

Ametek P316L P/M Stainless Steel, Sintered from 6.83 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 50 tsi. Green strength 1100 psi. Sintered breaking strength 125,000 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-683-gcc-Green-Density.php

Physical Properties	Metric	English	Comments
Bulk Density	2.70 g/cc	0.0975 lb/in ³	Powder
Density	6.83 g/cc	0.247 lb/in ³	Sintered

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell B	67	67	
Tensile Strength, Ultimate	400 MPa	58000 psi	
Elongation at Break	6.0 %	6.0 %	

Thermal Properties	Metric	English	Comments
Shrinkage	0.40 %	0.40 %	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	English	Comments
Descriptive Properties			
Powder Flow		30 sec/50 g	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China