




PHN 260.747.4154 9609 Ardmore Avenue
FAX 260.747.0398 Fort Wayne, IN 46809

FORT WAYNE METALS

Turning knowledge into solutions.

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CERTIFICATION OF COMPLIANCE

Certification: 1086235-1	Manufactured Date: 02/16/2017	Batch: 10759240	
Customer: Painful Pleasures		Sales Order: 1034160	
Customer Part: -		Purchase Order: 2217-1	Certified By Derrick Baker Inspector
Quantity Shipped: 498.00 ft (22.000 lb)			
Finish: Carbide Drawn			28 February, 2017 Date
Alloy: 316LVM		Size: 0.12800 in.	
Condition: Annealed			

RAW MATERIAL CHARACTERISTICS

Heat Number: G22503K05	Material: 316LVM
Batch Description: Round Wire	

Aluminum (Al) (%)	< 0.01	Balance	Iron
Boron (B) (%)	0.003	Carbon (C) (%)	0.021
Chromium (Cr) (%)	17.47	Cobalt (Co) (%)	< 0.05
Columbium (Cb) (%)	< 0.01	Copper (Cu) (%)	0.09
Manganese (Mn) (%)	1.31	Molybdenum (Mo) (%)	2.82
Molybdenum+Chromium (%)	26.77	Nickel (Ni) (%)	14.39
Nitrogen (N) (%)	0.03	Phosphorus (P) (%)	0.014
Silicon (Si) (%)	0.35	Sulfur (S) (%)	0.001
Tin (Sn) (%)	< 0.003	Titanium (Ti) (%)	0.01
Tungsten (W) (%)	< 0.05	Vanadium (V) (%)	0.03
Alumina Heavy (ea)	0	Alumina Thin (ea)	0.5
Globular Oxide Heavy (ea)	0.5	Globular Oxide Thin (ea)	0.5
Silicate Heavy (ea)	0	Silicate Thin (ea)	0.5
Sulfide Heavy (ea)	0	Sulfide Thin (ea)	0
Carbide Test	Pass	Grain Size (ea)	7
Inclusion Rating	Pass	Intergran Corrosion	Pass
Micro Ferrite Free	Pass	Microstructure	Pass
RM Country of Origin	USA	RM DFARS Compliant	Compliant
Ultrasonic Tested	Yes		

INTERMEDIATE MATERIAL CHARACTERISTICS

Manufactured in the USA

FDA registered and ISO 13485 certified - ISO 9001 and AS 9100 certified



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Alloy: 316LVM		Size: 0.12800 in.	
Condition: Annealed			

Size Tolerance: Diameter +0.00100 / -0.00100 in
Batch Description: Round Wire

Diameter (in)	0.12835	Breakload (lb)	1,132
Tensile Strength (PSI)	87,484	Elongation (%)	43
Yield Load (lb)	462	Yield Strength (PSI)	35,740

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