# **AWS D1.1:**

Clause 4.2.1.2The acceptability of procedure qualification to other standards is the Engineer's responsibility, to be exercised based upon either the specific structure, or service conditions, or both. AWS B2.1-X-XXX Series on Standard Welding Procedure Specifications (SWPS) may, in this manner, be accepted for use in this code.

Clause C 4.2.2.1 Engineer can accept other performance qualification tests based on other standards (like AWS B2.1 or ASME), if in his/her judgment, the skills measured by these alternate tests are essentially the same as the tests prescribed by this code.

# **AWS D1.2:**

Clause 3.2 Qualification of WPS's: Acceptability of previous qualification or qualification to other standard is the Engineer's responsibility. WPS qualified by AWS B2.1 may, in this manner, be accepted for use in this code.

Clause 3.3.1 Qualification of Welders, Welding Operators, and Tack Welders: By approval of the Engineer, welders and welding operators qualified by standard test to AWS B2.1 may, in this manner, be accepted for use in this code.

#### **AWS D1.3:**

**Clause 6.3** Engineer's Approval: Acceptability of previous qualification or qualification to other standard is the Engineer's responsibility, to be exercised based upon the specific structure, or service conditions, or both. WPS qualified by AWS B2.1 may, in this manner, be accepted for use in this code.

#### **AWS D1.5:**

No mention of AWS B2.1 Standard.

#### **AWS D9.1:**

Clause 5: Arc Welding Procedure Qualification

**Clause 5.1.1:** The use of WPS's qualified in accordance with AWS B2.1/B2.1M, shall be accepted for welding to this code. In addition, Standard WPS's (SWPSs) published by AWS B2.1-X-XXX Series shall be accepted as qualified procedures.

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## **AWS D1.6:**

**Clause 6.3.2** WPSs qualified by AWS B2.1 are accepted for use in this code. Additionally, the use of SWPSs based on AWS B2.1 is also acceptable.

The acceptability of procedure qualifications to standards other than AWS B2.1 is the Engineer's responsibility, to be exercised based upon the specific structure, or service conditions, or both.

Clause 6.13.3.1 Welders and Welding Operators qualified by AWS B2.1 are accepted for use in this code.

The acceptability of performance qualifications to standards other than AWS B2.1 is the Engineer's responsibility, to be exercised based upon the specific structure, or service conditions, or both.

**C-6.5.1** Base metals are grouped for procedure qualification purposes in Table 5.2 of AWS D1.6 and AWS B2.1 (M-Numbers, based on weldability, similar metal properties, chemical compositions, and metallurgical compatibility).

The stainless steels on AWS B2.1 are assigned M-6, M-7, M-8, M-10H, M10I, M-10J, M-10K, and M-45

It is the Engineer's responsibility to choose or select right AWS B2.1 M-Number, based on the joint designs, metallurgy, mechanical properties, service conditions, and other factors.

#### **AWS D17.1:**

Clause 5: Welding Procedure and Performance Qualification

**Clause 5.2.2:** WPS for Class A and B welds shall be qualified and supported by PQR. WPS for Class C welds and tack welds do not require supporting PQR. AWS B2.1 may be used for welding procedure qualification.

## **Clause 9: Nonflight Hardware**

#### Clause 9.2.2.2: Welding Performance Qualification

As an alternative to the requirements of codes and specifications listed in Table 9.1, welders, tack welders, and welding operators engaged in the structural welding of **nonflight hardware** may be qualified in accordance with AWS B2.1

# **AWS D1-Series References to AWS B2.1**

**WPSAmerica.com** 

(Continue from **AWS D17.1**):

# Clause 9.2.2.3: Welding Procedure and Qualification

As an alternative to the requirements of codes and specifications listed in Table 9.1, welding procedures to be used for the fabrication of Class A and Class B structural welds in **nonflight hardware** may be qualified in accordance with AWS B2.1

#### Clause 5.2.2.2: Test Methods for WPS

(4) When mechanical testing is required by Table 5.3, see AWS B2.1 for test weldment and required number of test specimens

**Clause 5.2.2.3:** Alternate Methods of Procedure Qualification (In lieu of Clause 5.2.2.1) Special test weldments as described in AWS B2.1 are not allowed.

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