## Ametek P316L P/M Stainless Steel, Sintered from 6.30 g/cc Green Density

Category : Metal , Ferrous Metal , Stainless Steel , T 300 Series Stainless Steel

## Material Notes:

P316L offers a very high degree of corrosion protection for a standard P/M stainless steel grade. It provides excellent strength at extremely high temperatures. Key materials benefits of P316L include enhanced compressibility, and green strength, which is approximately 40% higher than comparables induction melted materials.For property data reported here: Compacting properties measured on powders with 1% lithium stearate. Sintering was done in dissociated ammonia at 1121°C (2050°F) for 45 minutes. Sintering in hydrogen vs. ammonia reduces strength and increases elongation. Compacting pressure 40 tsi. Green strength 700 psi. Sintered breaking strength 103,000 psi.Information provided by Ametek Specialty Metal Products.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Ametek-P316L-PM-Stainless-Steel-Sintered-from-630-gcc-Green-Density.php

Physical Properties	Metric	English	Comments
Bulk Density	2.70 g/cc	0.0975 lb/in³	Powder
Density	6.60 g/cc	0.238 lb/in³	Sintered

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell B	48	48	
Tensile Strength, Ultimate	345 MPa	50000 psi	
Elongation at Break	4.8 %	4.8 %	

Thermal Properties	Metric	English	Comments
Shrinkage	0.44 %	0.44 %	versus die size

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.030 %	<= 0.030 %	
Chromium, Cr	16 - 18 %	16 - 18 %	
Iron, Fe	61.895 - 72 %	61.895 - 72 %	As Remainder
Manganese, Mn	<= 2.0 %	<= 2.0 %	
Molybdenum, Mo	2.0 - 3.0 %	2.0 - 3.0 %	
Nickel, Ni	10 - 14 %	10 - 14 %	
Phosphorous, P	<= 0.045 %	<= 0.045 %	
Silicon, Si	<= 1.0 %	<= 1.0 %	



Component Elements Properties	Metric <sup>0</sup> %	English <sup>0</sup> %	Comments
Descriptive Properties		Value	Comments
Powder Flow		30 sec/50 g	

## Contact Songhan Plastic Technology Co.,Ltd.

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