

**Engineering Standard TES-002**

Engineering Standard Name:

**Acceptable Material Substitution**

Issued By:

**Engineering**Rev.: **R000**Eff. Date: **07/24/10**Page **1**

**1.0 Purpose:** The purpose of this engineering standard is to provide vendors with an approved list of acceptable material substitutions which can be used when sourcing materials called out on Test Devices, Inc. released engineering documentation.




**2.0 Scope:** This engineering standard outlines all of the material substitutions approved by Test Devices.

**3.0 Definitions:**

**3.1 Acceptable Material Substitution:** An acceptable material substitution is the substitution of a material for the material called for on Test Devices released engineering documentation, which has been approved by Test Devices in this document.

**4.0 Responsibility:** It is the responsibility of Test Devices' engineering manager to ensure this standard is maintained and updated continuously.

**5.0 Engineering Standard:** The table below defines the acceptable material substitutions approved by Test Devices' engineering department. Any alternate material substitutions must be requested and approved by Test Devices' engineering department before actual substitution takes place.

<b>Approved By:</b>	V.P. of Operations		Date 6/4/10
	Engineering Manager		Date 7/1/10
	VP of Quality & Business Operations		Date 8-4-10

**Revision Log**

Revision	Summary of Changes	Rev. Date
R000	Initial Issue	7/24/10

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	Engineering Manager	Signature on File	Date 8/1/10
	VP of Quality & Business Operations	Signature on File	Date 8/4/10

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No	Material Specified on Drawing	Acceptable Material Substitutions
1	12L14, 11L17, A36, 1018, 1020 Steel (Applicable to static structure only)	12L14, 11L17, A36, 1018, 1020
2	AISI 4150 (Rc 27-32)	AISI 4340 (Rc 25 – 32) AISI 4142 (Rc 25 – 32)
3	ASTM-A515-GR70 ASTM-A516-GR70	ASTM-A516-GR70 ASTM-A515-GR70
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## 6.0 Referenced Documents:

None