VACCO

Supplier Training

Updated 12/13/18

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VACCO Website

- http://www.vacco.com/suppliers/suppliers
- Three key documents:
  - **VI-QFD-001**, General Quality Terms and Conditions
  - **VI-QFD-002**, Supplier Counterfeit Control Requirements
  - **VI-QFD-003**, Supplier False and Fraudulent Requirements
- Review the website for possible changes each time purchase order is received or once per month.

http://www.vacco.com/suppliers/quality-clauses

- Supplier Instructions – Provides guidance to suppliers to meet VACCO's requirements. Provides summary of Quality Clause updates.

http://www.vacco.com/suppliers/supplier-instructions

- Purchasing Terms and Conditions

http://www.vacco.com/suppliers/purchase-order-terms-and-conditions

- Forms
- http://www.vacco.com/suppliers/supplier-forms

VACCO General Information

- Purchase Orders are only valid if they come from a member of the Purchasing Department.
- The Supplier Management team includes members from Supplier Quality and Purchasing. This team…
  - Monitors all quality/delivery/documentation issues to assess supplier performance,
  - Performs on-boarding and continuous supplier training,
- Contract flow downs will vary for each Purchase Order. Repeat part number orders may not have the same flow down requirements.
- It is recommended that the supplier…
  - Review the Purchase Order and drawing requirements carefully prior to the acceptance of the PO.
  - Some documentation may be conflicting. The order of Precedence is located on VI-QFD-001 – Section 6.
  - **Note:** Source inspection may be required several times due to measurements that state prior to outside processing, etc.,
    - Allow 1 week for Source Inspection at a minimum.
  - Parts **must be** on VACCO's dock on the date promised on the PO.

A penalty clause may be added to PO's to ensure on time delivery.

A penalty clause may be added to PO's for shipping nonconforming product and/or documentation.

Supplier Management Team

Supplier Performance

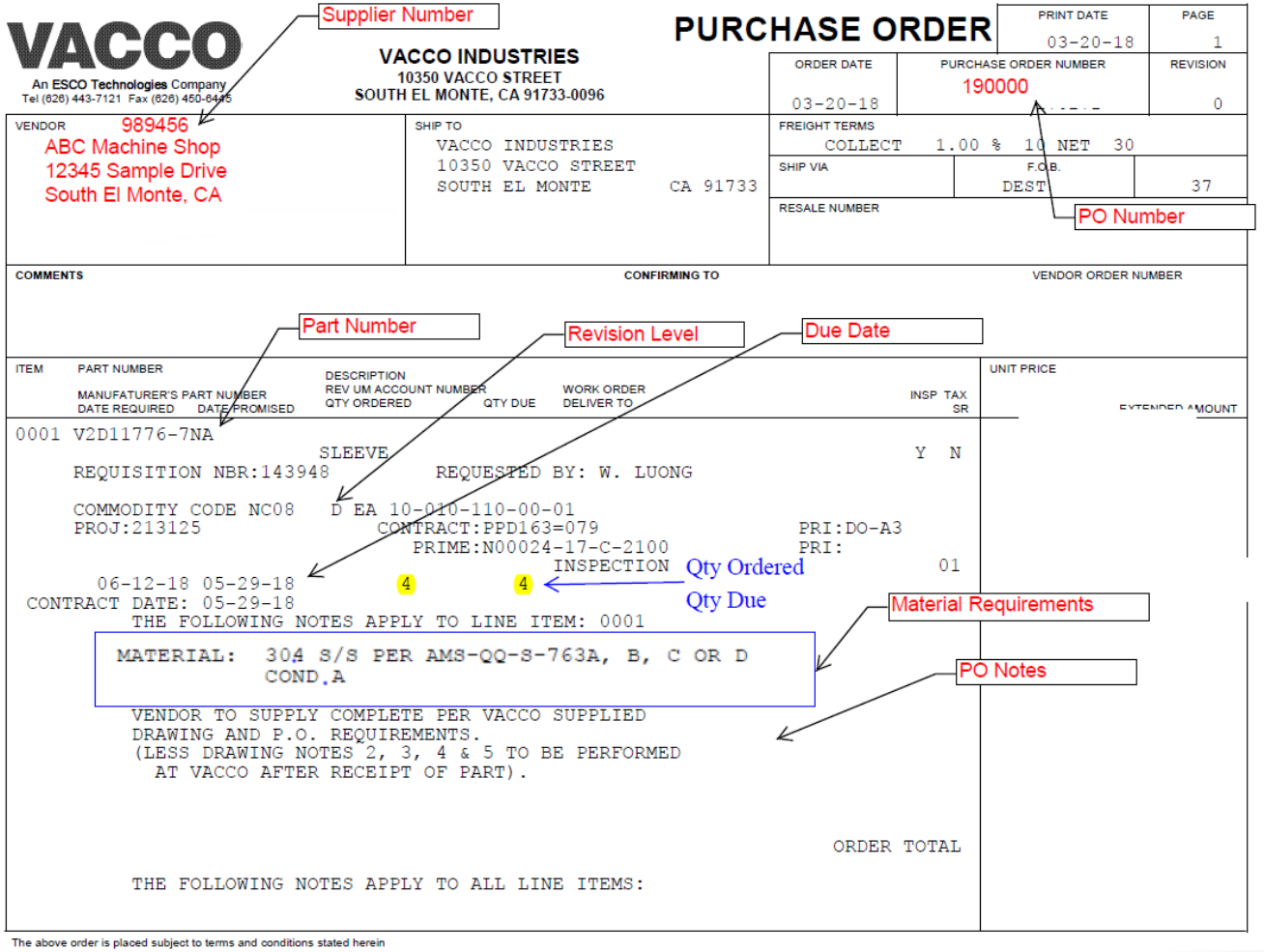
- Suppliers are reviewed Quarterly for performance by the Supplier Management Team. Suppliers are expected to meet:
  - Performance Goals on the VACCO website
- Suppliers may be put on Unapproved for a period of 3 months if their score falls below these expectations for 2 consecutive Quarters.

First Pass Yield (FPY)

- This score consists of a weighted average of the Quality Acceptance, Document Acceptance and SRMRs.
- Suppliers are expected to deliver all documentation and product in accordance with Purchase Order and Drawing requirements.

Purchase Order Sample

- Notes on the PO take precedence over Quality and PO flow downs (VI-QFD-001, 6.)
- Material Requirements specification and revision are required to be stated on:
  - Mill certification (per VI-QFD-001, 8.1)



VACCO
An ESCO Technologies Company
Tel (626) 443-7121 Fax (626) 450-6415

VACCO INDUSTRIES
10350 VACCO STREET
SOUTH EL MONTE, CA 91733-0096

Supplier Number

PURCHASE ORDER

PRINT DATE	PAGE
03-20-18	1

ORDER DATE	PURCHASE ORDER NUMBER	REVISION
03-20-18	190000	0

VENDOR 989456
ABC Machine Shop
12345 Sample Drive
South El Monte, CA

SHIP TO
VACCO INDUSTRIES
10350 VACCO STREET
SOUTH EL MONTE CA 91733

FREIGHT TERMS: COLLECT 1.00 % 10 NET 30
SHIP VIA | F.O.B. DEST | 37
RESALE NUMBER

PO Number

COMMENTS | CONFIRMING TO | VENDOR ORDER NUMBER

Part Number | Revision Level | Due Date

ITEM | PART NUMBER / MANUFATURER'S PART NUMBER / DATE REQUIRED / DATE PROMISED | DESCRIPTION / REV UM ACCOUNT NUMBER / QTY ORDERED / QTY DUE / WORK ORDER / DELIVER TO / INSP / TAX / SR | UNIT PRICE | EXTENDED AMOUNT

0001 V2D11776-7NA
SLEEVE Y N
REQUISITION NBR:143948 REQUESTED BY: W. LUONG

COMMODITY CODE NC08 D EA 10-010-110-00-01
PROJ:213125 CONTRACT:PPD163=079 PRI:DO-A3
PRIME:N00024-17-C-2100 PRI:
INSPECTION 01

06-12-18 05-29-18 4 4 ← Qty Ordered / Qty Due
CONTRACT DATE: 05-29-18
THE FOLLOWING NOTES APPLY TO LINE ITEM: 0001

Material Requirements

MATERIAL: 304 S/S PER AMS-QQ-S-763A, B, C OR D
COND.A

PO Notes

VENDOR TO SUPPLY COMPLETE PER VACCO SUPPLIED
DRAWING AND P.O. REQUIREMENTS.
(LESS DRAWING NOTES 2, 3, 4 & 5 TO BE PERFORMED
AT VACCO AFTER RECEIPT OF PART).

ORDER TOTAL

THE FOLLOWING NOTES APPLY TO ALL LINE ITEMS:

The above order is placed subject to terms and conditions stated herein

Purchase Order Sample

VACCO
An ESCO Technologies Company
Tel (626) 443-7121 Fax (626) 450-6445

PURCHASE ORDER

PRINT DATE	PAGE
03-20-18	2

VACCO INDUSTRIES
10350 VACCO STREET
SOUTH EL MONTE, CA 91733-0096

ORDER DATE	PURCHASE ORDER NUMBER	REVISION
03-20-18	190000	0

VENDOR 989456
ABC Machine Shop
12345 Sample Drive
South El Monte, CA

SHIP TO
VACCO INDUSTRIES
10350 VACCO STREET
SOUTH EL MONTE CA 91733

FREIGHT TERMS: COLLECT 1.00 % 10 NET 30

SHIP VIA	F.O.B.	
	DEST	37

RESALE NUMBER

COMMENTS

CONFIRMING TO: ADRIAN

VENDOR ORDER NUMBER

ITEM	PART NUMBER / MANUFATURER'S PART NUMBER / DATE REQUIRED / DATE PROMISED	DESCRIPTION / REV UM ACCOUNT NUMBER / QTY ORDERED / QTY DUE / WORK ORDER / DELIVER TO / INSP / TAX / SR	UNIT PRICE / EXTENDED AMOUNT

6.13 FIRST ARTICLE REPORT - AS9102
FIRST ARTICLE REPORT (FAIR) PER AS9102

6.15 ITEM LOT/HEAT NUMBER INDIVIDUA
QFD-6.15 ITEM LOT/HEAT NUMBER INDIVIDUALITY

6.18 GIDEP ANNOUNCEMENTS
QFD-6.18 GIDEP ANNOUNCEMENTS

6.2 VACCO PROP PROCEDURE/DRAWING
QFD-6.2 VACCO PROPRIETARY PROCEDURE/DRAWING REQUIREMENTS

6.24 SUPPLIER QUALITY CONTROL SYS.
QFD-6.24 SUPPLIER QUALITY CONTROL SYSTEM REQUIREMENTS

6.25 COUNTERFEIT WORK
QFD-6.25 COUNTERFEIT WORK

VI-QFD-001 Quality Flow Down Notes

DCMA Signature required prior to acceptance of PO.

7.2 **SUPPLIER VERIFY THAT THERE IS MANDATORY SIGNATURE PRIOR TO PO ACCEPTANCE**
GOVERNMENT SOURCE INSPECTION
Government Source Inspection is required on this order; it may involve in-process and final inspection. Upon receipt of this purchase order, promptly notify the Government Representative who normally services your plant, so that appropriate planning for Government Inspection can be accomplished. If none is currently assigned, contact the nearest Army, Navy, Air Force, or Defense Supply Agency Inspection Office. In the event the representative or office cannot be located, notify VACCO Industries' buyer immediately.

SUPPLIER - NOTIFY THE BUYER IMMEDIATELY IF THERE IS NO SIGNATURE UPON RECEIPT OF THIS PO.

DCMA Review: _____
QAR/EXTBF S4306A Date

Purchase Order Sample

VACCO
An ESCO Technologies Company
Tel (626) 443-7121 Fax (626) 450-6445

VACCO INDUSTRIES
10350 VACCO STREET
SOUTH EL MONTE, CA 91733-0096

PURCHASE ORDER

PRINT DATE	PAGE
03-20-18	4

ORDER DATE	PURCHASE ORDER NUMBER	REVISION
03-20-18	190000	0

VENDOR 989456
ABC Machine Shop
12345 Sample Drive
South El Monte, CA

SHIP TO
VACCO INDUSTRIES
10350 VACCO STREET
SOUTH EL MONTE CA 91733

FREIGHT TERMS
COLLECT 1.00 % 10 NET 30

SHIP VIA | F.O.B. DEST | 37

RESALE NUMBER

COMMENTS

CONFIRMING TO
ADRIAN

VENDOR ORDER NUMBER

ITEM	PART NUMBER / MANUFATURER'S PART NUMBER / DATE REQUIRED / DATE PROMISED	DESCRIPTION / REV UM ACCOUNT NUMBER / QTY ORDERED / QTY DUE / WORK ORDER / DELIVER TO / INSP / TAX / SR	UNIT PRICE / EXTENDED AMOUNT

9.5 RAW MATERIAL TRACEABILITY
QFD-9.5 RAW MATERIAL TRACEABILITY

QFD3-6.1 FALSE & FRAUD VI-QFD-003 6.1
False & Fraudulent requirements SEE document
VI-QFD-003 Section 6.1

T0002 101,102,103,108,109,110,112

False & Fraudulent Requirement - VI-QFD-003

Purchasing Flow Down Notes PNM 101

Signature of Buyer

BUYER: _____ APPROVAL _____

Mandatory DCMA Signature

- All POs with the following Clause are required to be signed prior to placement with the Supplier
- VACCO is requesting that the Supplier review the PO and verify that the PO is signed prior to final acceptance.

7.2 **SUPPLIER VERIFY THAT THERE IS MANDATORY SIGNATURE PRIOR TO PO ACCEPTANCE**

GOVERNMENT SOURCE INSPECTION

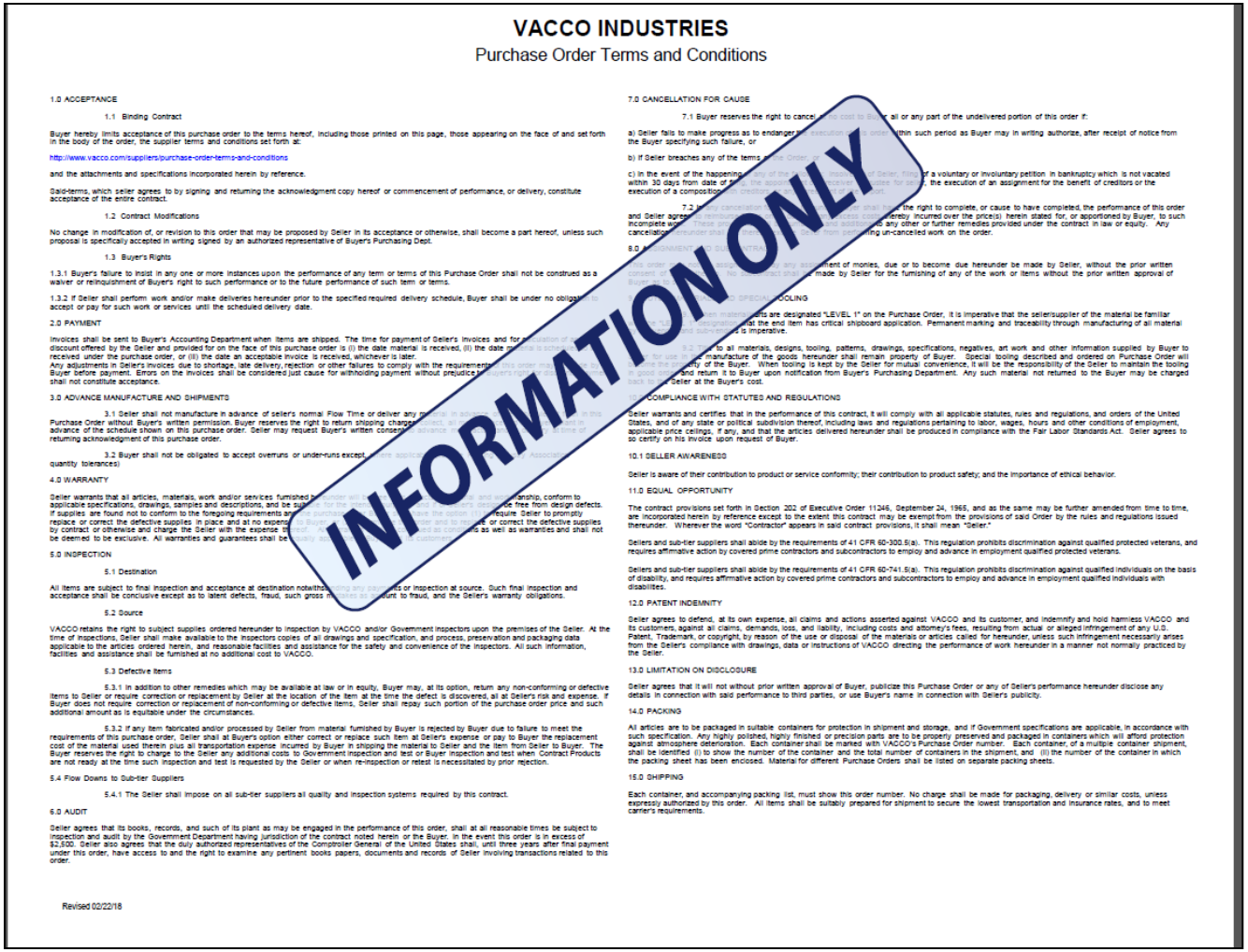
Government Source Inspection is required on this order; it may involve in-process and final inspection. Upon receipt of this purchase order, promptly notify the Government Representative who normally services your plant, so that appropriate planning for Government Inspection can be accomplished. If none is currently assigned, contact the nearest Army, Navy, Air Force, or Defense Supply Agency Inspection Office. In the event the representative or office cannot be located, notify VACCO Industries' buyer immediately.

****SUPPLIER - NOTIFY THE BUYER IMMEDIATELY IF THERE IS NO SIGNATURE UPON RECEIPT OF THIS PO.****

DCMA Review: _____

QAR/EXTBF S4306A Date

Purchase Order Sample



VACCO INDUSTRIES

Purchase Order Terms and Conditions

1.0 ACCEPTANCE

1.1 Binding Contract

Buyer hereby limits acceptance of this purchase order to the terms hereof, including those printed on this page, those appearing on the face of and set forth in the body of the order, the supplier terms and conditions set forth at:

http://www.vacco.com/suppliers/purchase-order-terms-and-conditions

and the attachments and specifications incorporated herein by reference.

Said-terms, which seller agrees to by signing and returning the acknowledgment copy hereof or commencement of performance, or delivery, constitute acceptance of the entire contract.

1.2 Contract Modifications

No change in modification of, or revision to this order that may be proposed by Seller in its acceptance or otherwise, shall become a part hereof, unless such proposal is specifically accepted in writing signed by an authorized representative of Buyer's Purchasing Dept.

1.3 Buyer's Rights

1.3.1 Buyer's failure to insist in any one or more instances upon the performance of any term or terms of this Purchase Order shall not be construed as a waiver or relinquishment of Buyer's right to such performance or to the future performance of such term or terms.

1.3.2 If Seller shall perform work and/or make deliveries hereunder prior to the specified required delivery schedule, Buyer shall be under no obligation to accept or pay for such work or services until the scheduled delivery date.

2.0 PAYMENT

Invoices shall be sent to Buyer's Accounting Department when items are shipped. The time for payment of Seller's invoices and for [illegible] discount offered by the Seller and provided for on the face of this purchase order is (i) the date material is received, (ii) the date [illegible] received under the purchase order, or (iii) the date an acceptable invoice is received, whichever is later.
Any adjustments in Seller's invoices due to shortage, late delivery, rejection or other failures to comply with the requirements [illegible] Buyer before payment. Errors on the invoices shall be considered just cause for withholding payment without prejudice [illegible] shall not constitute acceptance.

3.0 ADVANCE MANUFACTURE AND SHIPMENTS

3.1 Seller shall not manufacture in advance of seller's normal Flow Time or deliver any [illegible] Purchase Order without Buyer's written permission. Buyer reserves the right to return shipping charges [illegible] advance of the schedule shown on this purchase order. Seller may request Buyer's written consent [illegible] returning acknowledgment of this purchase order.

3.2 Buyer shall not be obligated to accept overruns or under-runs except [illegible] quantity tolerances)

4.0 WARRANTY

Seller warrants that all articles, materials, work and/or services furnished [illegible] applicable specifications, drawings, samples and descriptions, and be [illegible] free from design defects. If supplies are found not to conform to the foregoing requirements [illegible] require Seller to promptly replace or correct the defective supplies in place and at no expense [illegible] or correct the defective supplies by contract or otherwise and charge the Seller with the expense [illegible] as well as warranties and shall not be deemed to be exclusive. All warranties and guarantees shall be [illegible]

5.0 INSPECTION

5.1 Destination

All items are subject to final inspection and acceptance at destination notwithstanding any payment for or inspection at source. Such final inspection and acceptance shall be conclusive except as to latent defects, fraud, such gross mistakes as amount to fraud, and the Seller's warranty obligations.

5.2 Source

VACCO retains the right to subject supplies ordered hereunder to inspection by VACCO and/or Government inspectors upon the premises of the Seller. At the time of inspections, Seller shall make available to the inspectors copies of all drawings and specification, and process, preservation and packaging data applicable to the articles ordered herein, and reasonable facilities and assistance for the safety and convenience of the inspectors. All such information, facilities and assistance shall be furnished at no additional cost to VACCO.

5.3 Defective Items

5.3.1 In addition to other remedies which may be available at law or in equity, Buyer may, at its option, return any non-conforming or defective items to Seller or require correction or replacement by Seller at the location of the item at the time the defect is discovered, all at Seller's risk and expense. If Buyer does not require correction or replacement of non-conforming or defective items, Seller shall repay such portion of the purchase order price and such additional amount as is equitable under the circumstances.

5.3.2 If any item fabricated and/or processed by Seller from material furnished by Buyer is rejected by Buyer due to failure to meet the requirements of this purchase order, Seller shall at Buyer's option either correct or replace such item at Seller's expense or pay to Buyer the replacement cost of the material used therein plus all transportation expense incurred by Buyer in shipping the material to Seller and the item from Seller to Buyer. The Buyer reserves the right to charge to the Seller any additional costs to Government inspection and test or Buyer inspection and test when Contract Products are not ready at the time such inspection and test is requested by the Seller or when re-inspection or retest is necessitated by prior rejection.

5.4 Flow Downs to Sub-tier Suppliers

5.4.1 The Seller shall impose on all sub-tier suppliers all quality and inspection systems required by this contract.

6.0 AUDIT

Seller agrees that its books, records, and such of its plant as may be engaged in the performance of this order, shall at all reasonable times be subject to inspection and audit by the Government Department having jurisdiction of the contract noted herein or the Buyer. In the event this order is in excess of $2,500. Seller also agrees that the duly authorized representatives of the Comptroller General of the United States shall, until three years after final payment under this order, have access to and the right to examine any pertinent books papers, documents and records of Seller involving transactions related to this order.

Revised 02/22/18

7.0 CANCELLATION FOR CAUSE

7.1 Buyer reserves the right to cancel [illegible] all or any part of the undelivered portion of this order if:

a) Seller fails to make progress as to endanger [illegible] within such period as Buyer may in writing authorize, after receipt of notice from the Buyer specifying such failure, or

b) If Seller breaches any of the terms [illegible]

c) In the event of the happening [illegible] of a voluntary or involuntary petition in bankruptcy which is not vacated within 30 days from date of [illegible] the execution of an assignment for the benefit of creditors or the execution of a composition [illegible]

7.2 [illegible] the right to complete, or cause to have completed, the performance of this order and Seller agrees [illegible] thereby incurred over the price(s) herein stated for, or apportioned by Buyer, to such incomplete [illegible] any other or further remedies provided under the contract in law or equity. Any cancelation [illegible] ing un-canceled work on the order.

8.0 [illegible]

[illegible] ment of monies, due or to become due hereunder be made by Seller, without the prior written consent of Buyer. No [illegible] made by Seller for the furnishing of any of the work or items without the prior written approval of Buyer.

9.0 SPECIAL TOOLING

[illegible] ts are designated "LEVEL 1" on the Purchase Order, it is imperative that the seller/supplier of the material be familiar [illegible] that the end item has critical shipboard application. Permanent marking and traceability through manufacturing of all material [illegible] is imperative.

[illegible] to all materials, designs, tooling, patterns, drawings, specifications, negatives, art work and other information supplied by Buyer to [illegible] manufacture of the goods hereunder shall remain property of Buyer. Special tooling described and ordered on Purchase Order will [illegible] ty of the Buyer. When tooling is kept by the Seller for mutual convenience, it will be the responsibility of the Seller to maintain the tooling in good [illegible] and return it to Buyer upon notification from Buyer's Purchasing Department. Any such material not returned to the Buyer may be charged back to [illegible] Seller at the Buyer's cost.

10.0 COMPLIANCE WITH STATUTES AND REGULATIONS

Seller warrants and certifies that in the performance of this contract, it will comply with all applicable statutes, rules and regulations, and orders of the United States, and of any state or political subdivision thereof, including laws and regulations pertaining to labor, wages, hours and other conditions of employment, applicable price ceilings, if any, and that the articles delivered hereunder shall be produced in compliance with the Fair Labor Standards Act. Seller agrees to so certify on his invoice upon request of Buyer.

10.1 SELLER AWARENESS

Seller is aware of their contribution to product or service conformity; their contribution to product safety; and the importance of ethical behavior.

11.0 EQUAL OPPORTUNITY

The contract provisions set forth in Section 202 of Executive Order 11246, September 24, 1965, and as the same may be further amended from time to time, are incorporated herein by reference except to the extent this contract may be exempt from the provisions of said Order by the rules and regulations issued thereunder. Wherever the word "Contractor" appears in said contract provisions, it shall mean "Seller."

Sellers and sub-tier suppliers shall abide by the requirements of 41 CFR 60-300.5(a). This regulation prohibits discrimination against qualified protected veterans, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans.

Sellers and sub-tier suppliers shall abide by the requirements of 41 CFR 60-741.5(a). This regulation prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified individuals with disabilities.

12.0 PATENT INDEMNITY

Seller agrees to defend, at its own expense, all claims and actions asserted against VACCO and its customer, and indemnify and hold harmless VACCO and its customers, against all claims, demands, loss, and liability, including costs and attorney's fees, resulting from actual or alleged infringement of any U.S. Patent, Trademark, or copyright, by reason of the use or disposal of the materials or articles called for hereunder, unless such infringement necessarily arises from the Seller's compliance with drawings, data or instructions of VACCO directing the performance of work hereunder in a manner not normally practiced by the Seller.

13.0 LIMITATION ON DISCLOSURE

Seller agrees that it will not without prior written approval of Buyer, publicize this Purchase Order or any of Seller's performance hereunder disclose any details in connection with said performance to third parties, or use Buyer's name in connection with Seller's publicity.

14.0 PACKING

All articles are to be packaged in suitable containers for protection in shipment and storage, and if Government specifications are applicable, in accordance with such specification. Any highly polished, highly finished or precision parts are to be properly preserved and packaged in containers which will afford protection against atmosphere deterioration. Each container shall be marked with VACCO's Purchase Order number. Each container, of a multiple container shipment, shall be identified (i) to show the number of the container and the total number of containers in the shipment, and (ii) the number of the container in which the packing sheet has been enclosed. Material for different Purchase Orders shall be listed on separate packing sheets.

15.0 SHIPPING

Each container, and accompanying packing list, must show this order number. No charge shall be made for packaging, delivery or similar costs, unless expressly authorized by this order. All items shall be suitably prepared for shipment to secure the lowest transportation and insurance rates, and to meet carrier's requirements.

INFORMATION ONLY

VACCO

First Article Inspection Report Training

PER AS9102 Rev. B – Suppliers are required to use Revision B forms for this process.

First Article Inspection (FAI)

Purpose

Provides objective evidence that all engineering design and specification requirements are: understood, accounted for, verified, documented and can be duplicated.

Definition

A planned, complete, **independent**, and documented physical and functional inspection process to verify that prescribed production methods have produced an acceptable item as specified by engineering drawings, planning, purchase order, engineering specifications, and/or other applicable design documents.

FAIR Applicability

- FAIR completion applies to the Organization that is responsible for the product's design characteristics (i.e. product realization).
  - The Organization shall flowdown the requirements of AS9102 to any Supplier that produces design characteristics of the finished product (i.e. sub-assemblies, castings, forgings, and modified COTS items).

- Unless contractually required, FAIRs do not apply to:
  - Development and prototype parts that are not considered part of the first production run,
  - Unique single run orders that are not intended for on-going production,
  - Procured standard catalogue items, COTS, or deliverable software.

When should the supplier provide a FAIR?

Clause 6.13 is flowed down on the Purchase Order and one of the following below applies:

- **Full FAIR**
  - New part introduction
  - New supplier or new location of manufacture
  - Lapse in production for more than 2 years
  - When required by the customer or VACCO
- **Partial (Delta) FAIR**
  - Design change
  - Significant change in method of manufacture (e.g.: tooling, processes, machine, location, numerical control program, sequence of manufacture).

Some POs do not require FAIRs (non-production orders). FAIRs should not be sent if not requested by the PO based on the AS9102 requirements.

Subtier FAIRs

A VACCO supplier may obtain incomplete parts and a FAIR from a sub-tier supplier. The VACCO's direct supplier may perform a partial FAI on the characteristics not accounted for on a sub-tier supplier's FAI report to provide a complete FAIR to VACCO.

The subtier partial FAI should reference the Baseline Part number and revision level in field 14 of form 1 (the P/N and Rev. supplied to VACCO's supplier), along with the reason for the partial FAI (e.g., parts supplied less Eddy Current testing). The sub-tier supplier FAI report would need to provide a reference number allowing the incomplete characteristics (such as the P.O. number from VACCO's supplier [not the VACCO P.O. number]) in field 8 of form 1. Both of the reports would need to be provided to VACCO. Both of the reports should reference VACCO's part number in field 12.

What should be included in the FAI Report?

- VACCO Industries requires all three forms be completed when a FAIR is required.
  - Form 1: Part Number Accountability.
  - Form 2: Product Accountability – Raw Material, Specifications and Special Process(s), Test Verification
  - Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

- The FAIR should address the following:
  - Verification of all design characteristics (including drawing notes),
  - Material and Special Process Certifications (shall be clear and legible),
  - Manufacturing Process Verification,
  - Nonconformance Resolution,
  - FAIRs for major subassemblies.

AS9102 Form 1 – Part Number Accountability

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted

Form 1: Part Number Accountability — Sheet 1 of ___

1. Part Number	2. Part Name	*3. Serial Number*	4. FAI Report Number
5. Part Revision Level	*6. Drawing Number*	*7. Drawing revision level*	*8. Additional Changes*
9. Manufacturing Process Reference	10. Organization Name	11. Supplier Code	12. P.O. Number
13. Detail FAI ☐ Assembly FAI ☐	14. Full FAI ☐ Partial FAI ☐ *Reason for Partial FAI:*	*Baseline Part Number including revision level*	
a) if above part number is a detail part only, go to Field 19 b) if above part number is an assembly, go to the "INDEX" section below.			

Box descriptions:

1) Part number for the FAI Part (including the dash number).
2) Name of part as shown on the drawing in the description field.
3) Serial number of FAI Part; unique identifier assigned to the detail part, sub-assembly, or assembly by the purchasing organization/customer if applicable (if applicable to this PO).
4) Reference number that identifies the FAIR (may be internal number);s/b used for parts that will be included with an assembly that includes multiple FAIs. (Optional)
5) Part revision. If there is no revision, state N/C or (-) as stated on the drawing.
6) The drawing number associated with the FAI part (no dash number is included, in most cases)
7) Reference the revision of engineering drawing. If the drawing has not been revised, indicate as such (e.g. N/C, No Change)(Should match with Purchase Order. If not, contact VACCO buyer for direction).
8) Applicable when the Purchase Order identifies a deviation or exclusion from the drawing, such as: Less note "#"; change in design; or manufacturing change. Identify VACCO PO number.

AS9102 Form 1 – Part Number Accountability

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted

Form 1: Part Number Accountability — Sheet 1 of ___

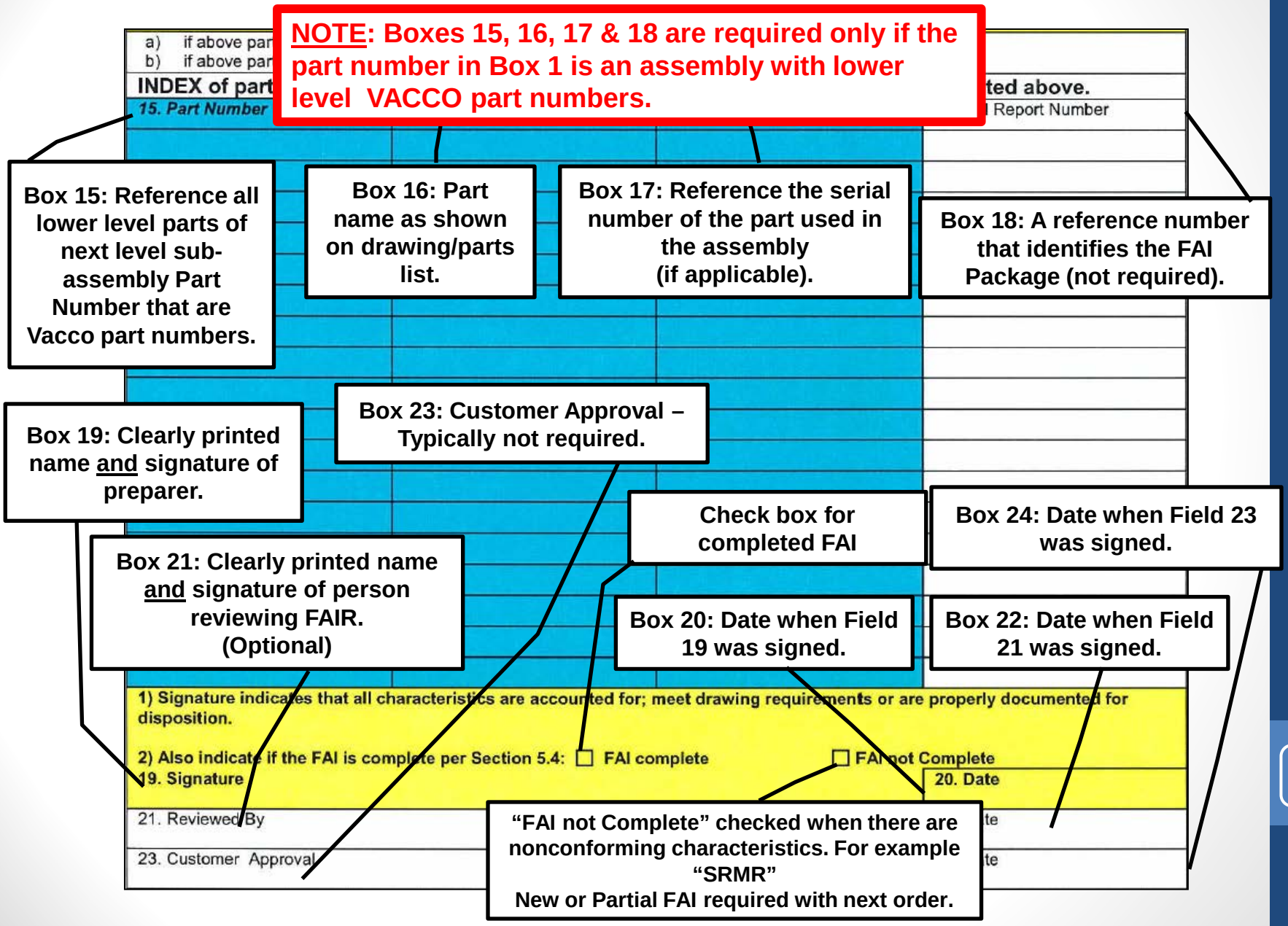
1. Part Number	2. Part Name	3. Serial Number	4. FAI Report Number
5. Part Revision Level	6. Drawing Number	7. Drawing revision level	8. Additional Changes
9. Manufacturing Process Reference	10. Organization Name	11. Supplier Code	12. P.O. Number
13. Detail FAI ☐ Assembly FAI ☐	14. Full FAI ☐ Partial FAI ☐ Reason for Partial FAI:	Baseline Part Number including revision level	
a) if above part number is a detail part only, go to Field 19 b) if above part number is an assembly, go to the "INDEX" section below.			

Box descriptions:

9) Reference internal manufacturing router, traveler or work order number.
10) Name of organization that is identified on the VACCO PO.
11) *__Required__* Reference VACCO assigned supplier vendor code on Purchase Order.
12) *__Required__* Reference VACCO PO # (add Line Item number if more than one Line Item on the Purchase Order).
13) Check as appropriate. Assembly FAIs are those with a parts list.
14) Check as appropriate. For partial FAI, provide the baseline part number (including revision level) to which this partial FAI is performed and the reason for it. For example, changes in design, process, manufacturing location, etc. Keep it simple.

AS9102 Form 1 – Part Number Accountability

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted



AS9102 Form 2 – Product Accountability

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted

Boxes 1-4 are repeated for convenience and traceability.

Box 7: Reference any material code specified, if applicable. May be left blank.

Box 10: Reference Certificate of Conformance number(s). E.g., special process completion number, raw material test report number and material heat number, etc.

Form 2: Product Accountability - Raw Material, Specifications and Special Process(es), Functional Testing

Sheet 1 of ___

1. Part Number	2 Part Name		3. Serial Number		4. FAI Report Number
5. Material or Process Name	6. Specification Number	7. Code	8. Special Process Supplier Code	9. Customer Approval Verification (Yes/No/NA)	10. Certificate of Conformance number

Box 5: Name of material or special process. i.e., Aluminum, Alloy, Cadmium, heat treat, anodize.

Box 6: Enter material and/or process specification number, class, type, etc. and material form. i.e., AMS4928 Bar (include make from materials, weld/braze filler materials, standard catalogue hardware, etc.)

Box 8: List supplier name and address.

Box 9: Indicate if technical approval is required by the customer ("Yes" or "No"). Otherwise state N/A.

AS9102 Form 2 – Product Accountability

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted

Form 2: Product Accountability - Raw Material, Specifications and Special Process(es), Functional Testing

Sheet 1 of ___

1. Part Number	2 Part Name		3. Serial Number		4. FAI Report Number
5. Material or Process Name	6. Specification Number	7. Code	8. Special Process Supplier Code	9. Customer Approval Verification (Yes/No/NA)	10. Certificate of Conformance number

IMPORTANT!!

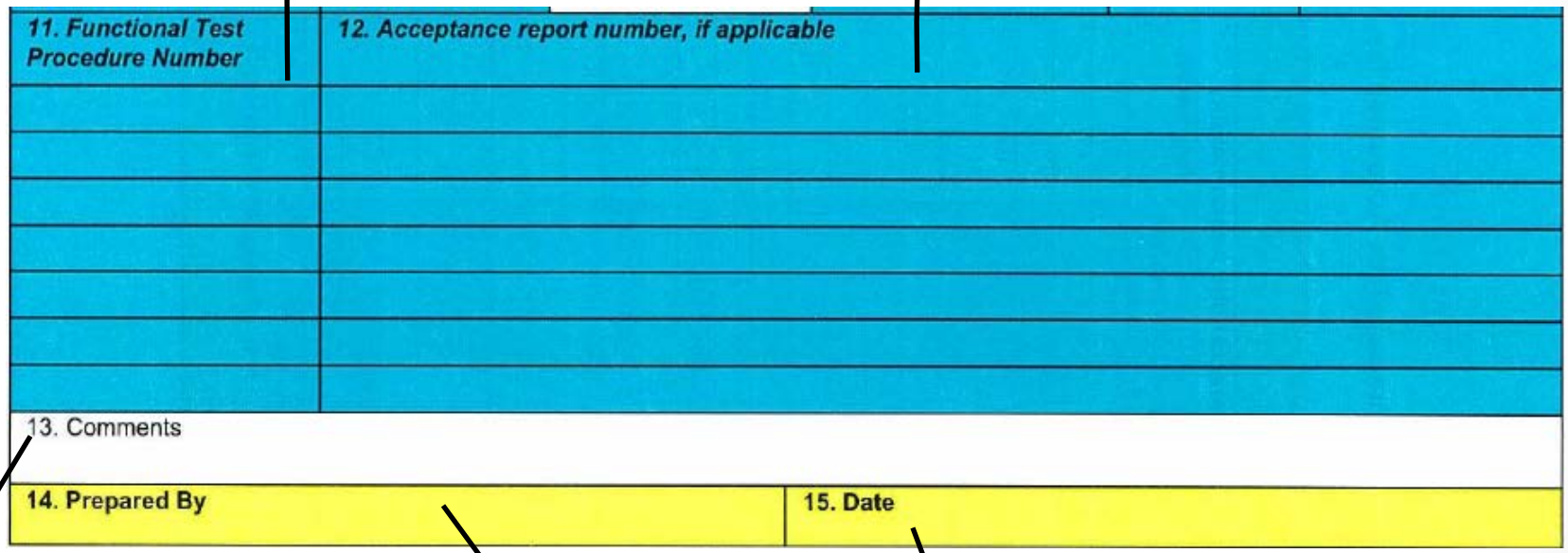
- Verify raw material and special process certifications call out the **correct** specification, revision, material type(s), conditions, and approvals per the PO or Drawing.
- Verify approved Special Process Sources are used (if applicable) and that the manufacturing routing document calls out the **correct** source, specification, Type, Class, Method, Revision etc. (as applicable).

AS9102 Form 2 – Product Accountability

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted

Box 11: Reference the Functional Test procedure as stated on the drawing (if applicable).

Box 12: Reference the Functional Test report that indicates the test requirements have been met. (if applicable).



11. Functional Test Procedure Number	*12. Acceptance report number, if applicable*
13. Comments	
14. Prepared By	**15. Date**

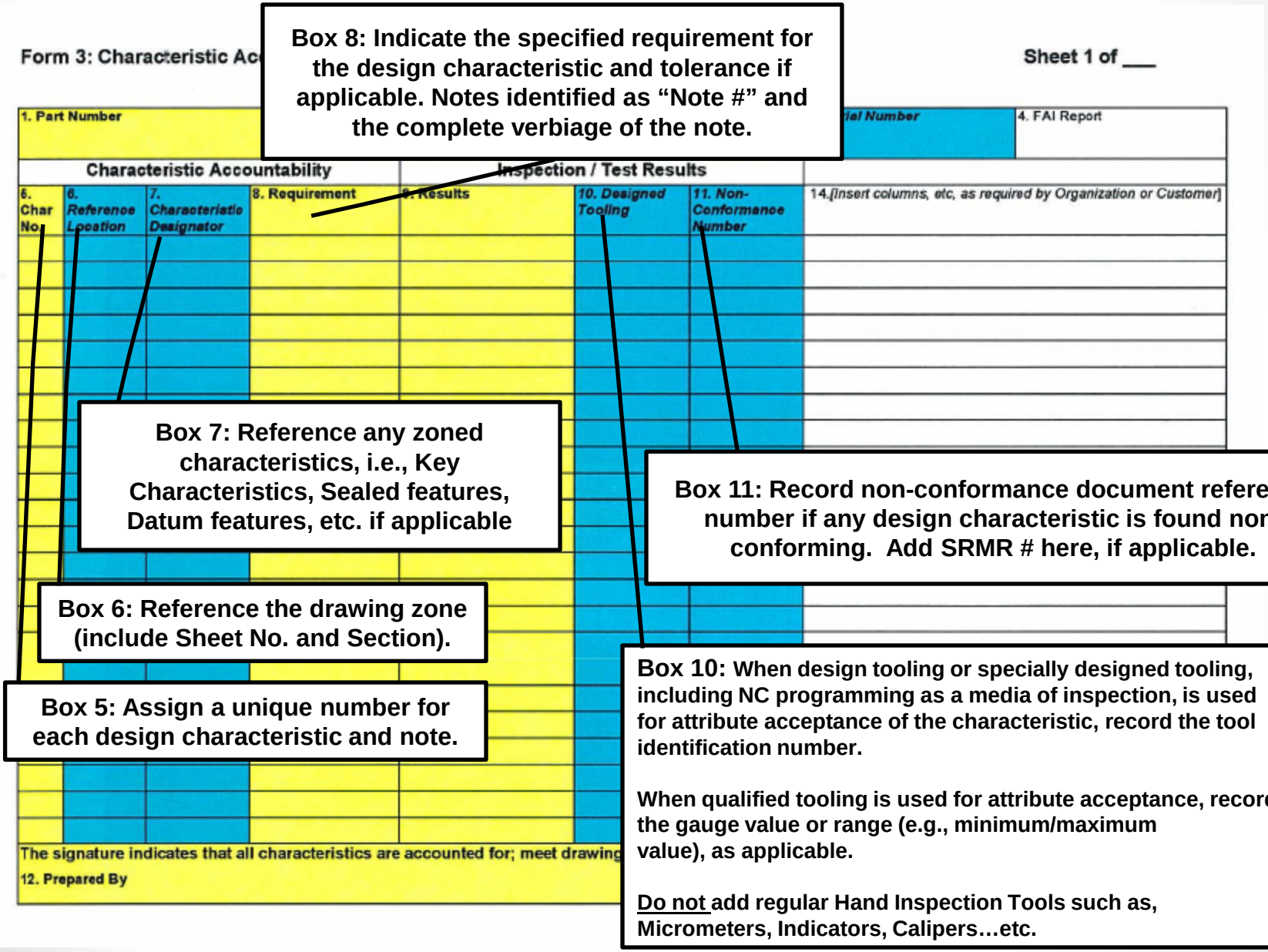
Box 13: Comments – As applicable.

Box 14: Clearly printed name and signature of preparer.

Box 15: Date when this form was completed.

AS9102 Form 3 – Characteristic Accountability Verification

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted



Box 8: Indicate the specified requirement for the design characteristic and tolerance if applicable. Notes identified as "Note #" and the complete verbiage of the note.

Box 7: Reference any zoned characteristics, i.e., Key Characteristics, Sealed features, Datum features, etc. if applicable

Box 11: Record non-conformance document reference number if any design characteristic is found non-conforming. Add SRMR # here, if applicable.

Box 6: Reference the drawing zone (include Sheet No. and Section).

Box 5: Assign a unique number for each design characteristic and note.

Box 10: When design tooling or specially designed tooling, including NC programming as a media of inspection, is used for attribute acceptance of the characteristic, record the tool identification number.

When qualified tooling is used for attribute acceptance, record the gauge value or range (e.g., minimum/maximum value), as applicable.

Do not add regular Hand Inspection Tools such as, Micrometers, Indicators, Calipers…etc.

AS9102 Form 3 – Characteristic Accountability Verification

Yellow fields are mandatory, Blue fields are Conditional, White Fields are Optional unless noted

Form 3: Characteristic Accountability, Verification and Compatibility Evaluation — Sheet 1 of ___

1. Part Number				2. Part Name			3. *Serial Number*	4. FAI Report
Characteristic Accountability				Inspection / Test Results				
5. Char No.	6. *Reference Location*	7. *Characteristic Designator*	8. Requirement	9. Results	10. *Designed Tooling*	11. *Non-Conformance Number*	14. *[Insert columns, etc, as required by Organization or Customer]*	

The signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

12. Prepared By — 13. Date

- Box 9: Indicate actual measurements obtained for each design characteristic. For multiple characteristics (i.e. 2X, 4X, 3PL) list each characteristic as individual values or list once with the minimum and maximum range of measured values attained. If a characteristic is nonconforming, then that characteristic shall be listed separately with the measured value noted.
- All drawing notes must be accounted for and stated as “Comply” or “Accept.”
- Notes with dimension callouts must have a numerical result.
- Processes that require design verification must have statement of compliance recorded on the form, i.e. Certification of Compliance – state “Accept.”
- Laboratory reports or Cert. of test must show specific values for requirements and actual results.

Box 12: Clearly printed name and signature of preparer.

Box 13: Date when this form was completed.

Supplier Request for Material Review (SRMR)

Forms are located on the VACCO website:
http://www.vacco.com/suppliers/suppliers

Supplier Forms

- SRMRs are used to request a waiver or deviation from the purchase order.
- Requests are sent to the buyer prior to the shipment of the material.
- Approval is received by VACCO Engineering and Quality
- Each Purchase Order must have its own SRMR.
- You may not ship until you receive the approved SRMR Form from the VACCO Buyer.

VACCO Certification Review Checklist – Optional

QF-CRC-001– Available as Word Document to customize based on supplier type and PO.

Supplier Name/Type: _____

SCOPE: This checklist is for VACCO suppliers.
PURPOSE: Identifies the minimum level of documentation required. Additional information/documentation may be required based on the Purchase Order, Drawing, and/or specifications.

The supplier shall have reviewed all certifications and the FAIR to the documentation listed above.

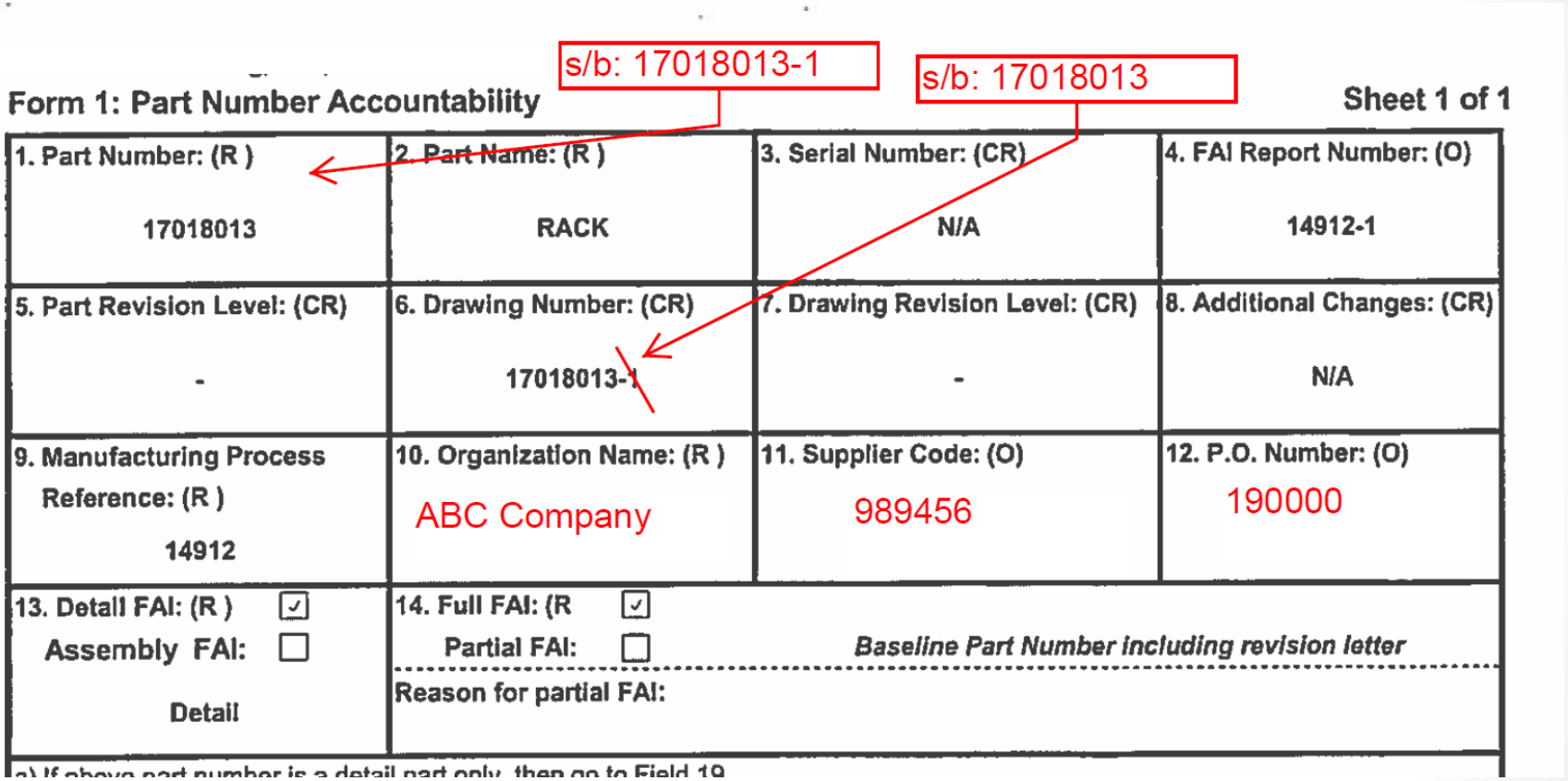
Item #	CHARACTERISTICS
1.0	**Supplier's Certification**
1.1	Certifications on Company Letterhead. Signature, Printed name and Title of person authorizing the certification
1.2	Part number and revision – shall be stated on the certification similar to the example below. The part number shall include the dash number if applicable. Ex: V2DXXXXX-1 Rev. A
1.3	VACCO Purchase Order number and Line item number.
1.4	Quantity of parts being certified.
1.5	Supplier's citing of any test specification, raw material certification on any of their paperwork shall have the Revision identified on the mill report. Revision and specification shall match the PO requirements.
2.0	**Subtier's Certification**
2.1	Material description, specification and revision of specification – typically based on a note identified on the drawing.
2.2	Verify traceability markings (e.g., heat number, lot number, serial number) on all certifications.
2.3	Verify material chemical results from the mill with the material specification.
2.4	Verify actual test results are given when required, representative data is not acceptable. Based on specification requirements. Specified value of offset reported for yield strength.
2.5	Where tests are to be performed to an approved procedure, verify the revision or date listed, and procedure is referenced on cert.
3.0	**All Certifications**
3.1	Certifications are legible and capable of reproduction
3.2	Certifications on Company Letterhead, Title of Authorized Representative
3.3	Printed Name and Signature of Authorized Representative
3.4	Statements on Certifications shall be positive and unqualified, statements such as, best to my knowledge and belief are not acceptable
3.5	Mercury Free Statement on certifications or CoC, if required per the Purchase Order (QFD 8.9)
3.6	Each Certification shall have a False and Fraudulent Statement. Contact the buyer if statement is not obtainable, if required per the Purchase Order (QFD-6.23B, QFD3-6.1 or QFD3-6.2)
3.7	All certifications shall contain the complete heat number.
3.8	Supplier shall request source inspection if identified on the Purchase Order or if dimensions are prior to plating, splining or other in process measurements. (QFD 7.1)
4.0	**FAIR** (If applicable)
4.1	Form 2 – Supplier's direct subtier certifications are listed
4.2	Form 3 – All notes and dimensions are listed
4.3	Form 3 – All spelling is correct

Top Supplier Issues

Some of the most common issues seen are…

- Individually bag and tag:
  - Parts are not individually bagged or tagged, the tag has a misspell or wrong part number or wrong revision.
- Incorrect revision or mill specifications on the mill certification, supplier certifications or FAIR (Form 2) - Shall match the specification and revision stated on the PO or Drawing
- Missing revisions of specifications on test reports
- Illegible certifications: scanning causes the sheet to twist and info is cut off.
- Missing Signature and Printed name on all 3 forms of the FAIR - Employee assigned stamps are not acceptable in place of a signature.
- Test/OSP reports & Certifications: Missing: Date, Title, Signature of representative
- NDT certifications - Signature, printed name, date, title of Level 2 or 3
- Traceability to Heat/Lot or Batch missing on test certifications
- Typos
- False and Fraudulent statement is not included on all Supplier and subtier certifications per QFD3-6.1 or QFD3-6.2 (See False & Fraudulent section for instructions)
- Reach Compliance not stated on the Supplier Certification per VI-QFD-001 (6.35)
- Missing Mercury Free Statement on Supplier and subtier Certifications (8.9)
- Missing statement for sampling plan on Supplier certification for Sampling Plan (7.7)
- Missing 100% Final Inspection Report or report does not have ranges for Results (7.5)

FAIR Corrections



QFD 7.5 100% Inspection Report

Form-3

1. Part Number and Revision:						2. Part Name:			3. Serial Number N/A	4. FAI Report N/A
Dimensional Characteristic Accountability						Inspection / Test Results				
5. Char No.	6. Reference Location	7. Characteristic Designator	8. GOT RequiremenV Comments	8. Requirement (min) Leave blank forGOT	8. Requirement (max)	9. Results: 12 pcs. 100% INSPECTED PER QFD-7.5 FINAL INSPECTION.	10. Designed Tooling	11. Non-Conformance Number	14. FAI Inspection Measuring Equipment	14. FAI Inspectors Identification
1	N/A	NIA	R.030 +/- .010 TYP	NIA	N/A	R .035 TYP.			NIA	NIA
2	"	"	.100 +/- .005 [-B-]	"	"	.1006			"	"
3	"	"	[TRUE POSITIONI.010 DIA. (M)IA(M)]	"	"	TRUE POSITION / .0004 DIA.(M) / A(M) /			"	"
4	"	"	.540 +/- .010	"	"	.5405			"	"
5	"	"	.860 +/- .002 [-A-]	"	"	.8605			"	"
6	"	"	[PERPENDICULARI.0011C]	"	"	PERPENDICULAR / .00021 C /			"	"
7	"	"	.325 +/- .001 DIA.	"	"	.325 DIA.			"	"
8	"	"	[TRUE POSITION/.010 DIA. (M)IA(M)]	"	"	TRUE POSITION / .0004 DIA.(M) / A(M) /			"	"
9	"	"	.068 +/- .010	"	"	.067			"	"
10	"	"	.150 +/- .010	"	"	.1505			"	"
11	"	"	.212 +/- .005 [-C-]	"	"	.2128			"	"
12	"	"	.033 +/- .010	"	"	.036			"	"
13	"	"	.010 MAX	"	"	.005			"	"
14	"	"	45 +/- 1 DEG.	"	"	45 DEG.			"	"
15	"	"	.432 DIA. +.0051-.000	"	"	.434 / .435 DIA.			"	"
16	"	"	.472 +/- .010 DIA.	"	"	.4715 DIA.			"	"
17	"	"	.559 +/- .010 DIA.	"	"	.559 DIA.			"	"
18	"	"	53 +1-1 DEG.	"	"	53 DEG.			"	"
19	"	"	R.030 +/- .010	"	"	R.030			"	"
20	"	NIA	NOTES: UNLESS OTHERWISE SPECIFIED	"	"	**********			"	"
21	"	NOTE 1	MATL: 304L CRES AMS-QQ-S-763 COND. A 1.250 DIA. X .40 LG	"	"	COMPLIANCE TO REQUIREMENTS			"	"
22	"	NOTE2	REMOVE BURRS VISIBLE@ 10X	"	"	COMPLIANCE TO REQUIREMENTS			"	"
23	NIA	NOTE3	FINISH: PASSIVATE PER WTS 27.50	NIA	NIA	COMPLIANCE TO REQUIREMENTS			NIA	N/A

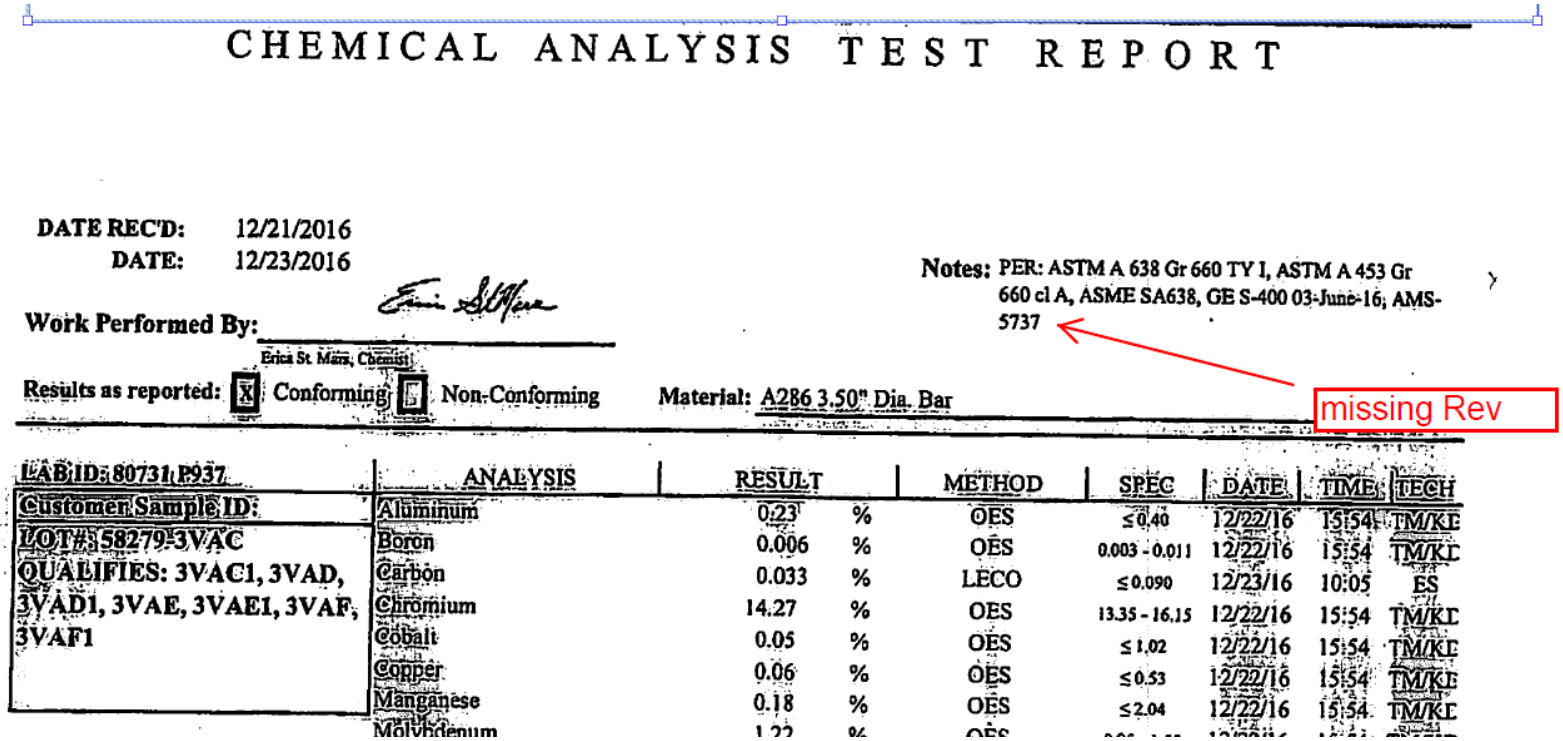
The signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

12. Prepared By: 13. Date:

Since this report is for 12pcs, there should be a range in Box 9. Results column.

PAGE 1 OF 1

Missing revision of specification that was reviewed.



CHEMICAL ANALYSIS TEST REPORT

DATE REC'D: 12/21/2016
DATE: 12/23/2016

Work Performed By: Erica St. Marie, Chemist

Notes: PER: ASTM A 638 Gr 660 TY I, ASTM A 453 Gr 660 cl A, ASME SA638, GE S-400 03-June-16; AMS-5737

missing Rev

Results as reported: [X] Conforming [ ] Non-Conforming Material: A286 3.50" Dia. Bar

LAB ID: 80731 P937	ANALYSIS	RESULT		METHOD	SPEC	DATE	TIME	TECH
Customer Sample ID:	Aluminum	0.23	%	OES	≤ 0.40	12/22/16	15:54	TM/KE
LOT#: 58279-3VAC	Boron	0.006	%	OES	0.003 - 0.011	12/22/16	15:54	TM/KE
QUALIFIES: 3VAC1, 3VAD, 3VAD1, 3VAE, 3VAE1, 3VAF, 3VAF1	Carbon	0.033	%	LECO	≤ 0.090	12/23/16	10:05	ES
	Chromium	14.27	%	OES	13.35 - 16.15	12/22/16	15:54	TM/KE
	Cobalt	0.05	%	OES	≤ 1.02	12/22/16	15:54	TM/KE
	Copper	0.06	%	OES	≤ 0.53	12/22/16	15:54	TM/KE
	Manganese	0.18	%	OES	≤ 2.04	12/22/16	15:54	TM/KE
	Molybdenum	1.22	%	OES				

Missing name & title – Test reports and mill certs

Description	Pcs	Weight
AMPCO® 45 round bar ø 7,5000" x 150,0000" extruded and drawn	1	1,846.0

Trace no.	Heat no.	Mechanical and physical properties		Chemical properties in %	
1802/8470	P1420	Hardness (HBW):	212	Element	Value
		Tensile Str. Rm (KSI):	107.8		
		Elongation A5 (%):	22.1		
		Yield Str Rp0.5 (KSI):	58		
				Cu	81.530
				Sn	0.000
				Zn	0.000
				Al	10.010
				Fe	3.720
				Ni	4.740
				Mn	0.000
				Si	0.000
				others	0.000

Remarks:
AMS 4640, ASTM B150/12, HR50
Harness (HBW) 212
Tensile Rm (KSI) 107.80
Yield Rp0.5 (KSI) 58.00
Elongation A5 (%) 22.10

Mercury Contamination: During the testing and insopection, the product did not come in direct contact with mercury or any of its compounds nor with any mercury containing devices employing a single boundary of containment.

All martierals: DFARS Compliance.

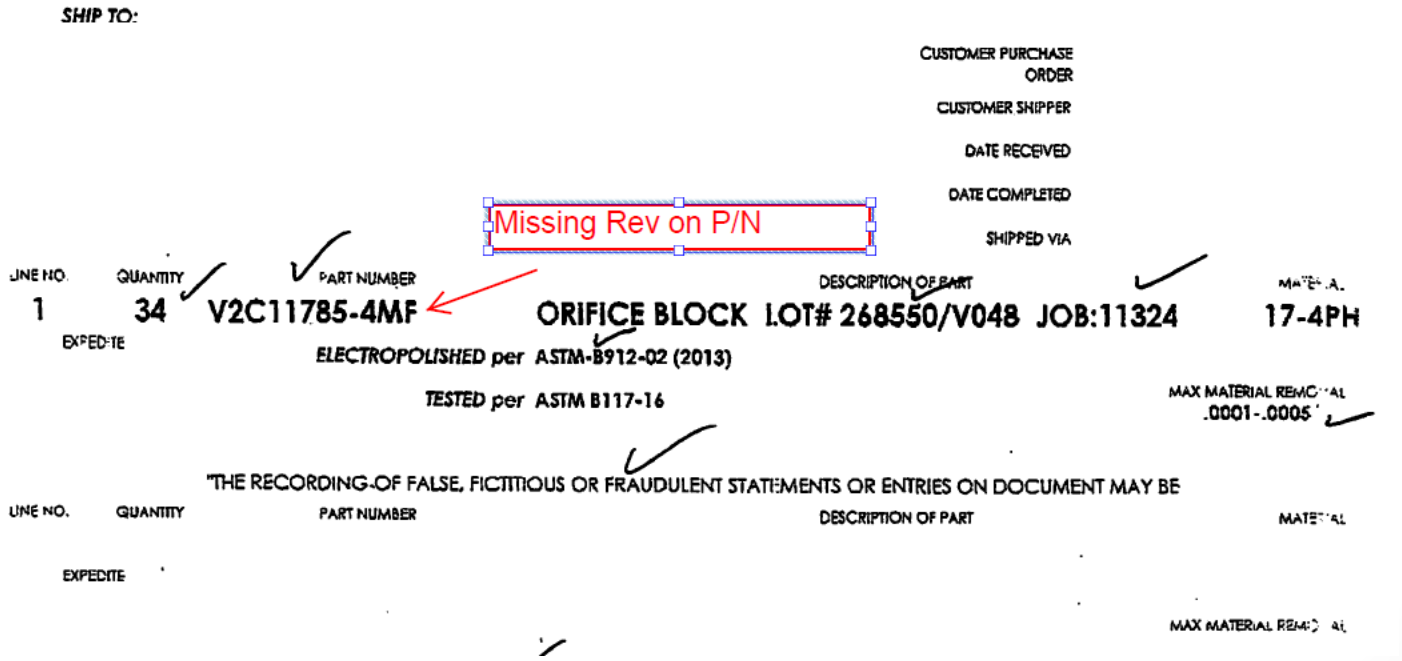
The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under federal statutes, including Title 18, Chapter 47 of the U.S. Code.

MD

Per QFD 8.1(b) Mill test reports shall contain: the signature, name, and title of the company representative

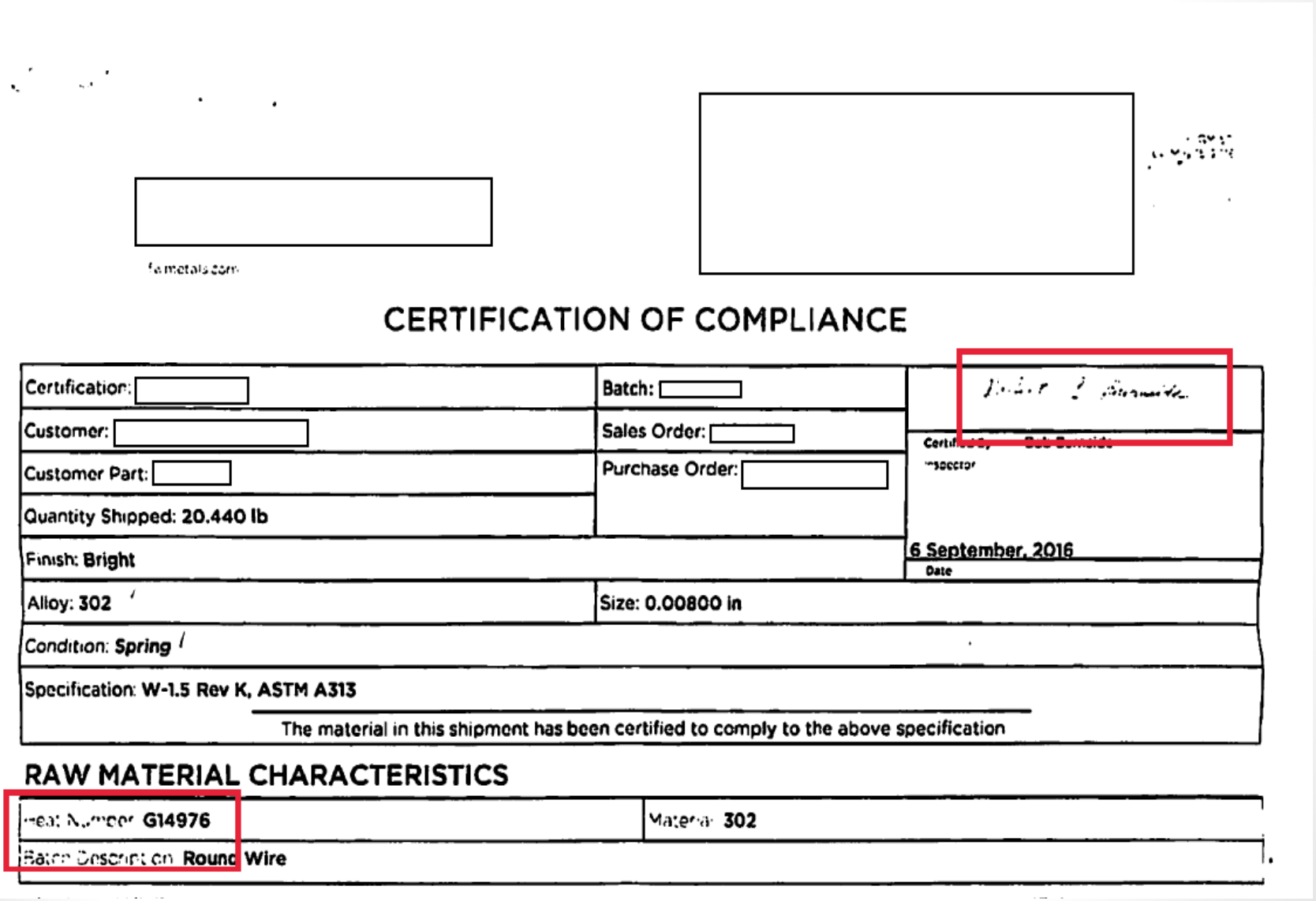
Missing Part number Revisions

When stating the **Part Number,** it shall include the **Revision** and the **Description**.



Illegible Certs

fa.metals.com



CERTIFICATION OF COMPLIANCE

Certification:	Batch:	[illegible]
Customer:	Sales Order:	Certified By: [illegible] Inspector
Customer Part:	Purchase Order:	
Quantity Shipped: 20.440 lb		
Finish: Bright		6 September, 2016 Date
Alloy: 302	Size: 0.00800 in	
Condition: Spring		
Specification: W-1.5 Rev K, ASTM A313		

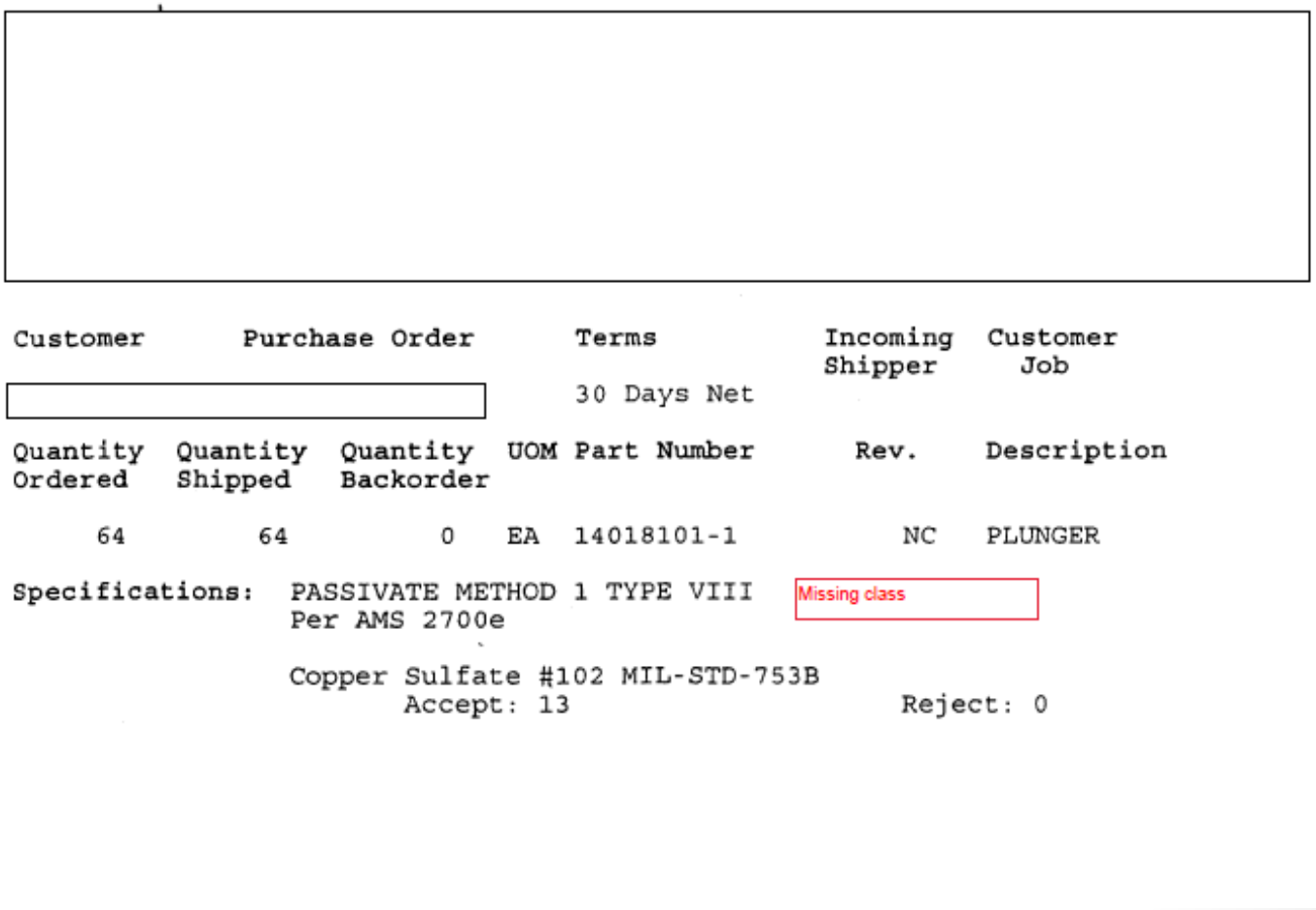
The material in this shipment has been certified to comply to the above specification

RAW MATERIAL CHARACTERISTICS

Heat Number: G14976	Material: 302
Batch Description: Round Wire	

Missing Information

When stating the specification, it shall include the **specification**, **revision** and all of the **requirements stated in the specification**.



Customer	Purchase Order	Terms	Incoming Shipper	Customer Job
		30 Days Net		

Quantity Ordered	Quantity Shipped	Quantity Backorder	UOM	Part Number	Rev.	Description
64	64	0	EA	14018101-1	NC	PLUNGER

Specifications: PASSIVATE METHOD 1 TYPE VIII Per AMS 2700e

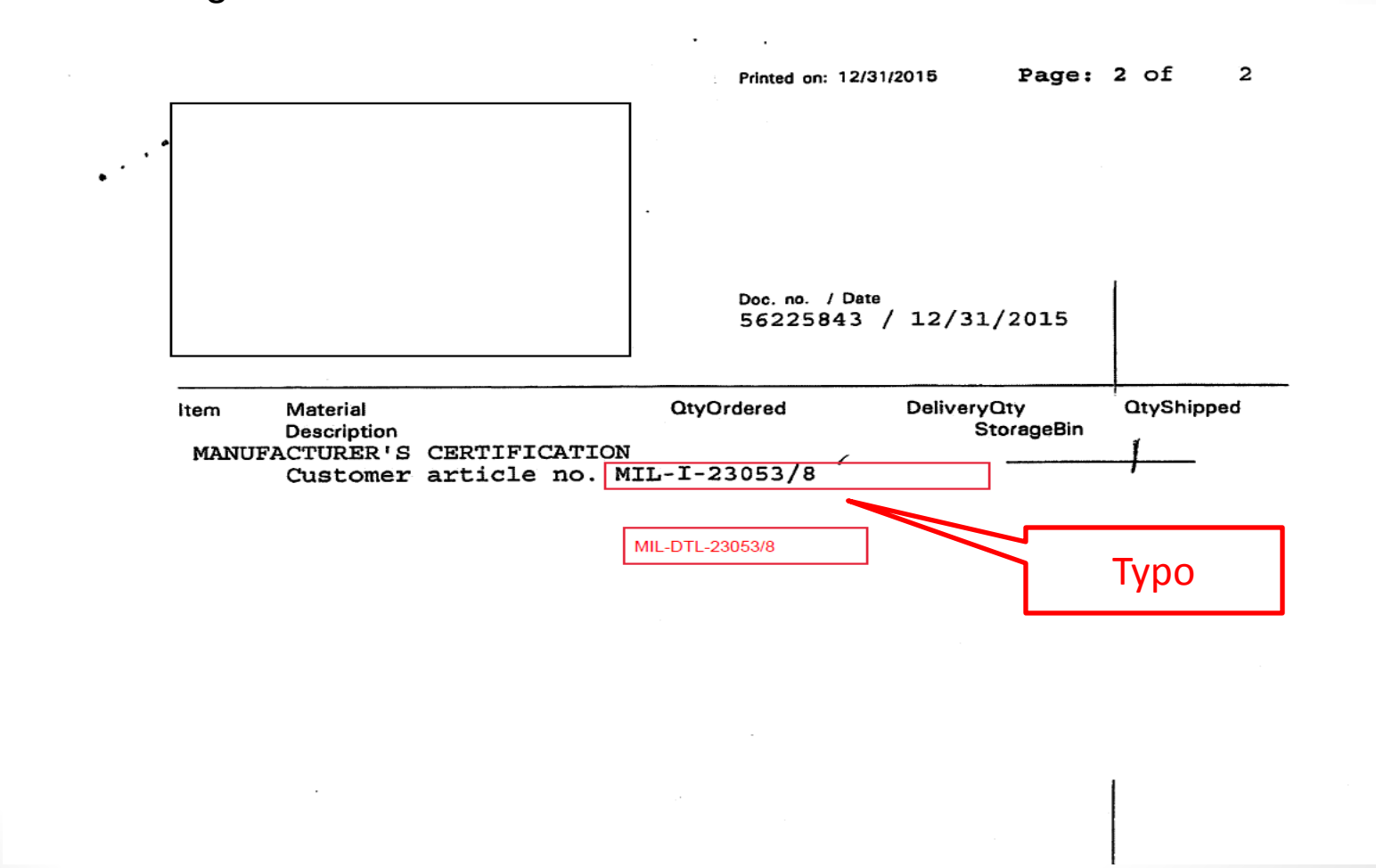
Missing class

Copper Sulfate #102 MIL-STD-753B

Accept: 13 Reject: 0

Specification Requirements

Specification stated on the supplier/subtier certifications shall match the Specification required on the PO or drawing and shall also include the revision. The Revision is required even there is not a revision stated on the PO or drawing.



False & Fraudulent Requirements – QFD3-6.1 or 6.2

Supplier shall have the following statement on all certifications:
“NOTE: The recording of false, fictitious or fraudulent statements or entries on
this document may be punishable as a felony under Federal Statute.”

If the Supplier is unable to obtain this statement on all certifications they shall:

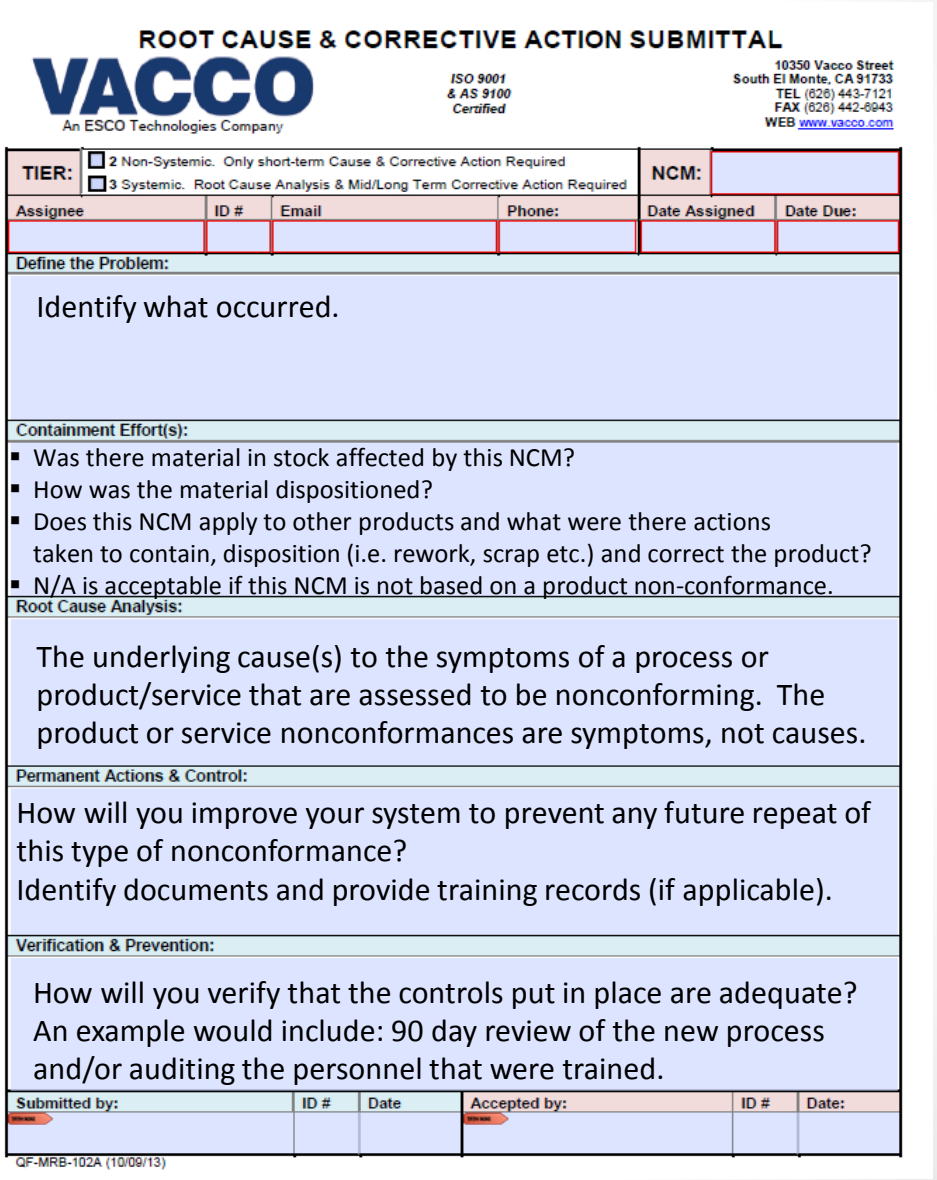
- **Electronically** complete the “False and Fraudulent Notification”.
  http://www.vacco.com/suppliers/supplier-forms
- One form for each supplier that cannot comply.
- Submit this form to the buyer for notification to VACCO’s customer prior to shipment.
- Product shall not be shipped until the buyer notifies the external provider that the process has been completed.
- This is required for each Purchase Order that does not comply.

Root Cause Corrective Action (RCCA)

RCCA replies required only when if the Supplier is notified that a CAR or Corrective Action is issued.

The RCCA should address the topics identified in this form. Suppliers are requested to use their own form.

Additional clarification for Corrective Actions and CARs: Supplier Instructions on VACCO website http://www.vacco.com/suppliers/supplier-instructions



ROOT CAUSE & CORRECTIVE ACTION SUBMITTAL

VACCO
An ESCO Technologies Company

ISO 9001 & AS 9100 Certified

10350 Vacco Street
South El Monte, CA 91733
TEL (626) 443-7121
FAX (626) 442-6943
WEB www.vacco.com

TIER:	☐ 2 Non-Systemic. Only short-term Cause & Corrective Action Required ☐ 3 Systemic. Root Cause Analysis & Mid/Long Term Corrective Action Required	NCM:	

Assignee	ID #	Email	Phone:	Date Assigned	Date Due:

Define the Problem:

Identify what occurred.

Containment Effort(s):

- Was there material in stock affected by this NCM?
- How was the material dispositioned?
- Does this NCM apply to other products and what were there actions taken to contain, disposition (i.e. rework, scrap etc.) and correct the product?
- N/A is acceptable if this NCM is not based on a product non-conformance.

Root Cause Analysis:

The underlying cause(s) to the symptoms of a process or product/service that are assessed to be nonconforming. The product or service nonconformances are symptoms, not causes.

Permanent Actions & Control:

How will you improve your system to prevent any future repeat of this type of nonconformance?
Identify documents and provide training records (if applicable).

Verification & Prevention:

How will you verify that the controls put in place are adequate? An example would include: 90 day review of the new process and/or auditing the personnel that were trained.

Submitted by:	ID #	Date	Accepted by:	ID #	Date:

QF-MRB-102A (10/09/13)

Supplier Training Record

- **Company Name**_____
- **Date**_____
- **VACCO Employee Signature**_____

First Name	Last Name	Title	Signature