Pressure Control
Supplier Quality Requirements – Coating & Plating Services

SQ-03
Rev: 1.1

Approved By:

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Document Revision Chart

The following chart lists the revisions made to this document tracked by version. Use this to describe the changes and additions each time this document is re-published. The description should include as many details of the changes as possible.

<table>
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<th>#.#</th>
<th>Section Modified and Revision Description</th>
<th>Date</th>
<th>Author</th>
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<tbody>
<tr>
<td>1.0</td>
<td>Initial release</td>
<td>10/13/2011</td>
<td>Celine McCulloch</td>
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<tr>
<td>1.1</td>
<td>Revised requirement for sub-suppliers used for calibration services to comply with GEE QMS 7.6.</td>
<td>9/26/2012</td>
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1.0 Purpose

This specification defines the minimum quality requirements for suppliers providing coating and plating services to Pressure Control facilities. This specification is applicable to all suppliers of coating and plating services, such as three part coating systems and various plating processes. When coating and plating suppliers are also contracted to perform processes used to enhance the surface characteristics of the steel such as Nitriding, carbonitriding, gas carburizing, etc., refer to SQ-07 for controls applicable to these special processes.

2.0 Scope

This procedure is applicable for all suppliers of coating and plating services used by Pressure Control facilities.

3.0 Procedure

3.1 Quality Program Requirements

3.1.1 Quality Program Verification

The supplier's quality system shall be described in a written manual or procedure with revision control and identification. The quality system manual should be approved and supported by the supplier's management and cover the requirements of either API Spec Q1 or ISO 9001 as a minimum. The quality system manual shall be submitted to the Pressure Control Division Quality department for review and approval upon initial issue and/or revision.

When the supplier is the holder of a current API License or ISO 9001 Registration Certificate, a copy of the applicable certificate may be submitted to the Pressure Control Division Quality department in lieu of the quality system manual as objective evidence of quality system implementation.

When a supplier is approved based on an API License or ISO Registration Certificate, the supplier is required by this specification to invoke the provisions of the applicable API License or ISO Registration to the work performed for Pressure Control facilities.

3.1.2 Conflicts in Specified Requirements

In cases where the purchase order disagrees with the referenced drawings or specifications, the supplier shall contact the buyer at the Pressure Control location that issued the affected purchase order to discuss and resolve the issue.

3.2 Specific Quality Control Program Requirements

3.2.1 Drawings, Specifications and Procedures (Document Control)
The supplier shall ensure that all work performed for a Pressure Control facility is in compliance with the requirements of the drawings, specifications, and instructions specified by the applicable purchase order.

### 3.2.2 Material Control

The supplier shall ensure that materials are properly identified and traceability maintained throughout the coating and/or plating operations.

### 3.2.3 Manufacturing Processes

#### 3.2.3.1 Process Control System

The coating and plating operations shall be controlled and documented in accordance with the requirements of the supplier’s quality system manual, API License or ISO Registration used as the basis for supplier approval by Pressure Control.

#### 3.2.3.2 Coating and Plating Operations

Coating and plating of parts and equipment for Pressure Control facilities shall be performed in accordance with the requirements of the Pressure Control coating specification required by the purchase order.

When the Pressure Control coating specification references a commercial grade specification for requirements, such as thickness, workmanship and hardness, the supplier shall also comply with the requirements of the commercial grade specification as well as the Pressure Control coating specification.

### 3.2.4 Inspection and Testing

All parts and/or equipment for Pressure Control facilities shall be inspected to ensure compliance with the applicable purchase order requirements. When the Pressure Control coating specification requests a specific mil thickness, the supplier shall verify that mil thickness with a calibrated mil thickness measuring device.

### 3.2.5 Control of Nonconforming Products

When suppliers detect nonconformities to purchase order requirements that cannot be corrected without subsequent coating and/or plating operations, or if the supplier wishes to have an issue reviewed for possible concession, the supplier shall prepare and submit a Supplier Deviation Request electronically, via the Pressure Control Portal,
Supplier Information Page for review and disposition prior to shipment of the affected items.

Note: Contact your Purchasing Buyer for guidance in accessing the Pressure Control Portal, Supplier Information Page.

3.2.6 Inspection, Measuring and Test Equipment

Inspection, measuring and testing equipment used in these inspections shall be calibrated and traceable to national standards. Physical constants may be used as the basis for calibration reference in case where national standards do not exist.

Sub-suppliers used for calibration services shall comply with the requirements of ISO 17025 or equivalent international or national standard.

3.2.7 Marking of Products

When documents referenced by the purchase order require marking, such marking shall be applied using low stress steel stamps.

Caution: If the marking of products will damage the coating, please contact your Pressure Control buyer.

4.0 Responsibilities

The personnel responsible for the Purchasing and Quality departments at each location are jointly responsible for ensuring complete implementation and compliance with this specification.

5.0 Quality Records

The following records produced by this procedure are considered Quality Records and shall be maintained and controlled according to the requirements in GEEQMS 4.2.4 - Record Control:

When required by the Pressure Control purchase order and/or EDC, Certificate of Compliance including the following documentation shall be submitted to Pressure Control via the method instructed on the Pressure Control purchase order:

- Purchase Order number
- Part Number and revision
- Part Description
- Heat Numbers
- Heat treat lot numbers, if applicable
- Serial numbers, if applicable
6.0 Definitions and Acronyms

Italicized terms have been defined in GEEQMS 3.0 – Terms, Definitions and Acronyms. Their definitions have been repeated here for convenience purposes. In case of conflict GEEQMS 3.0 will take precedence.

6.1 Definitions

The following definitions are applicable to the use and implementation of this procedure:

- **Division Quality** – refers to Quality department staff responsible for the development and administration of the company’s global Quality Management System.
- **Operating Unit** – identifies the various organizations and operating companies that make up Pressure Control.
- **Quality Management Representative** – refers to the designated management representatives for each of the Pressure Control Operating Units.
- **Coating & Plating** – as used in this specification, covers such processes such as Xylan, painting, chrome plate, nickel plate, copper flashing, phosphate & oil, etc.

6.2 Acronyms

The following acronyms are applicable to the use and implementation of this procedure:

- **EDC** - Engineering Data Code which is the part description and bills of material document that defines design.

7.0 References

The latest effective editions of the following specification are incorporated as reference and form a part of this specification:

- API Specification Q1 - Specification for Quality Programs
- ISO 9001 - Quality System Standards
- SQ-07 - Supplier Quality Requirements – Heat Treatment Services

8.0 Compliance Requirements

- Plan for implementation in place by 31-Sep-2012
- Full compliance required by 08-Oct-2012