

VACCO

# Supplier Training

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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:
  - 95% for Quality (QA)
  - 94% for On Time Delivery (OTD).
- Suppliers will 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)

- Suppliers are expected to deliver all documentation in accordance with the Quality and Purchasing flow down requirements. This parameter is scored as Documentation Acceptance (DA).
- It is critical that Suppliers correct any documentation requests to ensure that this does not result in a nonconformance and possibly a RTV of the product.
- FPY is calculated to determine the Supplier's overall performance. This score is based on the following calculation:
  - $60\%QA \times 30\%DA \times 10\%SRMR$
  - The expectation is that Supplier shall meet or exceed 90% for FPY.

# 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)

<b>VACCO</b> An ESCO Technologies Company Tel (626) 443-7121 Fax (626) 450-8446		<b>VACCO INDUSTRIES</b> 10350 VACCO STREET SOUTH EL MONTE, CA 91733-0096		<b>PURCHASE ORDER</b>		PRINT DATE 03-20-18	PAGE 1
VENDOR: <b>989456</b> <b>ABC Machine Shop</b> <b>12345 Sample Drive</b> <b>South El Monte, CA</b>		SHIP TO: VACCO INDUSTRIES 10350 VACCO STREET SOUTH EL MONTE CA 91733		ORDER DATE 03-20-18	PURCHASE ORDER NUMBER <b>190000</b>	REVISION 0	
				FREIGHT TERMS COLLECT 1.00 % 10 NET 30	SHIP VIA: F.O.B. DEST 37		
				RESALE NUMBER	<b>PO Number</b>		
COMMENTS CONFIRMING TO VENDOR ORDER NUMBER							
ITEM	PART NUMBER	DESCRIPTION	REV UM ACCOUNT NUMBER	WORK ORDER	INSP TAX	UNIT PRICE	EXTENDED AMOUNT
	MANUFACTURER'S PART NUMBER	REV UM ACCOUNT NUMBER	QTY ORDERED	DELIVER TO	SR		
0001	V2D11776-7NA	SLEEVE			Y N		
REQUISITION NBR:143948 REQUESTED BY: W. LUONG							
COMMODITY CODE NC08 D EA 10-010-110-00-01 CONTRACT:PPD163=079							
PROJ:213125 PRIME:N00024-17-C-2100 INSPECTION Qty Ordered Qty Due							
06-12-18 05-29-18 4 4							
CONTRACT DATE: 05-29-18							
THE FOLLOWING NOTES APPLY TO LINE ITEM: 0001							
MATERIAL: 304 S/S PER AMS-QQ-8-763A, B, C OR D COND. A							
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 (828) 443-7121 Fax (828) 460-6445

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


**PURCHASE ORDER**

VENDOR		SHIP TO		ORDER DATE	PURCHASE ORDER NUMBER	PRINT DATE	PAGE
989456 ABC Machine Shop 12345 Sample Drive South El Monte, CA		VACCO INDUSTRIES 10350 VACCO STREET SOUTH EL MONTE CA 91733		03-20-18	190000	03-20-18	2
COMMENTS		CONFIRMING TO ADRIAN		VENDOR ORDER NUMBER			
ITEM	PART NUMBER	DESCRIPTION	WORK ORDER	INSP	TAX	UNIT PRICE	EXTENDED AMOUNT
	MANUFACTURER'S PART NUMBER	REV UM ACCOUNT NUMBER	DELIVER TO				
	DATE REQUIRED	DATE PROMISED	QTY DUE	SR			
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



# Purchase Order Sample

 <p><b>VACCO</b> An ESCO Technologies Company Tel (626) 443-7121 Fax (626) 450-8445</p>	<p><b>VACCO INDUSTRIES</b> 10350 VACCO STREET SOUTH EL MONTE, CA 91733-0096</p>		<p><b>PURCHASE ORDER</b></p>		PRINT DATE	PAGE	
					03-20-18	4	
<p>VENDOR <b>989456</b> <b>ABC Machine Shop</b> <b>12345 Sample Drive</b> <b>South El Monte, CA</b></p>			<p>SHIP TO VACCO INDUSTRIES 10350 VACCO STREET SOUTH EL MONTE CA 91733</p>		ORDER DATE	PURCHASE ORDER NUMBER	REVISION
					03-20-18	<b>190000</b>	0
					FREIGHT TERMS		
					COLLECT 1.00 % 10 NET 30		
					SHIP VIA	F.O.B. DEST	37
					RESALE NUMBER		
<p>COMMENTS CONFIRMING TO ADRIAN VENDOR ORDER NUMBER</p>							
ITEM	PART NUMBER	DESCRIPTION	REV UM ACCOUNT NUMBER	WORK ORDER	INSP TAX	UNIT PRICE	
	MANUFACTURER'S PART NUMBER	REV UM ACCOUNT NUMBER	QTY ORDERED	DELIVER TO	SR		EXTENDED AMOUNT
	DATE REQUIRED	DATE PROMISED					
	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



# Purchase Order Sample

## VACCO INDUSTRIES Purchase Order Terms and Conditions

REFERENCE ONLY

### 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 processed 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 calculation of any cash 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 material is scheduled to be received under the purchase order, or (iii) the date an acceptable invoice is received, whichever is later. Any adjustments to Seller's Invoices due to storage (late delivery, repairs or other failures to comply with the requirements of this order may be made by Buyer before payment. Errors on the invoices shall be considered just cause for withholding payment without prejudice to Buyer's right to discount. Payment 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 material in advance of the schedule set forth in this Purchase Order without Buyer's written permission. Buyer reserves the right to return shipping charges collect, all material received at Buyer's plant in advance of the schedule shown on this purchase order. Seller may request Buyer's written consent to advance manufacture and/or delivery at time of returning acknowledgment of this purchase order.

3.2 Buyer shall not be obligated to accept overruns or under-runs except, where applicable, (i.e. The Forging Industry Association quantity tolerances)

### 4.0 WARRANTY

Seller warrants that all articles, materials, work and/or services furnished hereunder will be free from defects in material and workmanship, conform to applicable specifications, drawings, samples and descriptions, and be suitable for the intended purpose, and if of Seller's design be free from design defects. If supplies are found not to conform to the foregoing requirements and the purchase order Buyer shall have the option (1) to require Seller to profitably replace or correct the defective supplies in place and at no expense to Buyer, or (2) to terminate this order and to replace or correct the defective supplies by contract or otherwise charge the Seller with the expense thereof. All warranties shall be construed as conditions as well as warranties and shall not be deemed to be exclusive. All warranties and guarantees shall be equally applicable to Buyer and its customers.

### 5.0 INSPECTION

#### 5.1 Destination

All items are subject to final inspection and acceptance at destination notwithstanding any payments 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 inspection, 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 Seller 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 materials to Seller and the item from Seller to Buyer. The Buyer reserves the right to charge to the Seller any additional cost 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.

### 7.0 CANCELLATION FOR CAUSE

7.1 Buyer reserves the right to cancel at no cost to Buyer all or any part of the undelivered portion of this order if:

a) Seller fails to make progress as to endanger the execution of this order 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 of the Order, or

c) In the event of the happening of any of the following: insolvency of Seller, filing of a voluntary or involuntary petition in bankruptcy which is not vacated within 30 days from date of filing, the appointment of a receiver or trustee for seller, the execution of an assignment for the benefit of creditors or the execution of a composition with creditors, or any agreement of like import.

7.2 In any cancellation for cause hereunder, Buyer shall have the right to complete, or cause to have completed, the performance of this order and Seller agrees to reimburse Buyer on its demand any excess costs thereby incurred over the price(s) herein stated for, or apportioned by Buyer, to such incomplete work. These provisions shall be cumulative and additional to any other or further remedies provided under the contract in law or equity. Any cancellation hereunder shall not thereby excuse Seller from performing un-cancelled work on the order.

### 8.0 ASSIGNMENT AND SUBCONTRACTS

This order may not be assigned nor may any assignment of monies, due or to become due hereunder be made by Seller, without the prior written consent of Buyer thereto. No subcontract shall be made by Seller for the furnishing of any of the work or items without the prior written approval of Buyer as to sources.

### 9.0 BUYER MATERIALS AND SPECIAL TOOLING

9.1 When materials are designated "LEVEL 1" on the Purchase Order, it is imperative that the seller/supplier of the material be familiar with the "LEVEL 1" designation, that the end item has critical shipboard application. Permanent marking and traceability through manufacturing of all material by the vendor and sub-vendors is imperative.

9.2 Title to all materials, designs, tooling, patterns, drawings, specifications, negatives, art work and other information supplied by Buyer to Seller for use in the manufacture of the goods hereunder shall remain property of Buyer. Special tooling described and ordered on Purchase Order will become the property 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 order 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 the 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 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 its 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. Whenever 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 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.

# 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 AS 9102 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 <input type="checkbox"/>	14. Full FAI <input type="checkbox"/>	Baseline Part Number including revision level	
Assembly FAI <input type="checkbox"/>	Partial FAI <input type="checkbox"/>		
Reason for Partial FAI:			
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)
- 7) Reference the revision of engineering drawing. If the drawing has not been revised, indicate as such (e.g. N/C, No Change).
- 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 <input type="checkbox"/>	14. Full FAI <input type="checkbox"/>	<i>Baseline Part Number including revision level</i>	
Assembly FAI <input type="checkbox"/>	Partial FAI <input type="checkbox"/>		
		<i>Reason for Partial FAI:</i>	
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.
- 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 #.
- 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 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.

Box 10: Reference Certificate of Conformance number(s). E.g., special process completion number, raw material test report number, heat treat 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, revision, 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. Reference special process/material supplier vendor codes (if available).

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

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.





# 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.



# 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
<b>1.0</b>	<b>Supplier's Certification</b>
<b>1.1</b>	Certifications on Company Letterhead. Signature, Printed name and Title of person authorizing the certification
<b>1.2</b>	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
<b>1.3</b>	VACCO Purchase Order number and Line item number.
<b>1.4</b>	Quantity of parts being certified.
<b>1.5</b>	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.
<b>2.0</b>	<b>Subtier's Certification</b>
<b>2.1</b>	Material description, specification and revision of specification – typically based on a note identified on the drawing.
<b>2.2</b>	Verify traceability markings (e.g., heat number, lot number, serial number) on all certifications.
<b>2.3</b>	Verify material chemical results from the mill with the material specification.
<b>2.4</b>	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.
<b>2.5</b>	Where tests are to be performed to an approved procedure, verify the revision or date listed, and procedure is referenced on cert.
<b>3.0</b>	<b>All Certifications</b>
<b>3.1</b>	Certifications are legible and capable of reproduction
<b>3.2</b>	Certifications on Company Letterhead, Title of Authorized Representative
<b>3.3</b>	Printed Name and Signature of Authorized Representative
<b>3.4</b>	Statements on Certifications shall be positive and unqualified, statements such as, best to my knowledge and belief are not acceptable
<b>3.5</b>	Mercury Free Statement on certifications or CoC, if required per the Purchase Order (QFD 8.9)
<b>3.6</b>	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)
<b>3.7</b>	All certifications shall contain the complete heat number.
<b>3.8</b>	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)
<b>4.0</b>	<b>FAIR (If applicable)</b>
<b>4.1</b>	Form 2 – Supplier's direct <u>subtier</u> certifications are listed
<b>4.2</b>	Form 3 – All notes and dimensions are listed
<b>4.3</b>	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
- Traceability to Heat/Lot or Batch missing on test certifications
- Typos
- False and Fraudulent statement is not included on all 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)

# FAIR Corrections

## Form 1: Part Number Accountability

Sheet 1 of 1

1. Part Number: (R) 17018013	2. Part Name: (R) RACK	3. Serial Number: (CR) N/A	4. FAI Report Number: (O) 14912-1
5. Part Revision Level: (CR) -	6. Drawing Number: (CR) 17018013-1	7. Drawing Revision Level: (CR) -	8. Additional Changes: (CR) N/A
9. Manufacturing Process Reference: (R) 14912	10. Organization Name: (R) ABC Company	11. Supplier Code: (O) 989456	12. P.O. Number: (O) 190000
13. Detail FAI: (R) <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/> Detail	14. Full FAI: (R) <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> Reason for partial FAI: <i>Baseline Part Number including revision letter</i>		

a) If above part number is a detail part only, then go to Field 10

s/b: 17018013-1

s/b: 17018013

# Missing revision of specification that was reviewed.

## CHEMICAL ANALYSIS TEST REPORT

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

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

Work Performed By: Erica St. Mera

Erica St. Mera, Chemist

Results as reported:  Conforming  Non-Conforming

Material: A286 3.50" Dia. Bar

missing Rev

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,	Carbon	0.033 %	LECO	≤0.090	12/23/16	10:05	ES
3VAD1, 3VAE, 3VAE1, 3VAF,	Chromium	14.27 %	OES	13.35 - 16.15	12/22/16	15:54	TM/KE
3VAF1	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 Revision - subtier certification

## Certificate of Compliance

P.O. No.	Date	Invoice No.	Ship Via	F.O.B.	Job No.
Qty	Item	Description			
1	LASER I.D.	P/N <b>12345-1</b> Rev. D Laser Etch <b> </b> Per MIL-STD-130, Character Height .120", Material: A286 per AMS 5737			
		<b> </b> (9) Qty			
		Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under Federal Statute.			
		<b>missing rev</b>			

# 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 Tensile Str. Rm (KSI): 107.8 Elongation A5 (%): 22.1 Yield Str Rp0.5 (KSI): 58	<table border="1"> <thead> <tr> <th>Element</th> <th>Value</th> </tr> </thead> <tbody> <tr><td>Cu</td><td>81.530</td></tr> <tr><td>Sn</td><td>0.000</td></tr> <tr><td>Zn</td><td>0.000</td></tr> <tr><td>Al</td><td>10.010</td></tr> <tr><td>Fe</td><td>3.720</td></tr> <tr><td>Ni</td><td>4.740</td></tr> <tr><td>Mn</td><td>0.000</td></tr> <tr><td>Si</td><td>0.000</td></tr> <tr><td>others</td><td>0.000</td></tr> </tbody> </table>	Element	Value	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
Element	Value																						
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																						
<p><b>Remarks:</b>                      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 inspection, 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 materials: 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.</p>																							
<p>_____</p> <p style="text-align: center;">MD</p>		<div style="border: 1px solid red; padding: 5px; display: inline-block;"> <p>← Per QFD 8.1(b) Mill test reports shall contain: the signature, name, and title of the company representative</p> </div>																					

# Missing Part number Revisions

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

**SHIP TO:**

CUSTOMER PURCHASE ORDER  
CUSTOMER SHIPPER  
DATE RECEIVED  
DATE COMPLETED  
SHIPPED VIA

LINE NO.	QUANTITY	PART NUMBER	DESCRIPTION OF PART	MATERIAL
1	34	V2C11785-4MF	ORIFICE BLOCK LOT# 268550/V048 JOB:11324	17-4PH

EXPEDITE

ELECTROPOLISHED per ASTM-B912-02 (2013)  
TESTED per ASTM B117-16

MAX MATERIAL REMOVAL .0001-.0005

THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON DOCUMENT MAY BE

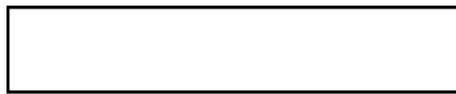
LINE NO.	QUANTITY	PART NUMBER	DESCRIPTION OF PART	MATERIAL
----------	----------	-------------	---------------------	----------

EXPEDITE

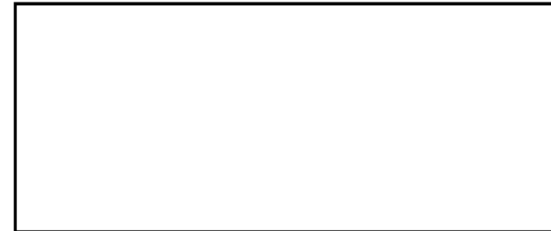
MAX MATERIAL REMOVAL

**Missing Rev on P/N**

# Illegible Certs



fa-metals.com



## CERTIFICATION OF COMPLIANCE

Certification: <input type="text"/>	Batch: <input type="text"/>	<i>Robert J. Bernhardt</i>
Customer: <input type="text"/>	Sales Order: <input type="text"/>	Certified By: <b>Bob Bernhardt</b>
Customer Part: <input type="text"/>	Purchase Order: <input type="text"/>	Inspector
Quantity Shipped: <b>20.440 lb</b>		<b>6 September, 2016</b>
Finish: <b>Bright</b>		Date
Alloy: <b>302</b>	Size: <b>0.00800 in</b>	
Condition: <b>Spring</b>		
Specification: <b>W-1.5 Rev K, ASTM A313</b>		
The material in this shipment has been certified to comply to the above specification		

## RAW MATERIAL CHARACTERISTICS

Heat Number: <b>G14976</b>	Material: <b>302</b>
Batch Description: <b>Round Wire</b>	



# 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

Copper Sulfate #102 MIL-STD-753B  
Accept: 13

Reject: 0

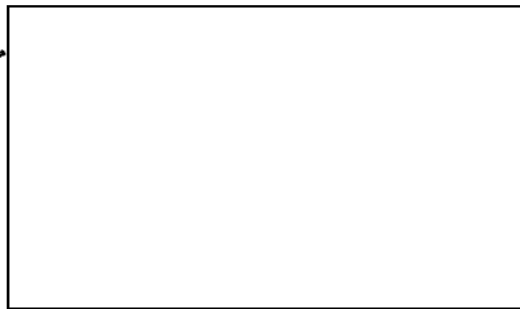
Missing class

# 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.

Printed on: 12/31/2015

Page: 2 of 2



Doc. no. / Date  
56225843 / 12/31/2015

Item	Material Description	QtyOrdered	DeliveryQty StorageBin	QtyShipped
	MANUFACTURER'S CERTIFICATION Customer article no.	MIL-I-23053/8		1

MIL-DTL-23053/8

Typo

# 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 when the NCM identifies the requirement as shown below, **Tier 2 or Tier 3**:
- Tier 1 NCRs are considered SQUAWKs and do not require a RCCA.

**NON-CONFORMANCE REPORT**



**VACCO**  
An ESCO Technologies Company

ISO 9001  
& AS 9100  
Certified

10350 Vacco Street  
South El Monte, CA 91733  
TEL (626) 443-7121  
FAX (626) 442-6643  
WEB [www.vacco.com](http://www.vacco.com)

NCM:  Rev:

Type:  Date:

VACCO Part #	REV	VACCO Part Name			QTY REQ	QTY REJ	VACCO Serial No(s)		Customer	Receiver #	
										N/A	
Cust. Part #	REV	Cust Serial No(s)	Cust. PO/Contract:	Project Number	VACCO WO	VACCO PO	Line #	Location Found	OPN #	Type I	
N/A	N/A	N/A				N/A	N/A	VACCO		<input type="checkbox"/>	
DESCRIPTION OF NON-CONFORMANCE – Itemize Discrepancies & List DWG Zone					DISPOSITION – Itemize Dispositions & Revisions					CODE:	<input type="text"/>
Reported By:	ID #	Date:	Stamp #	Cust. MRB Auth.:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Parent NCM:	N/A		Waiver #	N/A	
				DCMA MRB Auth.:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Quality Review:	ID #	Date:	RCCA REQ'D:	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
				Prefm. Disposition:	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				TIER:	1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	
Preliminary Disposition Override:	ID #	Date:	Scrap QTY	Scrap Cost	1st Scrap Approval by:	ID #	Date:	2nd Scrap Approval by:	ID #	Date:	
N/A	N/A	N/A	0	\$ 0.00	N/A	N/A	N/A	N/A	N/A	N/A	
MRB Engineering Disposition Submittal	ID #	Date:	Resp. Shop/Vendor	Employee	ID #	Supervisor	ID #				
MRB Quality Engineering Disposition Approval	ID #	Date:	RCCA Assigned To:	ID #	RCCA Approved By:	ID #	Date:				
DCMA/Customer Disposition Approval – Attach if Necessary	Date:	OCC	RC	CA	CAR No.	CAR Assigned To:	ID #	Due Date:			
					N/A	N/A	N/A	N/A			
DCMA/Customer Closure Approval – Attach if Necessary	Date:	Non-Conformance Closure				Stamp #	ID #	Closure Date:			

QF-MRB-101 (10/09/13)

Types: ADM – Administrative Error ASSY – Assembly Failure ATP – Acceptance Test Failure DWG – Out-of-Drawing HAND – Mishandling MAT – Material Defect RTN – Customer Return  
Disposition Code: MRB – Refer to MRB MULT – Multiple Disp. RPR – Repair RTV – Return to Vendor RWK – Rework SCR – Scrap UAI – Use-As-Is (justification req'd) VOID – Void NCR  
MRB TIERS: TIER 1 – No Root Cause & Corrective Action (RCCA) Required (As Applicable) TIER 2 & TIER 3 – RCCA Required

# Root Cause Corrective Action (RCCA)

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/supplier/supplier-instructions>

ROOT CAUSE & CORRECTIVE ACTION SUBMITTAL						
<b>VACCO</b> An ESCO Technologies Company		ISO 9001 & AS 9100 Certified		10350 Vacco Street South El Monte, CA 91733 TEL (828) 443-7121 FAX (828) 442-8943 WEB <a href="http://www.vacco.com">www.vacco.com</a>		
<b>TIER:</b>	<input type="checkbox"/> 2 Non-Systemic. Only short-term Cause & Corrective Action Required <input type="checkbox"/> 3 Systemic. Root Cause Analysis & Mid/Long Term Corrective Action Required				<b>NCM:</b>	
Assignee	ID #	Email	Phone:	Date Assigned	Date Due:	
<b>Define the Problem:</b>						
Identify what occurred.						
<b>Containment Effort(s):</b>						
<ul style="list-style-type: none"> <li>▪ Was there material in stock affected by this NCM?</li> <li>▪ How was the material dispositioned?</li> <li>▪ 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?</li> <li>▪ N/A is acceptable if this NCM is not based on a product non-conformance.</li> </ul>						
<b>Root Cause Analysis:</b>						
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.						
<b>Permanent Actions &amp; Control:</b>						
How will you improve your system to prevent any future repeat of this type of nonconformance? Identify documents and provide training records (if applicable).						
<b>Verification &amp; Prevention:</b>						
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:	

# Supplier Request for Material Review (SRMR)

Supplier shall submit this form prior to delivering material. Supplier is required to wait for the buyer to provide a copy of the Approved form. The form shall be submitted with the product. Location of form: <http://www.vacco.com/suppliers/supplier-forms>

**SUPPLIER REQUEST FOR MATERIAL REVIEW**



**VACCO**  
An ESCO Technologies Company

ISO 9001  
& AS 9100  
Certified

10350 Vacco Street  
South El Monte, CA 91733  
TEL (626) 443-7121  
FAX (626) 443-6943  
WEB [www.vacco.com](http://www.vacco.com)

NCM:

Date:

Supplier Name		Number	PO Number	Rev	Line	RR Number	
<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Part #	Description	Rev	LOT QTY	QTY ACC	QTY REJ	Sales Order	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
ITEM	QTY	ZONE	DESCRIPTION OF NONCONFORMANCE			CODE	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input style="width: 100%; height: 100%;" type="text"/>			<input type="text"/>	
ROOT CAUSE OF DISCREPANCY						CODE	
<input style="width: 100%; height: 100%;" type="text"/>						<input type="text"/>	
CORRECTIVE ACTION						CODE	
<input style="width: 100%; height: 100%;" type="text"/>						<input type="text"/>	
Management Signature		Title	Contact Information		Date		
<input type="text"/>		<input type="text"/>	<input type="text"/>		<input type="text"/>		
ITEM	VACCO MRB DISPOSITION					CODE	
<input type="text"/>	<input style="width: 100%; height: 100%;" type="text"/>					<input type="text"/>	
MRB Engineer	ID #	Date	MRB Quality Eng.	ID #	Date	Customer/DCMA	Date
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

VI-MRB-100, Form 6 QF-MRB-104A (6/13/13)

# Supplier Training Record

- **Company Name** \_\_\_\_\_
- **Date** \_\_\_\_\_
- **VACCO Employee Signature** \_\_\_\_\_

First Name	Last Name	Title	Signature