Steel Plates Produced by Thermo-Mechanically Controlled Processing for Offshore Structures

API SPECIFICATION 2W
SIXTH EDITION, JANUARY 2019

API MONOGRAM PROGRAM EFFECTIVE DATE: AUGUST 1, 2019

ADDENDUM 1, APRIL 2021

REAFFIRMED, OCTOBER 2026



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Steel Plates Produced by Thermo-Mechanically Controlled Processing for Offshore Structures

1 Scope

1.1 Coverage

This specification covers four grades of steel plates that are to be produced by thermo-mechanically controlled processing (TMCP) for use in welded construction of offshore structures.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda or errata) applies.

API Recommended Practice 2Z, *Preproduction Qualification for Steel Plates for Offshore Structures*

ASTM[1] A6/A6M, *Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling*

ASTM A370, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*

ASTM A578/A578M, *Standard Specification for Straight-Beam Ultrasonic Examination of Rolled Steel Plates for Special Applications*

ASTM A673, *Standard Terminology Relating to Surface Analysis*

ASTM E10, *Standard Test Method for Brinell Hardness of Metallic Materials*

ASTM E23, *Standard Test Methods for Notched Bar Impact Testing of Metallic Materials*

ASTM E208, *Standard Test Method for Conducting Drop-Weight Test to Determine Nil-Ductility Transition Temperature of Ferritic Steels*

3 Abbreviations

ACC accelerated cooling

CP conventional preheat

CR controlled rolling

CTOD crack tip opening displacement

CTS controlled thermal severity

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[1] American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, www.astm.org.