



# Phoenix \* Capitol \* Camco CapProducts

## Certified Material Test Report

Heat Code: 156E    Heat No: 188693  
 Item: 12204015X: 1-1/2" FS 3M THD AAR UNION X-Series  
 Material: ASTM A105-2014 / ASME SA105-2015 Edition

### Chemistry Properties

<b>C</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Si</b>	<b>Cu</b>	<b>Cr</b>
0.2100	0.9100	0.0080	0.0210	0.2000	0.1800	0.1190
<b>Ni</b>	<b>Mo</b>	<b>V</b>	<b>Co</b>	<b>Al</b>	<b>Cb</b>	<b>N</b>
0.0750	0.0300	0.0330				
<b>Pb</b>	<b>Sn</b>	<b>Ta</b>	<b>Ti</b>	<b>C Eq. Long</b>		
				0.4151		

### Additional Chemical Properties


### Mechanical Properties

<b>Tensile(PSI)</b>	<b>Yield(PSI)</b>	<b>Elong.% in 2in.or 4D</b>	<b>Reduction</b>	<b>HBW</b>	<b>HBW 2</b>
83000	48600	28%	63	179	174

### Charpy Minimum Impact - ft/lbs ----- Fracture Appearance - ft/lbs

Test 1	Test 2	Test 3	Avg.	Test Temp.	Test Size	Test 1	Test 2	Test 3	Avg.

We hereby certify that these parts were manufactured, sampled, tested, and inspected in accordance with the product specifications stated and were found to meet the requirements. This document is according to EN 10204 Inspection Certificate 3.1 requirements. These products meet the requirements of the latest editions of NACE MR0175/ISO 15156 and NACE MR0103. No weld repair has been performed on these products. This material was not exposed to mercury or any other metal alloy that is liquid at ambient temperatures during processing or while in our possession.

Meets ASME SA-181-70 2017 Edition. Manufactured in the USA.

