



Exploration & Production

GENERAL SPECIFICATION

Drilling & Wells

GS EP FP 338

**Manufacturing specification for new welded pipe for
Conductor pipe application**

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1. Scope

1.1 Purpose

This general specification was created to provide the additional manufacturing requirements for pipes manufactured to [API SPEC 5L](#) for the use as conductor pipe by TOTAL from approved mills.

1.2 Equipment

This general specification covers the additional requirements to [API SPEC 5L](#). This document includes practices currently being implemented by a broad spectrum of the industry.

2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the EFFECTIVE DATE of the CONTRACT.

Standards

Reference	Title
API SPEC 5L – 43rd Edition	Specification for Line pipe
ISO 10005	Quality management systems – Guidelines for quality plans

Professional Documents

Reference	Title
Not applicable	

Regulations

Reference	Title
Not applicable	

Codes

Reference	Title
Not applicable	

**Other documents**

Reference	Title
Not applicable	

Total General Specifications

Reference	Title
Not applicable	

3. Application

Only TOTAL approved mills shall be used for the supply of these products.

Longitudinal welded pipe shall be manufactured to [API SPEC 5L](#) PSL2 and the additional requirements contained within this document shall be proposed for conductor pipe application to TOTAL.

Where it is known that the conductor pipes will be driven then only SAW (Submerged Arc Welding) shall be proposed.

The use of Jointers shall be agreed before use and the process validated by TOTAL.

Helical seam pipe is not suitable for use as conductor pipe for TOTAL.

4. Purchasing Requirements**4.1 Requirement**

The purchaser shall specify the following in the purchase order;

- Specification
- Quantity
- Delivery date
- Shipping instructions
- Type of pipe
 - Specification
 - Diameter
 - weight per foot or wall thickness
 - Grade
 - Range

If applicable;

- Type of connector



- Manufacturers designation
- Connector dimensional considerations
- Description of weld attachments
 - o Pad eyes
 - o Lift eyes

5. Material

All plate or skelp shall conform to PSL 2 and shall not contain any repair welds.

5.1 Traceability

The manufacturer shall provide means for tracing any length of pipe or coupling to the proper heat and lot and to all applicable chemical and mechanical test results.

5.2 Chemical properties

The composition of steel used for the manufacture of pipes furnished to this specification shall conform to the chemical requirements given in 5L for PSL2 and reported as per SR 15 of [API SPEC 5L](#).

5.3 Tensile properties

PSL 2 Grades B, X42, X46, X52, X56, X60, X65, X70, and X80 shall conform to the tensile requirements specified in [API SPEC 5L](#).

5.4 Charpy Impact properties

As per PSL2 test temperature shall be 0°C, if an alternative temperature is required it will be specified on the purchase order. All fracture toughness shall conform to the requirements of SR19 of [API SPEC 5L](#).

Where the conductor pipe will be used in a driving application for installation there shall be Charpy impact testing done on the weld centerline, fusion line & fusion line + 2mm.

5.5 Metallographic Examination

PSL 2 electric welded pipe in all grades examinations shall be performed at least twice per operating shift and whenever changes of grade, diameter, or wall thickness are made and whenever significant excursions from operating heat treatment conditions are encountered.

6. Hydrostatic tests

Every length of pipe shall be hydrostatically tested to [API SPEC 5L](#) or by agreement to the required test pressure as stated on the purchase order.

7. Pipe Ends

The pipe ends shall be plain, threaded or specially prepared for connectors or special couplings.

The straightness of the pipes shall not exceed 0.1% on the length.



8. Non Destructive Examination

All pipes supplied to this specification shall be non-destructively inspected full length (100%) for the entire thickness. SR 17 shall apply to all pipe purchased for TOTAL

When an automated ultrasonic or electromagnetic inspection system (combined equipment, operating procedures, and personnel) is applied to meet the above, the weld at the end of the pipe that is not covered by the automated inspection system shall be inspected for defects by ultrasonic angle beam or radiographic methods as appropriate.

For submerged-arc welded pipe, the weld at each pipe end for a minimum distance of 8 in. (200 mm) shall be inspected by radiographic methods. The results of such radiographic inspection shall be recorded on either film or another imaging medium.

9. Length

Unless otherwise specified on the purchase agreement all lengths of plain end conductor pipe shall be 38 ft to 40 ft in length.

10. Drift testing

In all cases the pipes shall be full length drifted by a mandrel 12" long and the drift size as follows;

- Id – 3/16" for pipe up to and including 20"
- Id – 5/16" for pipe over 20"

Where the pipe is going to be fitted with connectors that has a bore size small than the pipe Id then the connector size will be the governing drift size

11. Marking and protection

Standard mill varnish finish shall be applied to the external surface of pipes unless otherwise specified in the purchase agreement. The coating layer shall be uniform in appearance and thickness. The thickness of the coating should have no detrimental effect on storage, running or in-service operations.

Any machined (finished) threaded end shall have an agreed storage compound applied or Jet Marine Imperator.

Where "O" rings are utilized as part of the threaded connection performance the purchaser will decide before manufacturing if they have to be installed on the pipe before shipping or shipped separately.

All marking shall be in conformance with the following and [API SPEC 5L](#) appendix I plus any additional requests stated on the purchase agreement;

- At the designated pin end, two meters from the threaded connection, one ring (100 mm wide) of blue paint and one ring of yellow (100 mm wide) paint, with a space of 30 mm between the rings.



12. Certification requirements

Certification and the traceability shall be in accordance with [API SPEC 5L Annex F SR15](#), unless otherwise specified in the purchase agreement.

13. Quality Assurance

In all respects to manufacturing the supplier of the product shall provide a quality control plan (QCP) to TOTAL for approval. Inside this QCP shall be the agreed production route and the third party inspection points for TOTAL the QCP shall conform to [ISO 10005](#).