

Recommended Practice for Purchaser Representative Surveillance and/or Inspection at the Supplier

API RECOMMENDED PRACTICE 5SI
FIRST EDITION, JANUARY 2006



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Upstream Segment

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1 Scope

1.1 PURPOSE AND COVERAGE

The purpose of this Recommended Practice (RP) is to provide guidelines for the surveillance and/or inspection of API products at supplier locations. This Recommended Practice establishes a set of general guidelines addressing the protocol between purchasers, suppliers and the purchaser representative for surveillance and/or inspection by the purchaser representative. This Recommended Practice is a general document for use at the request of the purchaser of API products. This document is intended to provide only general guidance to the industry. The issue of the roles and responsibilities of the parties is a subject that should be addressed as part of negotiations between the purchaser and the supplier.

Included as a part of this document are product specific appendices. Processes other than those included will be considered for inclusion in this Recommended Practice. Persons desiring to have other processes considered shall submit a request to the “Committee on Standardization of Tubular Goods.”

This Recommended Practice addresses the relationship and responsibility of the purchaser, suppliers, and purchaser representatives regarding surveillance and/or inspection of products from placement of the order or the pre-production meeting, as appropriate, through the point of title transfer from suppliers to purchasers. The use of the document by the parties is voluntary and it is merely intended to provide general guidelines on issues that should be addressed by the parties. This may include activities such as laboratory testing, nondestructive testing, dimensional verification, coating, shipping, handling/storage or other related activities.

This RP is not intended to conflict with those inspection activities outlined in other API documents. In case of a conflict, the other applicable API Document shall prevail.

2 References

2.1 NORMATIVE REFERENCES

The following documents contain provisions which, through reference in this text, constitute provisions of this standard. For undated references, the latest edition of the normative document referred to applies.

API

Spec 5L *Specification for Line Pipe*

RP 5L9 *External Fusion Bonded Epoxy coating of Line Pipe*

3 Definitions

For the purpose of this Recommended Practice, the following definitions apply:

3.1 purchaser: The party responsible for both the definition of requirements for a product order and for payment of that order.

3.2 purchaser representative: The organization, surveyor, inspector, auditor and/or other, either hired or appointed to act on behalf of the purchaser.

3.3 purchaser representative inspection: Duties that include overall monitoring and/or random checks along with detailed verification and witnessing of purchaser-designated processes or product attributes. This is accomplished through conformity evaluation by observation and judgment, at the specified or appropriate level, by measurement, testing or gauging.

3.4 supplier: Producer, processor, manufacturer, distributor, retailer or vendor of a product, and/or provider of a service.

3.5 surveillance/survey: Duties that include overall monitoring and spot-checking of a supplier's process and product. This is accomplished through conformity evaluation by observation and judgment accompanied, as appropriate, by measurement, testing, gauging or other objective evidence.

3.6 third party inspector: A commonly used phrase generally referring to purchaser representative (see 3.2).

4 Responsibilities of the Parties

All parties involved with surveying and/or inspecting product should have clear and defined responsibilities in addition to the following:

4.1 RESPONSIBILITY OF THE PURCHASER

The purchaser should establish through purchase orders, specifications, preproduction meeting minutes, or other written communications the responsibility of each party based upon the following:

- a. The purchaser should select the purchaser representative and the survey and/or inspection level required.
- b. The purchaser should establish the protocol as to the responsibilities and authorities of the purchaser representative. This protocol should include communications of relevant information to all parties.
- c. The purchaser should ensure that clear documentation of the agreement between the purchaser and the supplier is provided to the purchaser representative, such as: an un-priced copy of the purchase order including any exceptions and/or applicable specifications.
- d. The purchaser should determine the need of a pre-production meeting and should ensure that the purchaser representative is either represented at the meeting or is fully advised, either verbally or in writing, of agreements made between the purchaser and the supplier at the meeting. It is recommended that the purchaser representative attend the preproduction meeting where possible.

4.2 RESPONSIBILITY OF THE PURCHASER REPRESENTATIVE

The purchaser representative should be responsible for the following:

- a. Ensuring that clear direction is received from the purchaser as to communications protocol, responsibilities, authorities, and extent of representation.
- b. Providing copies of specifications, agreements, appropriate gages and instruments, safety equipment and other necessities to its employees as appropriate to perform the assignment.
- c. Activities of the purchaser representative in the supplier's facility should not interfere with the normal activities of the supplier, including production rate.

However, there are situations where legitimate quality and safety issues may impact the production rate of a supplier.

4.3 RESPONSIBILITY OF THE SUB-CONTRACTOR

The purchaser and appointed purchaser representative should determine whether it is appropriate to sub-contract the inspection and/or surveillance activities. The sub-contractor should have the same or higher qualifications as the original purchaser representative (contractor).

4.4 RESPONSIBILITY OF THE SUPPLIER

The supplier should be responsible for the following:

- a. The supplier should allow the purchaser representative access to all parts of the supplier's facility that concerns the purchaser's product ordered and at all times while work on the purchaser's product is being performed.
- b. The supplier should give advance notification to the purchaser and the purchaser representative of changes in plant scheduling that could affect the purchaser representative activities related to the order.
- c. The supplier should provide the purchaser representative reasonable facilities to the purchaser representative that the product is being produced in accordance with the applicable purchase agreement. Reasonable facilities typically may include office space, telephone, internet access, mail/package delivery, and specialized safety equipment.
- d. The supplier should endeavor to present to the purchaser representative for inspection only product that the supplier has found to meet purchaser requirements.
- e. The supplier should identify any documents that are considered proprietary to the manufacture or processing of the product described in the purchase agreement. The supplier, purchaser and purchaser representative should establish the parameters by which such documents can be accessed, copied and submitted during manufacture and processing.
- f. It is not generally required, nor advisable, for the supplier to provide equipment to the purchaser representative. For the purpose of final decisions, the suppliers calibrated equipment should be the ruling equipment, unless otherwise agreed by the parties.

5 Level of Surveillance and/or Inspection Activities

As a general rule, surveillance and/or purchaser representative inspection activities should be specified by the parties in the purchase agreement. These activities are typically at the discretion of the purchaser.

The purchaser should specify one of the following activity levels and any additional inspection and/or surveillances. Product specific appendixes are included in this document and apply to levels specified in the appendix (or specified herein). The supplier and purchaser representative should be notified at the pre-production meeting or other appropriate time as to the specified activity level. The purchaser, at its discretion, may adjust the activity levels in accordance with the purchase agreement and/or applicable specifications at any time during the duration of the order. In which case the supplier and purchaser representative should be notified so that there is an understanding between all parties as to the inspection and surveillance required.

5.1 LEVEL A

This activity level consists of a representative, retained by the purchaser, who surveys the process and quality activities of the supplier.

This level of activity does not require the presence of a surveyor on each production shift.

5.2 LEVEL B

This level includes those activities shown in Level A in addition to the use of other overseers in certain key processes such as welding, NDT, final bench, coating, etc.

This level requires a lead inspector, with some level of presence, on each shift for supervision of the purchaser representative survey and/or inspection team.

5.3 LEVEL C

Level C establishes purchaser representative surveys and/or inspections at appropriate processes and quality areas in the supplier's facility on each processing shift. This may include monitoring and/or witnessing of all the supplier's critical processes and a purchaser representative final inspection subsequent to the supplier's final inspection.

This level requires a lead surveyor and/or inspector for supervision of the purchaser representative survey and/or inspection teams with full-time presence on each shift.

6 Safety

The supplier should inform the purchaser representative of potential safety hazards in the supplier's facility and expect the purchaser representative to comply with all relevant safety considerations required of the supplier's employees.

The supplier should identify the items of personal protection equipment required. Basic industrial safety training should be supplied by the purchaser representative to its employees.

Orientation and explanation of safety issues inherent to the supplier's facility is the responsibility of the supplier. Such orientation should take place prior to initiation of surveillance and/or inspection activities.

6.1 DRUG AND/OR ALCOHOL TESTING

If the supplier's facility is required to have a drug and/or alcohol testing program, then the purchaser representative should have a drug and/or alcohol testing program for its employees that will be working at the at the supplier's facility.

If the supplier requires verification of the drug and/or alcohol testing program under which the purchaser representative is enrolled, the representative should provide proof or sign a confirmation statement. In such cases that the representative is unable to provide proof or sign a confirmation statement, the representative should acknowledge, by signature, the willingness to abide by, and participate in accordance with the requirements of the suppliers drug and/or alcohol test program.

7 Qualifications of Purchaser Representatives

Qualifications of purchaser representative should consist of experience and training to the specification to which the product will be manufactured and inspected.

Qualifications of the purchaser representative should be in accordance with the employer's written policy. Documentation of the purchaser representative's qualifications should be available to the purchaser upon request.

8 Gauges and Instruments

Purchaser representatives may use their own gauges, instruments or measuring devices. The supplier's calibrated instruments should be used to confirm all out-of-specification or questionable findings by either the supplier's employees or the purchaser representative.

The supplier's mechanical gages, fixed gages and electronic instruments or other gages that are used for the purpose of determining material acceptance or rejection should be calibrated on an established schedule and traceable to a national or international standard.

9 Inspection Procedures

The purchaser representative should have applicable specifications, standards, and un-priced purchase agreements and should have access to those standard operating procedures for the processes and/or products being supplied.

10 Reporting

Purchaser representatives should report as directed by the purchaser. Purchaser may require daily, weekly, monthly and/or job completion final reporting. In addition to these, other reports may be requested based on the purchaser requirements and may also include nonconformance and corrective action reports.

11 Product Appendix

The attached appendixes are recommended for specific products and based on the purchaser desired level of representation. Persons who wish to have other processes considered for inclusion should submit a request to the Committee on Standardization of Tubular Goods.

11.1 LEGEND FOR APPENDIXES

NA (Non-Applicable, no involvement required)

DR (Document Review)

M (Monitor/Spot Check/Spot Witness)

W (100% Witness or Attend)

H (Hold Point-Further processing is stopped subject to completion of prior process).

APPENDIX A—STEEL LINE PIPE REPRESENTATION LEVEL (API-5L PRODUCT)

PROCESS	Level A	Level B	Level C	Optional
Pre-production Meeting <ul style="list-style-type: none"> Review purchase agreement to Manufacturing and Quality Plans Production Scheduling 	W	W	W	
Steel Making <ul style="list-style-type: none"> Verify heat Analysis Confirm Traceability of Manufacturers Test Certificate to Steel 	DR	DR	DR	
Rolling (SMLS) or Forming (SAW and EW) <ul style="list-style-type: none"> Temperatures (SMLS), Sizing and Traceability 	M	M	M	
Welding (DSAW & EW) <ul style="list-style-type: none"> Welding Procedures and Welders' Qualifications Materials, Speed, Weld Profile Repairs 	DR	DR	DR	
Heat Treating <ul style="list-style-type: none"> Traceability, Temperatures and Times (SMLS and EW) Full Body Normalizing (EW) Seam Annealing (EW) Calibration of Equipment 	M	M	W	
In-line Mill Process <ul style="list-style-type: none"> In-process Fluoroscope, UT or X-ray Sizing or Expansion Beveling/End Finish 	M	M	M	
Non-Destructive Testing, General (NDT or NDE) <ul style="list-style-type: none"> Calibration of Equipment and Verification of Standards. Personnel Qualifications and Testing Procedures Traceability 	M	W	W	
NDT or NDE <ul style="list-style-type: none"> Weld Seam UT, Fluoroscope Full Body UT, EMI or Other Body Imaging Devices Pipe End UT, Magnetic Particle or Other Methods 	DR	DR	DR	
Hydrostatic Testing <ul style="list-style-type: none"> Gage and Chart Calibrations Testing 	M	M	M	
X-ray, Ends and Repairs <ul style="list-style-type: none"> Film or Digital Imaging Review 	DR	M	W	
Mill Final Inspection <ul style="list-style-type: none"> Visual, Dimensional, Traceability 	M	M	M	
Mechanical Testing and Chemical Verification <ul style="list-style-type: none"> Tensile, Bend and Flattening Tests Charpy and Drop Weight Tear Tests Product Chemical Analysis 	M-DR	M-DR	W-DR	
	M-DR	M-DR	W-DR	
	DR	DR	M-DR	

PROCESS	Level A	Level B	Level C	Optional
Purchaser’s Final Inspection <ul style="list-style-type: none">• Visual• Dimensional• Marking and Traceability	M M M	M M M	W M M	
Loading, or Moving to Other Processes <ul style="list-style-type: none">• See Coating, Double Ending, Threading or Others	H	H	H	
Final Document Review and Report to Purchaser	DR-W	DR-W	DR-W	

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APPENDIX B—STEEL PIPE COATING REPRESENTATION LEVEL

PROCESS	Level A	Level B	Level C	Optional
Pre-Production Meeting <ul style="list-style-type: none"> Review PO to Manufacturing and Quality Plans Production Scheduling 	W W	W W	W W	
Raw Materials <ul style="list-style-type: none"> Verify Factory Materials Analysis and Tests Confirm Traceability, Shelf Life and Differential Scanning Calorimeter results 	DR DR	DR DR	DR DR	
Receiving Bare Pipe <ul style="list-style-type: none"> Traceability, Damage, Contamination and Quantity 	M	M	W	
Cleaning <ul style="list-style-type: none"> Pre-heat Temperature, Dew Point and Traceability Blast Materials, Line Speed and Pipe End Protection Surface Profile and Cleanliness 	M M M	M M M	M M W	
Blast Bench Inspection <ul style="list-style-type: none"> Traceability, Surface Profile and Surface Defects Traceability, Surface Profile and Surface Defects 	M M	M M	W W	
In-Line Mill Process <ul style="list-style-type: none"> Acid or Chemical Bath, Wash and Cleaning or Primer Heated Surface Temperature and Coating Line Speed Coating Application, First Touch and Cool Down 	M M M	M M M	M M M	
Holiday Testing <ul style="list-style-type: none"> Calibration of Equipment and Verification of Standards Testing Procedures, Deeper Voltage Verification Pipe Surface Temperature, Deeper Speed and Coverage 	M DR-M M	W DR-M M	W DR-W M	
Visual and Purchaser's Final Inspection <ul style="list-style-type: none"> Coating Surface Appearance, Defects and Holidays Holiday Count, Repairs and Stencil Pipe End Damage and Coating Cut Back Coating Thickness and Gage Calibrations 	M M M M	M M M M	W W W W	
Bevel Repairs and Other Coating Repairs <ul style="list-style-type: none"> Bevel Profile and End Square Coating Repair Cure and Holiday Testing Stripping Temperature and Traceability 	M M M	M M M	W W W	
Production Testing or Ring Test <ul style="list-style-type: none"> Cathodic Disbandment, Water Soak Porosity and Interface Contamination Impact, Adhesion and Bend (Flexibility) 	M M M	M M M	W W W	
Loading <ul style="list-style-type: none"> Visual Review for Damage, Cut Back, Repairs Traceability and Stencil Vehicle Cleanliness, Dunnage and Tie Down Safety Tally and Destination 	M M M M H-DR	M M M M H-DR	W W W M H-DR	
Final Document Review and Report to Purchaser	DR-W	DR-W	DR-W	



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