

# Engineering Procedure

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SAEP-347

31 October, 2004

Supplying Material from Stockists

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Document Responsibility: Inspection Department

## Saudi Aramco DeskTop Standards

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## 1 Scope

- 1.1 This procedure defines the minimum mandatory requirements for Saudi Aramco purchase of inspectable materials from stockists.
- 1.2 This procedure defines the minimum mandatory requirements for Saudi Aramco Project Contractors purchase of inspectable materials from stockists
- 1.3 This procedure shall be part of any purchase order to a stockist for inspectable material in addition to the applicable materials specifications and inspection requirements.

## 2 Conflicts and Deviations

Direct all requests to deviate from this procedure in writing to the Company or Buyer Representative, who shall forward such requests to the Manager, Inspection Department of Saudi Aramco, Dhahran.

## 3 References

Materials supplied to this procedure shall comply with the latest edition of the references listed below except where noted otherwise.

### 3.1 Saudi Aramco References

Saudi Aramco Engineering Standards

|                                   |                                                              |
|-----------------------------------|--------------------------------------------------------------|
| <a href="#"><u>SAES-L-101</u></a> | <i>Regulated Vendors List for Pipes and Fittings</i>         |
| <a href="#"><u>SAES-L-102</u></a> | <i>Regulated Vendors List for Valves</i>                     |
| <a href="#"><u>SAES-J-002</u></a> | <i>Technically Acceptable Instruments</i>                    |
| <a href="#"><u>SAES-P-101</u></a> | <i>Regulated Vendors List for Electrical Equipment</i>       |
| <a href="#"><u>SAES-D-101</u></a> | <i>Regulated Vendors List for Pressure Vessels and Tanks</i> |
| <a href="#"><u>SAES-G-101</u></a> | <i>Regulated Vendors List for Rotating Equipment</i>         |
| <a href="#"><u>SAES-E-101</u></a> | <i>Regulated Vendors List for Heat Transfer Equipment</i>    |

Saudi Aramco Materials System Specification

*As per P.O requirements*

Saudi Aramco Engineering Standard

*As per P.O requirements*

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Saudi Aramco Engineering Procedure

*As per P.O requirements*

Saudi Aramco Inspection Requirements

*Form 175-030100      Stockist Supplied Materials*

*As per P.O requirements*

3.2 Industry Codes and Standards

American Petroleum Institute

*As per P.O requirements*

American Society of Mechanical Engineers

*As per P.O requirements*

American Society for Testing and Materials

*As per P.O requirements*

Manufacturers Standardization Society

*As per P.O requirements*

International Organization for Standardization

*ISO-9001      Quality Management Systems Requirements*

## 4 Definition

**Stockist:** The term stockist in this procedure is defined as a non-manufacturing facility that maintains stock of specified material.

**Inspectable Materials:** Material that require inspection prior to acceptance as per Saudi Aramco system.

**Buyer:** Saudi Aramco Purchasing Department Representative or Project Contractor Procurement Representative.

**Buyer's Representative:** The person or persons designated by the Purchasing Department or the Project Contractor Management to monitor/enforce the contract.

## 5 Purchasing Requirements

### 5.1 General

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- 5.1.1 Purchase order for stocked inspectable materials shall be placed with only Saudi Aramco approved stockists.

*Commentary Note:*

*This requirement shall be effective starting September 01, 2004.*

- 5.1.2 List of Saudi Aramco approved manufacturer plants and/or regulated vendors for specific inspectable material must be provided to the stockist along with the P.O.
- 5.1.3 Materials intended for Saudi Aramco Materials System (SAMS) stock shall not be supplied from stockists.

5.2 Procurement Criteria and Material Limitations

Procurement of pipes, fittings, flanges and valves from a stockist shall be limited as specified in Table 1:

**Table 1 – Limitations to Procurement from a Stockist**

|          | <b>Rating Limitation</b> | <b>Size Limitation</b> | <b>Service Limitation</b>                                                  | <b>Material Limitation</b>                                                                                                  |
|----------|--------------------------|------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Pipes    | No Limit                 | No Limit               | All services, except materials intended for Sour Services or Gas Pipeline. | All materials, except carbon steel and low alloy steel for low temperature services                                         |
| Fittings | No Limit                 | No Limit               | All services, except materials intended for Sour Services.                 | All materials, except carbon steel and low alloy steel for low temperature services                                         |
| Flanges  | Class 300 and lower      | 12" and lower          | All services, except materials intended for Sour Gas Services.             | All materials, except carbon steel and low alloy steel for low temperature services                                         |
| Valves   | Class 150 and lower      | 12" and lower          | All services, except materials intended for Sour Services.                 | All materials, except valves with steel alloy components, or carbon steel and low alloy steel for low temperature services. |

## 6 Requirements by Stockist

### 6.1 Procurement of Materials

- 6.1.1 Inspectable materials shall be supplied by stockist through direct purchasing from a Saudi Aramco approved manufacture as per the latest Regulated Vendor Lists (RVL) and/or SAP records.
- 6.1.2 No material is allowed to be supplied from other stockists or any stocking facility.

- 6.1.3 Used or recycled materials shall not be supplied to Saudi Aramco facility through direct or project contractor's purchase.

## 6.2 Purchase Requisition Review

- 6.2.1 The stockist shall review the purchase requisition requirements related to the material prior to order acceptance. The review shall ensure as minimum:

- 6.2.1.1 The total P.O. quantity is available at the stockist facility. Partial quantity supplied from different stockists is not acceptable.

- 6.2.1.2 All applicable material specifications and requirements are defined.

- 6.2.1.3 The stockist has the ability to meet the defined requirements.

- 6.2.2 The stockist shall disclose deviation from the purchase orders requirements in writing to the Buyer Representative. Saudi Aramco approval of any deviation shall be obtained prior to stockist acceptance of the purchase order.

- 6.2.3 Direct all requests to deviate from this procedure in writing to the Company or Buyer Representative, who shall follow internal company procedure SAEP-302 and forward such requests to the Manager, Inspection Department of Saudi Aramco, Dhahran.

- 6.2.4 The stockist shall specify the plant ID, name and location of the approved manufacturer and confirm the compliance with all applicable Saudi Aramco Material System Procedures and Inspection Requirements Form A-175 referenced within Saudi Aramco purchase requisition.

## 6.3 Personnel Competence and Qualification

- 6.3.1 Personnel performing work affecting material quality shall be competent on the basis of appropriate education, training, skills and experience. The stockist shall determine and provide the resources needed to ensure the material compliance with the purchase order requirements.

- 6.3.2 Inspectable materials that will be installed within a Saudi Aramco facility shall be inspected by qualified stockist QC personnel as specified on Attachment-I of this procedure.

- 6.3.3 Stockists shall utilize competent sales and purchasing personnel that are familiar with international codes and standards and Saudi Aramco requirements.

#### 6.4 Material Identification and Traceability

- 6.4.1 Where appropriate, the stockist shall identify the material by suitable means and shall identify the inspection status against the P.O. inspection requirements (SA-175 Forms).
- 6.4.2 Stockist supplied materials shall be marked with the manufacturer's heat number, manufacturer's logo, Stockist P.O. number, Saudi Aramco P.O. number, and Stockist identification number. Marking shall be durable and legible.
- 6.4.3 Stockist shall provide the manufacturer's original tests reports & materials certificates for Buyer inspector(s) review. Copies of original tests reports & materials certificates shall be stamped as original by the Stockist and the Buyer inspector (s).

#### 6.5 Control of Measuring and Testing Devices

- 6.5.1 Where measuring devices are used, they shall be calibrated or verified at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards.
- 6.5.2 When the device is found to be out of the calibration, the stockist shall take appropriate action on the device and any material affected. Records of the results of calibration and verification shall be maintained and reviewed during inspection.

## 7 Inspection Requirements

- 7.1 Inspectable materials supplied by stockist and purchased in accordance with this procedure are subject to the requirements of Inspection Form 175-030100 in addition to the applicable inspection requirements in the purchase order.
  - 7.2 The stockist qualified QC personnel shall perform inspection activities necessary to ensure that purchased material fully comply with specified purchase order requirements and all the related documents shall be review and accepted , prior to call for Buyer representative inspection.
  - 7.3 Inspection records and evidence of materials compliance shall be documented and presented to Buyer inspector.
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- 7.4 For metallic valves, stockist shall carry out all inspection witness points as per purchase order requirements in presence of Buyer' inspection representative.

**Revision Summary**

31 July, 2004

New Saudi Aramco Engineering Procedure.

31 October, 2004

Editorial revision to Valves' rating and service limitations in Table 1.

## **Attachment I – Stockist QC Inspectors Qualification Minimum Requirements**

Quality personnel employed by stockist and/or its subcontractors to inspect materials that will be installed within a Saudi Aramco facility shall meet, as a minimum, the following qualification and experience requirements. Saudi Aramco shall be the final authority for the determination of equivalency for all qualifications, certifications, or minimum number of years of experience through further examinations and/or interviews.

- Quality Assurance Manager/Quality Management Representative: Shall have demonstrated knowledge and training in the ISO-9000 Series international standards, or equivalent. He shall be able to exercise judgment against the criteria of the standards. He shall have a university degree or equivalent with a minimum of five (5) years of direct experience in Quality Assurance system activities of which two (2) years must be in managing quality system.
- Quality Control Inspector: as a minimum, he shall be a High School graduate, or equivalent. He shall be able to read, write and speak the English Language. He shall have five (5) years inspection experience in manufacturing activities, including two (2) years of this inspection experience in the specific commodity and processes to be inspected. He shall be fully conversant with applicable Industry standards, procedures, and fabrication methods and shall perform a variety of inspection functions with minimal supervision as required to verify supplier compliance with the purchase order requirements. He shall be able to read engineering drawings. He shall have knowledge and understanding of ISO-9001 quality system requirements and implementation. He shall demonstrate working knowledge of codes as required by the purchase order, such as ASME, ANSI, NACE, and API, and testing equipment including Positive Material Identification test equipment required for the inspection of mechanical commodities such as pipes, piping, fittings, valves, and fasteners. Where Nondestructive Testing (NDT) forms part of the QC activities, and inspector is required to review or ensure NDT programs and results, he shall have been previously qualified and certified to a minimum ASNT Level II in the relevant method(s). When performing, reviewing or ensuring Nondestructive Testing in VT, MT, PT, RT or UT, he shall be certified in the specific method(s).