125 Material Certification - Chemical Composition (traceability required) (QA05)

The Supplier shall furnish, with each shipment, a material certification showing the actual chemical composition of material that the Supplier is sending to Dexter. Certification shall also list the part number, PO number, and be signed by an authorized representative.

QA130 Material Certification - Chemical Composition (typical) (QA06)

The Supplier shall furnish, with each shipment, a material certification showing the typical chemical composition of material that the Supplier is sending to Dexter. Certification shall also list the part number, PO number, and be signed by an authorized representative.

QA135 Material Certification - Data (for Specialized Electronic Products) (QA25)

The Supplier shall furnish, with each shipment, a material certification showing the actual electrical or dimensional data of the material sent to Dexter. Certification shall also list the part number, PO number, and be signed by an authorized representative.

1. Electrical Data
2. Dimensional Data

QA140 Material Certification - Helmholtz Test Data (for Magnetic Material) (QA35)

The Supplier shall perform Helmholtz test on a Helmholtz coil and a fluxmeter, using the "flip method", on the appropriate number of samples from each lot for each part number. The Supplier shall furnish the Helmholtz test data signed by the responsible representative with flux linkage results, the Helmholtz coil and fluxmeter used, the part number, revision, and test date.

QA145 Calibration Certification (Independent Lab) (QA19)

A certificate must confirm calibration to relevant standards in compliance with ISO/IEC 17025 and ANSI/NCSL Z540.3.

QA150 Mercury Contamination (QA21)

The material supplied shall contain no metallic mercury and shall be free from mercury contamination. This statement must be an explicit element of the Supplier’s Certificate of Conformance. These requirements must be included in any subcontract or PO and the contract shall ensure subcontractor compliance with these requirements.

QA200 – Inspections

QA200 First Article Inspection Report (FAIR) (QA07)

The Supplier is required to perform a First Article Inspection to the requirements of SAE AS9102 (latest revision) on a minimum of 2 units prior to running the production. The FAIR must be sent to Dexter for approval prior to starting the production run. The first article part shall be clearly identified by a suitable method (such as tagging) and submitted with the FAIR.

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QA205 Production Part Approval Process (PPAP 1, 2, or 3)

(QA29)

The Supplier shall furnish, with initial sample parts or before, the following documents as required for the level (1, 2, or 3) required: Part Submission Warrant (PSW), Certificate of Conformance (CoC), material certifications, ISIR (Initial Sample Inspection Report), Process Flow Diagram, Control Plan, FMEA (Failure Mode Effect Analysis), Process Capability, gage R&R study, and Installation Qualification (IQ), Operational Qualification (OQ) and Performance Qualification (PQ).

1. PPAP 1: PSW, CoC, material certifications
2. PPAP 2: PSW, CoC, material certifications, ISIR
3. PPAP 3: PSW, CoC, material certifications, ISIR, process flow diagram, control plan, FMEA, process capability, gage R&R study, IQ, OQ, PQ

QA210 100% Inspection Required

(QA09)

The Supplier shall perform 100% inspection of all characteristics on all products covered by the PO. Records of inspection results showing actual values shall accompany each delivery of product to Dexter.

QA215 Source Inspection

(QA11)

Dexter inspection is required prior to the shipment. Notify Dexter five days in advance of final inspection so that arrangements for source inspection can be coordinated. Dexter source inspection shall not constitute product acceptance, nor shall it relieve the Supplier of any liability for full compliance with the requirements of the PO.

QA220 Final Inspection Reports and Records

(QA14)

The Supplier shall furnish a copy of their final inspection report(s) and/or record(s), with data and summary for all dimensions and characteristics showing the actual results obtained by the Supplier during final sampling inspection of delivered product(s). Each sampling plan (unless otherwise specified) shall be based on AQL 1.0, C = 0 from the “Zero Acceptance Sampling Plans Fifth Edition”. The Supplier shall indicate the metrology used for each dimension and characteristic measured.

QA300 – Regulatory

QA300 Defense Priorities and Allocations System (DPAS) DO Rated

(QA13a)

This is a DO rated order. The supplier shall follow the provisions of 15 CFR 700 and flow down the DPAS requirements to applicable sub-tier sources involved in the order’s fulfillment. The supplier shall accept or reject this order within fifteen (15) working days after receipt. DO rated orders must be given production preference over unrated orders if necessary to meet required delivery dates. In the event of the delivery or performance of multiple accepted rated orders conflict, preference shall be given to the conflicting orders in the sequence in which they are to be delivered or performed (not to the receipt dates).

QA305 Defense Priorities and Allocations System (DPAS) DX Rated

(QA13b)

This is a DX rated order. The supplier shall follow the provisions of 15 CFR 700 and flow down the DPAS requirements to applicable sub-tier sources involved in the order’s fulfillment. The supplier shall accept or reject this order within ten (10) working days after receipt. DX rated orders must be given production preference over DO rated and unrated orders if necessary to meet required

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delivery dates. In the event of the delivery or performance of multiple accepted rated orders conflict, preference shall be given to the conflicting orders in the sequence in which they are to be delivered or performed (not to the receipt dates).

QA310 DPAS DO Rated for Suppliers Outside the USA **(QA33a)**

This is a DO rated order. The supplier shall accept or reject this order within fifteen (15) working days after receipt. DO rated orders must be given production preference over unrated orders if necessary to meet required delivery dates. In the event of the delivery or performance of multiple accepted rated orders conflict, preference shall be given to the conflicting orders in the sequence in which they are to be delivered or performed (not to the receipt dates). This priority status shall be applied to subsequent orders with sub-tier suppliers in support of this order.

QA315 DPAS DX Rated for Suppliers Outside the USA **(QA33b)**

This is a DX rated order. The supplier shall accept or reject this order within ten (10) working days after receipt. DX rated orders must be given production preference over DO rated and unrated orders if necessary to meet required delivery dates. In the event of the delivery or performance of multiple accepted rated orders conflict, preference shall be given to the conflicting orders in the sequence in which they are to be delivered or performed (not to the receipt dates). This priority status shall be applied to subsequent orders with sub-tier suppliers in support of this order.

QA320 Restriction on Acquisition of Specialty Metals **(QA15a)**

The Supplier must be in compliance with DFARS 252.225-7008 Restriction on Acquisition of Specialty Metals during the performance of this PO or Contract. The Supplier must flow down this requirement to sub-tier sources as applicable, and contact Dexter Magnetic Technology’s Purchasing Department or Quality Department if additional information or clarification is required to ensure compliance. The supplier (or the sub-tier source) of a raw material containing *specialty metals* shall provide explicit certification identifying it as such, with its paperwork including the statement, “I hereby certify that these parts were manufactured in the United States or its outlying areas in accordance with DFARS 252.225-7008.”

[FOR REFERENCE ONLY]

- Raw material containing *specialty metals*, including nickel, iron-nickel, cobalt, titanium, and zirconium must be melted or produced in the United States.

QA325 Restriction on Acquisition of Certain Articles Containing Specialty Metals
(QA15b)

The Supplier must be in compliance with DFARS 252.225-7009 Restriction on Acquisition of Certain Articles Containing Specialty Metals during the performance of this PO or Contract. The Supplier must flow down this requirement to sub-tier sources as applicable, and contact Dexter Magnetic Technology’s Purchasing Department or Quality Department if additional information or clarification is required to ensure compliance. The supplier of a component or assembly containing *specialty metals* located in a qualifying country (per DFARS 225.003) shall provide explicit certification identifying it as such, with its paperwork including the statement, “I hereby certify that these parts were manufactured in a qualifying country in accordance with DFARS 252.225-7009.”

[FOR REFERENCE ONLY]

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- *Specialty metals*, including nickel, iron-nickel, cobalt, titanium, and zirconium, must be melted or produced in the United States or a qualifying country.

QA330 Restriction on Acquisition of Certain Magnets and Tungsten (QA15c)

The Supplier must be in compliance with DFARS 252.225-7052 Restriction on the Acquisition of Certain Magnets and Tungsten during the performance of this PO or Contract. The Supplier must flow down this requirement to sub-tier sources as applicable, and contact Dexter Magnetic Technology’s Purchasing Department or Quality Department if additional information or clarification is required to ensure compliance. The supplier (or the sub-tier source) of a component or assembly containing *covered material* shall provide explicit certification stating the item was not manufactured in a covered country, with its paperwork including the statement, “I hereby certify that these parts do not contain covered material melted or produced in covered countries, nor do they contain covered material and were manufactured in a covered country in accordance with DFARS 252.225-7052 and 10 USC 2533c”.

[FOR REFERENCE ONLY]

- Certain magnets of *covered material*, including neodymium-iron-boron magnets, samarium-cobalt magnets, tungsten metal powder, and tungsten heavy alloy, cannot be melted or produced in North Korea, China, Russia, or Iran (covered countries).

QA335 EU-Directive 2011/65/EU and 2015/863 (RoHS) (QA16)

No material, surface finish, and production process used for the PO may contain or apply any RoHS directive restricted substances. The Supplier shall furnish, with each shipment, a certification stating the material supplied does not contain any EU-Directive 2011/65/EU RoHS 2 and 2015/863 RoHS 3 substances. Certification shall also list the part number, PO number, and be signed by an authorized representative.

QA340 Export Control (QA23)

The Supplier must be in compliance with the ITAR (International Traffic and Arms Regulations, 22CFR 120-130) and EAR (Export Administration Regulations, 15CFR 730-774). ITAR-controlled parts and technical information may not be shared with any unlicensed person, country, or company, by any means, or for end-uses requiring a license without prior written approval from the U.S. Department of State. EAR-controlled parts and technical information requiring an export license may not be shared with any unlicensed person, country, or company, by any means, or for end-uses requiring a license without prior written approval from the U.S. Department of Commerce, Bureau of Industry and Security (BIS). The supplier agrees that it shall be responsible for ensuring that the requirements of this notification are conveyed to any of its suppliers that will receive technical documentation (and equipment, if applicable) originated by Dexter and/or Dexter’s Customer.

QA345 United States-Mexico-Canada Agreement (USMCA) (QA24)

The Supplier must be in compliance with USMCA. The Supplier shall attach to the job a USMCA – Certificate of Origin form.

QA350 Foreign Object Damage/Foreign Object Debris (FOD) (QA31)

The Supplier shall have a FOD control program, as suited for its products and/or company, in accordance with specification NAS412/AS9146 or equivalent. FOD prevention must be implemented in all areas as applicable.

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QA355 National Aerospace & Defense Contractors Accreditation Program (NADCAP) (QA34)

The Processor / Supplier is required to be NADCAP approved. Proof of accreditation shall be sent to Purchasing Contact.

QA360 REACH Regulation (EC) No 1907/2006 / REACH Annex XVII (QA36)

No material, surface finish, or production process used for the PO may contain or apply any REACH SVHC (substances of very high concern) or Restricted substances. The Supplier shall furnish, with each shipment, a certification stating the material supplied does not contain any substances in thresholds exceeding 0.1% by weight (1000ppm) found in the REACH SVHC list or any supplemental Annexes. Certification shall also list the part number, PO number, and be signed by an authorized representative.

QA365 Minerals Reporting (QA37)

The material supplied under this PO shall comply with Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Act of 2010 and contain no tantalum, tin, tungsten, or gold (3TG) sourced from the Democratic Republic of the Congo (DRC) or adjoining countries. It shall also reflect responsible sourcing practices regarding cobalt and mica supply chains. Suppliers shall submit a completed Conflict Minerals Report for 3TG via the Conflict Minerals Reporting Template (CMRT) and a completed Extended Minerals Report for cobalt and mica supply chains via the Extended Minerals Reporting Template (EMRT) annually to confirm compliance.

QA370 Proposition 65

The Supplier is required to provide a warning for the exposure of any chemical in the California Proposition 65 list present in the product unless the exposure is low enough to pose no significant risk of cancer or is significantly below levels observed to cause birth defects or other reproductive harm. The Supplier shall furnish, with each shipment, a certification listing the chemicals of which a warning is required, or that no Proposition 65 listed chemical exposure warning is required.

QA375 Cybersecurity Maturity Model Certification 2.0 (CMMC)

The supplier shall comply with Level 2 requirements of CMMC 2.0. Proof of compliance shall be sent to Purchasing Contact.