

NAV 26 Fastener Test Methods (ASTMF 606)

All references ASTM F 606

1.	Does the activity have written procedures for preparing test specimens and selection of test methods to be used for testing?	___Yes ___No
2.	Product Hardness Testing (3.1)	___Yes ___No ___N/A
	a. Does the activity have a written requirement to verify that any surface oxide, decarburization, plating or other coatings have been removed prior to testing? Ref. 3.1	
	b. Does the activity use the correct test method? • ASTM E18 Rockwell -any size • ASTM E 10 Brinell - >= 1 1/2" diameter Ref 3.1.1.4	___Yes ___No ___N/A
	c. Does the activity select the test locations in accordance with 3.1.1.1 - 3.1.1.3?	___Yes ___No ___N/A

NAV 26 Fastener Test Methods (ASTMF 606)

3	<p>Tension Tests.</p> <p>a. Does the activity ensure that six complete threads (except for heavy hex structural bolts, which shall be based on four threads) are exposed between grips during testing? For continuous thread bolts, at least six full threads shall be exposed. Described the method used to verify thread exposure. Ref. 3.2.2</p>	<p>___ Yes ___ No ___ N/A</p>
4	<p>Proof Load - Method 1, Length Measurement Ref. 3.2.3</p> <p>a. Does the activity prepare test specimens and perform measurements on the specimen as required by 3.2.3?</p>	<p>___ Yes ___ No ___ N/A</p>
	<p>b. If the activity does not use a bolt extensometer, verify that a measuring instrument capable of measuring changes in increments of 0.0001" with an accuracy of 0.0001" in any 0.001" range is used for length measurement.</p>	<p>___ Yes ___ No ___ N/A</p>
	<p>b. Verify that the testing speed does not exceed .12in/min and that the load is held for at least ten seconds.</p>	
	<p>c. If re-testing is performed as allowed, is the load increased by 3%?</p>	<p>___ Yes ___ No ___ N/A</p>
5	<p>Proof Load - Method 2, Yield Strength Ref. 3.2.4 <i>Note: Method 2a is the applicable method for Austenitic Stainless Steel and Non-Ferrous Products.</i></p>	
	<p>a. Does the method the activity uses to measure the total elongation during testing includes the exposed threads?</p>	<p>___ Yes ___ No ___ N/A</p>

NAV 26 Fastener Test Methods (ASTMF 606)

	b. Does the activity use an offset equal to 2% of the length occupied by six full threads as required to determine the load/stress?	___Yes ___No ___N/A
6	Proof Load - Method 2a, Yield Strength (Austenitic Stainless Steel and Non-Ferrous Products). Ref. 3.2.4.1	
	a. Does the activity determine the load/stress at an offset equal to 0.2% of the strain based on the length of the bolt between holders?	___Yes ___No ___N/A
7	Proof Load - Method 3, Uniform hardness - Fasteners <=1" Diameter Ref. 3.2.5	
	a. Are hardness tests conducted as specified in 2 above?	___Yes ___No ___N/A
	b. Does the activity perform a core hardness as required by 3.2.5 and compare the results to the mid-radius results? The difference shall not exceed 3 points.	___Yes ___No ___N/A
8	Axial Tension Testing of Full-Sized Products. Ref 3.4	
	a. Does the activity have a written procedure for testing full size Bolts or Studs in accordance 3.4.1 / 3.4.2?	___Yes ___No ___N/A

NAV 26 Fastener Test Methods (ASTMF 606)

9	Wedge Tension Testing of Full-Size Product. Ref 3.5	
	a. Does the activity have a written procedure for wedge testing full size Bolts in accordance 3.5.1?	___Yes ___No ___N/A
	b. When wedge tension testing and proof load testing is required for bolts, does the activity use the proof loaded test bolts for the wedge testing as required by 3.5.1?	
	c. Does the activity have a written procedure for wedge testing full size Studs in accordance 3.5.2?	___Yes ___No ___N/A
	d. When wedge tension testing and proof load testing is required for studs, does the activity use the proof loaded test studs for the wedge testing as required by 3.5.2?	___Yes ___No ___N/A
10	Tension Testing of Machined Test Specimens. Ref 3.6	
	a. Does the activity have a written procedure for preparing and testing machined specimens in accordance 3.6.1-3.6.1.4?	___Yes ___No ___N/A
	b. Does the activity use the Drop of the beam or halt of the pointer method to determine the yield point? Ref 3.6.2.2	___Yes ___No ___N/A

NAV 26 Fastener Test Methods (ASTMF 606)

	<p>c. Does the activity use the Autographic Diagram Method to determine the yield point? Ref 3.6.2.3</p>	<p>___ Yes ___ No ___ N/A</p>
	<p>d. Does the activity use the Total Extension Under Load Method to determine yield point? Ref 3.6.2.4</p> <ul style="list-style-type: none"> • If so, do they use a class C or better extensometer? • Has the extensometer been verified and calibrated as required by ASTM E 83? 	<p>___ Yes ___ No ___ N/A</p>
	<p>e. Does the activity use the Offset Method to determine yield strength? Ref 3.6.3.1</p> <ul style="list-style-type: none"> • If so, do they use an extensometer with a magnification of at least 250 to 1? 	<p>___ Yes ___ No ___ N/A</p>
	<ul style="list-style-type: none"> • Has the extensometer been verified and calibrated as required by ASTM E 83? 	<p>___ Yes ___ No ___ N/A</p>
	<p>f. Does the activity determine the tensile strength, elongation and reduction in area in accordance with 3.64 - 3.6.52?</p>	<p>___ Yes ___ No ___ N/A</p>
11.	<p>Testing of internally threaded fasteners. Ref 4.1</p>	
	<p>a. Does the activity perform hardness testing in accordance with 4.1 - 4.1.5?</p>	<p>___ Yes ___ No ___ N/A</p>

NAV 26 Fastener Test Methods (ASTMF 606)

	b. Does the activity perform proof load testing in accordance with 4.2-4.2.3?	___ Yes ___ No ___ N/A
	c. Does the activity perform cone proof load testing in accordance 4.3?	___ Yes ___ No ___ N/A

Additional Comments/Concerns: