



Date: February 3, 2021

Company: S-5

P.O. #: 17mm Bolts

ATTN: Dustin Haddock, Jon Moss

Ref. #:

Address: 500 W Highway St

Material: AISI 304 A2-70

Address: Iowa Park, TX 76367

Specification: ASTM E8/E8M-16ae1 | ASTM E18-20 | ASTM E1086-14

Lab #: 2101-189

FULL SIZE TENSILE TEST

CMS 209		Area mm ²	Yield Strength		Tensile Strength		Fracture
Identity	Size		Load (kN)	Stress (MPa)	Load (kN)	Stress (MPa)	Location
#1	M8-1.25	36.61	28.85	798.5	30.15	834.7	Threads
#2	M8-1.25	36.61	28.38	785.5	29.56	818.4	Threads

Requirements:

450 min

700 min

Yield Strength Determined By: 0.2% Offset
[X] Meets Specification Requirements

CHEMICAL ANALYSIS

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304

Carbon	0.02	0.08 max
Sulfur	0.002	0.030 max
Phosphorus	0.022	0.045 max
Silicon	0.36	1.00 max
Chromium	18.46	18.0-20.0
Nickel	8.19	8.00-10.5
Manganese	0.78	2.00 max
Copper	1.39	
Molybdenum	0.12	
Columbium	0.01	
Titanium	<0.01	
Aluminum	0.01	
Vanadium	0.08	
Cobalt	0.19	
Tungsten	<0.01	
Tin	<0.01	
Iron	Base	Base

Chemistry Run By: OES
Percent By Weight
[X] Meets Specification Requirements

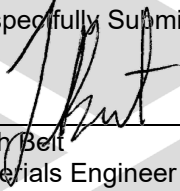


HARDNESS

Indent	Bolt 1 (HRC)	Bolt 2 (HRC)
1	36	36
2	37	36
3	36	36
Average	37	36

[X] Information Only

Respectfully Submitted,



Josh Belt
Materials Engineer