SPECIFICATION FOR FINE GRAINED, WELDABLE STEEL PLATES FOR PRESSURE EQUIPMENT

SA/AS 1548

1. Additional Requirements

1.1 Steelmaking Process:
The ratio of reduction of thickness from a strandcast slab to plate shall be at least 3.0:1.

1.2 Marking:
In addition to the marking requirements of this specification, the prefix, SA/, shall be added ahead of the marking on all products required to be marked by this specification, and to the material identification used on all documentation required by the specification.

1.3 Chemical Composition:
The requirements of paras. 7.1.2 and 7.1.3 on heat analysis, and of paras. 7.2.3 and 7.2.4 on product analysis, of SA-20/SA-20M shall apply.

1.4 Test Reports:

1.4.1 The designation of this SA/AS specification shall include the edition year.

1.4.2 Copies of the original manufacturer's test report shall be included with any subsequent test report.

2. Appendix

2.1 The appendix "Interchangeability of Strength Grades" does not apply for SA/AS 1548.

3. Source

3.1 See Nonmandatory Appendix A for ordering information to obtain an English language copy of AS 1548 and its references.
1. Additional Requirements

1.1 Marking:

(a) In addition to the marking requirements of this specification, all products required to be marked and material identification used on all documentation required by this specification are to be identified by this SA/EN specification designation.

(b) Plates that have been given the full heat treatment required by para. 8.2.1 or 8.2.2 shall be marked by the party performing the heat treatment with the letters designating the applicable heat treatment condition in Table 3 of EN 10028-2 following the stamped steel name or number.

c) Plates for which normalizing has been replaced by normalizing rolling as permitted by para. 8.2.2 shall be marked “+NR” instead of “+N.”

d) Plates that are not heat treated but are qualified on the basis of heat treated specimens per para. 8.2.3 shall be stamped with letter “G” following the stamped specification designation.

e) When such plates are subsequently heat treated, they shall be marked, by the party that performed the heat treatment, as required by (b) above following the required stamped specification designation.

1.2 Delivery Condition:

Normalizing shall not be replaced by normalizing rolling for plates of steel Grade 16Mo3.

1.3 Chemical Composition:

The requirements of paras. 7.1.2 and 7.1.3 on heat analysis, and of paras. 7.2.3 and 7.2.4 on product analysis, of SA-20/SA-20M shall apply.

1.4 Tension Tests:

For quenched and tempered plates one tension test shall be taken from each end of the heat treated plate. The gage length of the tension test specimens shall be taken at least 1T from any heat treated edge, where T is the thickness of the plate, and shall be at least 1/2 in. (12.5 mm) from flame cut or heat-affected-zone surfaces.

1.5 Impact Test Sampling:

Deviation from the requirement for preparation of test pieces for impact testing in EN 10028-1 shall not be permitted in SA/EN 10028-2.

1.6 Steelmaking Process:

The ratio of reduction of thickness from a strand-cast slab to plate shall be at least 3.0:1.

1.7 Quality:

All surface imperfections, the removal of which will reduce the plate thickness below its permissible minimum, shall be cause for rejection of the plate; however by agreement with the purchaser, the metal so removed may be replaced with weld metal.

Preparation for repair welding shall include inspection to assure complete removal of the defect.

Repairs shall be made utilizing welding procedures qualified in accordance with ASME Section IX and repair welding shall be done by welders or welding operators meeting the qualification requirements of ASME Section IX.

1.8 Test Reports:

1.8.1 The designation of this SA/EN specification shall include the edition year.

1.8.2 Copies of the original manufacturer’s test report shall be included with any subsequent test report.
SPECIFICATION FOR FLAT PRODUCTS MADE OF STEELS FOR PRESSURE PURPOSES
Part 3: Weldable Fine Grain Steels, Normalized

1. Additional Requirements

1.1 Marking:

(a) In addition to the marking requirements of this specification, all products required to be marked and material identification used on all documentation required by this specification are to be identified by this SA/EN specification designation.

(b) Plates that have been given the full heat treatment required by para. 8.2.1 or 8.2.2 shall be marked by the party performing the heat treatment with the letters designating the applicable heat treatment condition in Table 4 of EN 10028-3 following the stamped steel name or number.

(c) Plates for which normalizing has been replaced by normalizing rolling as permitted by para. 8.2.2 shall be marked “+NR” instead of “+N.”

(d) Plates that are not heat treated but are qualified on the basis of heat treated specimens per para. 8.2.3 shall be stamped with letter “G” following the stamped specification designation.

(e) When such plates are subsequently heat treated, they shall be marked, by the party that performed the heat treatment, as required by (b) above following the required stamped specification designation.

1.2 Chemical Composition:

The requirements of paras. 7.1.2 and 7.1.3 on heat analysis, and of paras. 7.2.3 and 7.2.4 on product analysis, of SA-20/SA-20M shall apply. In addition, the copper content shall be per SA-20/SA-20M Table 1.

1.3 Impact Test Sampling:

Deviation from the requirement for preparation of test pieces for impact testing in EN 10028-1 shall not be permitted in SA/EN 10028-3.

1.4 Steelmaking Process:

The ratio of reduction of thickness from a strand-cast slab to plate shall be at least 3.0:1.

1.5 Quality:

All surface imperfections, the removal of which will reduce the plate thickness below its permissible minimum, shall be cause for rejection of the plate; however by agreement with the purchaser, the metal so removed may be replaced with weld metal.

Preparation for repair welding shall include inspection to assure complete removal of the defect.

Repairs shall be made utilizing welding procedures qualified in accordance with ASME Section IX and repair welding shall be done by welders or welding operators meeting the qualification requirements of ASME Section IX.

1.6 Test Reports:

1.6.1 The designation of this SA/EN specification shall include the edition year.

1.6.2 Copies of the original manufacturer’s test report shall be included with any subsequent test report.

2. National Parts

2.1 The National Foreword and the National Annexes, if any, do not apply for SA/EN 10028-3.

3. Source

3.1 See Nonmandatory Appendix A for ordering information to obtain an English language copy of EN 10028-3 and its references.

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