API Specification

Fifth Edition, December 2006
Steel Plates, Quenched-and-Tempered, for Offshore Structures

In placing orders for steel plate to be manufactured in accordance with API Spec 2Y, the purchaser should specify the following on the purchase order:

- Specification: API Spec 2Y
- Quantity/Size: As Required
- Grade: 42, 50, 50T, or 60
- Mill Inspection by Purchaser: State Advance Notice Requirements
- Delivery Date and Shipping Instructions: As Required
- Supplementary Requirements: As Required

The purchaser should state on the purchase order the requirements concerning the following Supplementary Requirements, which are optional with the purchaser.

NOTE: Section 1 of this specification addresses the purpose/function of several of the supplementary requirements.

- S1 Ultrasonic Examination
- S2 Notch Toughness at Lower Temperatures
  - S2.1 Notch Toughness at –60 °C
  - S2.2 Notch Toughness at Other Than –40 °C or –60 °C
  - S2.3 Higher Notch Toughness Energy Values
- S3 Additional Tension Test
- S4 Through-thickness (Z-direction) Testing
- S5 Low Sulfur Steel for Improved Through-thickness Properties
- S7 Low Nitrogen Content for Improved Notch Toughness in Strain-aged Condition
- S8 Strain-aged Charpy V-Notch Impact Test
- S9 Simulated Post-weld Heat Treatment
- S10 Hardness Testing
## S11 Preproduction Qualification

**S11.3** CTOD Testing of Weld Heat Affected Zone

**S11.4** Weldability (Hydrogen Cracking) Tests at:
- CP (Conventional Preheat) Level of Performance
- MP (Modified Preheat) Level of Performance

## S12 Notch Toughness Using Drop Weight

## S13 Surface Quality

## S14 Thickness Tolerance

**NOTE** Nothing in this specification should be interpreted as indicating a preference by the committee for any material or process. In the selection of materials and processes, the purchaser must be guided by the experience and by the service for which the plate is intended.