3.2.11 PURCHASE REQUIREMENTS

3.2.11.1 A summary of the pertinent requirements in 3.2 through 3.8 is provided in Annex 3-B.

3.2.11.2 Special chemical compositions, heat treatment procedures, fabrication requirements, and supplementary tests may be required to assure that the vessel will be in the most favorable condition for the intended service.

3.2.12 MATERIAL IDENTIFIED WITH OR PRODUCED TO A SPECIFICATION NOT PERMITTED BY THIS DIVISION

3.2.12.1 Identified Material With Complete Certification From the Material Manufacturer. Material identified with a specification not permitted by this Division and identified to a single production lot as required by a permitted specification may be accepted as satisfying the requirements of a specification permitted by this Division, provided the following conditions are satisfied:

(a) Documentation is provided to the Certificate Holder demonstrating that all applicable requirements (including, but not limited to, melting method, melting practice, deoxidation, chemical analysis, mechanical properties, quality, and heat treatment) of the specification permitted by this Division to which the material is to be recertified, including the requirements of this Division (see 3.2.6), have been met.

(b) The material has marking, acceptable to the Inspector, for identification to the documentation.

(c) When the conformance of the material with the permitted specification has been established, the material shall be marked as required by the permitted specification.

3.2.12.2 Identified Material Recertification. Only the vessel or Part Manufacturer is permitted to recertify material per 3.2.12.1.

3.3 SUPPLEMENTAL REQUIREMENTS FOR FERROUS MATERIALS

3.3.1 GENERAL

All forms of ferrous products listed in Table 3-A.1 and Table 3-A.3 shall meet the supplemental requirements of 3.3. The high strength quenched and tempered steels listed in Table 3-A.2, shall meet the supplemental requirements of 3.4.

3.3.2 CHEMISTRY REQUIREMENTS

Carbon and low alloy steel having carbon content of more than 0.35% by heat analysis shall not be used in welded construction or be shaped by oxygen cutting (except as provided elsewhere in this Division).

3.3.3 ULTRASONIC EXAMINATION OF PLATES

3.3.3.1 Except as permitted in 3.3.3.2, all plate 50 mm (2 in.) and over in nominal thickness shall be ultrasonically examined in accordance with the requirements of SA-578. The acceptance standard shall be Level B of SA-578.

3.3.3.2 When the design rules permit credit for thickness of cladding on plate conforming to SA-263, SA-264, and SA-265, ultrasonic examination shall be made in accordance with the requirements of SA-578. The acceptance standard for Level C shall be at least Level B of SA-578. Alternatively, the acceptance standard of Level C may be used to satisfy this requirement.

3.3.4 ULTRASONIC EXAMINATION OF FORGINGS

3.3.4.1 All forgings 50 mm (2 in.) and over in nominal thickness shall be examined ultrasonically in accordance with Section V, SA-388.

(a) Reference specimens shall have the same nominal thickness, composition, and P-number grouping as the forgings to be examined in order to have substantially the same structure.

(b) Reference specimens shall have the same nominal thickness, composition, and P-number grouping as the forgings to be examined in order to have substantially the same structure.

3.3.4.2 Forgings are unacceptable if:

(a) The straight beam examination results show one or more discontinuities which produce indications accompanied by a complete loss of back reflection not associated with or attributable to the geometric configuration.

(b) The angle beam examination results show one or more discontinuities which produce indications exceeding in amplitude the indication from the calibration notch.

3.3.4.3 In the case of straight beam examination, the following conditions shall be reported to the purchaser for his consideration and approval prior to shipment of the forging:

(a) Forgings containing one or more indications with amplitudes exceeding adjacent back reflections.