



Vendor Quality Requirements	
Document #: BP-0018	Current Rev: 1.0
Business Process	

REVISION HISTORY			
Rev.	Description of Change	Author	Effective Date
1.0	Initial Release	Hamed Soleimani	2019-01-21

The following is a list of Vendor Quality Requirements (VQRs) that are applicable to MetOcean Telematics Purchase Orders for Critical Items. Items are considered critical if their quality will have a direct impact on MetOcean Telematics' ability to meet product or project requirements. Vendors are considered critical when they are asked by MetOcean Telematics to supply critical items. Additional applicable requirements may be indicated on the PO or the drawing. The current version of this list is to be sent to all vendors on the MetOcean Telematics Approved Vendors List. It is expected that these vendors will retain this list on file and apply the listed herein to all PO's received from MetOcean Telematics as per the table below.

STANDARD VQRs PER VENDOR CLASSIFICATION	
VENDOR CLASSIFICATION	APPLICABLE VQRs
All Vendors	VQRs 1-15
Electronics and Electro-Mechanical Assembly Vendors	VQRs 1-23
Machining and Fabrication Vendors	VQRs 1-15 and 22-26

Please contact Quality Manager at MetOcean Telematics if you have any questions regarding the following requirements or in case of conflict with drawing requirements.

VQR1 MINIMUM INSPECTION SYSTEM REQUIREMENTS: The Vendor is responsible for ensuring that all inspections and tests have been performed that are necessary to substantiate that the supplies or services furnished under this purchase order conform to specification requirements for the manufacturer's parts. All Inspection, Test and Measurement equipment used in the manufacture and processing of the items shall be calibrated and traceable to known national standards. The Inspection program shall include receiving inspection, In-Process Inspection, and Final outgoing inspection. Records shall be kept of what was inspected, the results of the inspection and who performed the inspection.

VQR2 CERTIFICATE OF CONFORMANCE: The Vendor shall send a Certification of Conformance (C of C) with each shipment, if specified on the PO. It shall include the following:

- Purchase order number
- Specification or drawing number including current revision
- Quantity of parts
- A statement that the materials conform to the applicable specifications and signature
- Dimension reports, if specified

VQR3 PACKING SLIP: The Vendor shall send a Packing Slip with each shipment if a C of C is not required by the Purchase Order. It shall include the following:

- Vendor Packing Slip number
- MetOcean Telematics Purchase Order number
- Part, specification or drawing number of product supplied (including revision)
- Quantity supplied



Vendor Quality Requirements	
Document #: BP-0018	Current Rev: 1.0
Business Process	

VQR4 NONCONFORMING CRITICAL PARTS: MetOcean Telematics fully expects critical parts delivered from Vendors to conform to Purchase Order requirements. MetOcean Telematics retains the right to return all parts found defective for sorting, repair, and replacement at the full expense to the Vendor. This will include the labor involved in the inspection and disposition of the defective material while at MetOcean Telematics, packing and shipping costs, and any associated costs incurred if there are delivery delays to our customers. (i.e.: extra shipping costs incurred from having to send as a single unit later or loss of the order due to delays)

VQR5 ON-TIME DELIVERY: By accepting the conditions of the Purchase order this verifies agreeing to the terms of delivery agreement as listed on the PO. Failure to meet this delivery date and quantity listed could result in penalties being assessed or worst case, probationary status or termination as a supplier from our supply chain.

VQR6 DEVIATION/WAIVER REQUESTS: The Vendor may not deviate from any MetOcean Telematics requirements without approval from MetOcean Telematics. The Vendor may request a deviation from, or a waiver of, MetOcean Telematics requirements using a deviation/waiver form (Vendor may use their own form or MetOcean Telematics' form).

VQR7 SUBCONTRACT AND FLOW DOWN REQUIREMENTS: The Vendor must notify MetOcean Telematics of intent to subcontract any portion of the PO. The vendor must flow down MetOcean Telematics requirements (including this document) to the subcontract vendors. MetOcean Telematics requires contact information for the Subcontract Vendor and access, if requested, to their production facility to do a site survey.

VQR8 REFURBISHED / USED / REPAIRED MATERIALS: Material supplied shall be of new manufacture. Used, repaired or refurbished parts/material shall not be supplied. **Repair:** Is defined as the process used to bring the non-conformance into an acceptable condition other than to print or specification **and requires MetOcean Telematics approval.** It is the act of restoring the functional capability of a defective part without necessarily restoring appearance, interchangeability, and uniformity. **Rework:** Is defined as the re-processing of a non-conformance to make it conform completely to the established drawing, specification or contract requirements **and does not require MetOcean Telematics approval (but must be recorded by the Vendor).**

VQR9 RECORDS RETENTION:

- A. The Vendor shall retain on file for a period of at least **2 years** all records for the material provided (e.g. incoming inspection/test results, assembly checklists/travelers, and final inspection/test results). Records must be traceable to serial number, if serialized, or customer SO/PO and ship date.
- B. The Vendor shall retain on file for a period of at least **7 years** all records for the material provided (e.g. incoming inspection/test results, assembly checklists/travelers, and final inspection/test results). Records must be traceable to serial number, if serialized, or customer SO/PO and ship date.
- C. The Vendor shall retain on file for an **indefinite period** for all records for the material provided (e.g. incoming inspection/test results, assembly checklists/travelers, and final inspection/test results). Records must be traceable to serial number, if serialized, or customer SO/PO and ship date

VQR10 HAZARDOUS MATERIAL (SDS): Vendors who supply MetOcean Telematics with chemicals are required to provide current "Safety Data Sheets" (SDS) with each shipment. Outside shipping containers shall be identified with the appropriate warning label.

VQR11 SHELF LIFE MATERIAL: When providing shelf life materials to MetOcean Telematics, each unit package shall be identified with the part number, Date of Manufacture, Storage Temperature, Date of storage expiration, and name of manufacturer as applicable. At least 75% of the shelf life must remain at the time of receipt by MetOcean Telematics unless otherwise specified on the purchase order.



Vendor Quality Requirements	
Document #: BP-0018	Current Rev: 1.0
Business Process	

VQR12 PACKAGE IDENTIFICATION: The Vendor shall mark package(s) with the part number, revision number (if MetOcean Telematics part number), quantity and Vendor identification unless otherwise defined by MetOcean Telematics.

VQR13 ELECTRONIC COMPONENTS TRACEABILITY:

- A. Counterfeit Parts** - The Vendor shall use or supply only new components (i.e. not refurbished, recovered, reworked or counterfeit) which are traceable to the Original Equipment Manufacturer (OEM). Electronic components must be purchased from the OEM or a franchised distributor. Procurement of components from a broker or non-authorized distributor is not permitted.
- B. Conflict Minerals** - Supplier must refrain from purchasing products that contain conflict minerals. The term “conflict minerals” refers to four metals -- tantalum, tin, tungsten, and gold -- that may be sourced from mines in the Democratic Republic of Congo (or an adjoining country)

VQR14 BILL OF MATERIAL PART/MATERIAL SUBSTITUTIONS: The Vendor shall not substitute different materials or components that are defined in the provide MetOcean Telematics BOM or on the drawing without prior approval from MetOcean Telematics.

VQR15 RoHS: If listed on the purchase order, all product(s) supplied under this purchase order must be compliant to the Restriction of Hazardous Substance (RoHS) Directive.

VQR16 SOLDERING WORKMANSHIP: Printed Circuit Board Assemblies (PCBAs) shall meet the requirements of IPC-A-610 (current version), Class 2 and J-STD-001. Automated Optical Inspection (AOI) on boards and X-ray analysis on BGAs (if present) is required on the first and last CCAs of a production run as well as every tenth CCA in between. AOI and X-ray records must be retained by the Vendor. It is expected by MetOcean Telematics a minimum quality yield of 98% on deliveries and MetOcean Telematics reserves the right to return lots to the Vendor when minimum yield is not met.

VQR17 ELECTROSTATIC DISCHARGE (ESD) PROTECTION: ESD Sensitive Devices and Assemblies shall be packaged, marked and handled in a manner that will prevent mechanical and/or electrical damage. The packaging shall withstand normal transport and handling requirements. ESD sensitive devices shall be packaged in static shielding materials.

VQR18 CABLE ASSEMBLY AND WIRE HARNESS WORKMANSHIP: Cables & wire harnesses shall meet the requirements of IPC/WHMA-A-620 (current version), Class 2

VQR19 ASSEMBLY TRACEABILITY: The Vendor shall create a checklist or traveler which records operator sign off at major assembly, in-process inspection and final inspection points. In-process inspections are required at any point in the assembly where the next step will make it impossible to verify the previous steps. In-process and final inspections must be performed by QA or other qualified personnel but should not be the person who performed the operation under inspection.

VQR20 PCB WORKMANSHIP: Printed Circuit Boards (PCBs) shall meet the requirements of IPC-A-600 (current version), Class 2 or equivalent and shall be shipped with Inspection Certificates.

Vendor Quality Requirements	
Document #: BP-0018	Current Rev: 1.0
Business Process	

VQR21 SERIALIZATION AND BARCODING: If listed on the purchase order, the supplier shall label all outgoing PCBAs with a standard serialized barcode label (see below) generated by two digit referenced part number, start date of build, and unit number manufactured in that build. The width and length of the label and positioning on PCBA shall be of the discretion of the supplier unless otherwise noted. Any issues with the generation or placement of the serialized barcode label should be consulted with MetOcean Telematics on further guidance.

- NN – Part Number Designation (to be supplied by MetOcean Telematics)
- YY - Last two digits of year build start date
- MM – Month of build start date
- DD – Day of build start date
- XXXX – Unit number in that build



VQR22 FIRST ARTICLE INSPECTION: The Vendor shall perform, or notify MetOcean Telematics of the requirement for first article inspection/product validation on parts and subassemblies supplied under the following conditions, unless the requirement has been waived by MetOcean Telematics (e.g. for very simple or non-critical items).

- A. The parts are being built by the Vendor for the first time.
- B. There has been a major drawing revision since the last shipment of the same parts.
- C. The last delivery of the same parts has been over one year before the PO date.
- D. Vendor has introduced a major process change/modification in the manufacture of the parts.
- E. Vendor has introduced a Software, Firmware, Electrical, Mechanical, or Process change to the product that could impact design specifications.

100% inspection will be performed on all parts and sub-assemblies for the specified first article quantity (as indicated on the PO or in written communication from MetOcean Telematics). The Vendor is required to deliver the First Article Quantity and First Article Report prior to shipment of the balance of the Purchase Order, unless otherwise specified.

VQR23 TEST REPORTS: Test reports shall contain the results of tests which indicate conformance to the requirements detailed in the MetOcean Telematics drawing, PO or other applicable specifications. These reports must be identifiable with the materials furnished. Copies of the test reports shall be included with each shipment or submitted digitally to purchasing@metocean.com



Vendor Quality Requirements	
Document #: BP-0018	Current Rev: 1.0
Business Process	

VQR24 DIMENSIONAL INSPECTION REPORT (FABRICATED PARTS): Unless otherwise specified the Vendor shall provide a dimensional inspection report for critical dimensions only (i.e. dimensions with tolerances other than drawing defaults). This report may simply list the highest and lowest measurement for each critical feature across the quantity supplied, assuring MetOcean Telematics that all remaining items are within this range. A MetOcean Telematics drawing with the highest and lowest measurement written next to the critical feature required dimension is acceptable, providing it is initialed/stamped by the inspector and dated.

VQR25 WELDING CERTIFICATION: Welding performed on MetOcean Telematics parts used in lifting and rigging shall be certified as per ASME Section IX. Assume all welding must be certified unless instructed otherwise by MetOcean Telematics. Dye inspection is not required unless specifically requested by MetOcean Telematics. The WPS and certified welder license must be sent to MetOcean Telematics with each welded lot.

VQR26 ANODIZED PARTS: All anodizing shall be as per MIL-A-8625F TYPE III, unless otherwise indicated on the drawing.