

TAM International, Inc.	
Mild Carbon Steel Material for Load Bearing or Pressure Containing Parts	Specification: ESMA-1001
Reviewed By: Mark Wyatt, Engineering Manager	Revision Level: A
Approved By: Greg Fletcher, Quality Manager	

1. Scope

- 1.1. This document provides specifications for mild carbon steel material with 40 ksi minimum yield strength used for producing load bearing or pressure containing component parts in TAM products.
- 1.2. Material specified by this document must be in accordance with NACE MR-0175 (ISO 15156).

2. Acceptable Materials / Chemistry

- 2.1. Any carbon steels that fall within 0.12 – 2.00 % carbon content are acceptable as long as the material meets all other requirements of this specification.

3. Mechanical Properties

- 3.1. The mechanical properties of this material shall conform to the following requirements:
 - 3.1.1. 40,000 psi minimum yield strength as determined in accordance with ASTM A370.
 - 3.1.2. 22 RC maximum hardness as determined in accordance with ASTM E18.
- No other mechanical properties are required by this specification to be reported unless otherwise specified.

4. Weldability

- 4.1. Material meeting the requirements of this specification must be classified as P 1 by ASME BPVC-IX.

5. Dimensional Tolerances

- 5.1. Unless otherwise specified, dimensional tolerances shall comply with the following:
 - 5.1.1. Plates shall comply with the dimensional requirements of ASTM A568.
 - 5.1.2. Tubes shall comply with the dimensional requirements of ASTM A450.
 - 5.1.3. Bars shall comply with the dimensional requirements of ASTM A29.
 - 5.1.4. Shapes shall comply with the dimensional requirements of ASTM A6.

6. Reports

- 6.1. Material ordered to this specification shall be accompanied by a Material Test Report. Report shall contain the following minimum information which will be subject to inspection upon receipt:
 - 6.1.1. Statement of material type/grade
 - 6.1.2. Chemical analysis that shows the carbon content
 - 6.1.3. Material yield strength
 - 6.1.4. Material hardness
 - 6.1.5. Material Identification Number

7. Material Acceptance

- 7.1. All requirements of this specification are subject to verification at the discretion of TAM International.
- 7.2. TAM Engineering Manager or designee is ultimately responsible for accepting or rejecting material that does not conform to any portion of this specification.

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Rev	Date	Description	Prepared By:	Reviewed By / Approved By	Date
A	02/09/15	New Document	M. Wyatt		