

Industeel VIRGO 15.5PH 15Cr-5Ni-3Cu Precipitation Hardening Martensitic Stainless Steel (480°C (900°F) - 1 hour - air cooling)

Category : Metal , Ferrous Metal , Martensitic , Stainless Steel , Precipitation Hardening Stainless , T S10000 Series Stainless Steel

Material Notes:

Description: Alloy VIRGO 15.5 PH is a precipitation hardening martensitic stainless steel with 15% Cr, 5% Ni, 3.5% Cu and 0.3% Nb/Cb. The grade combines high mechanical properties and medium corrosion resistance. The VIRGO 15.5 PH grade is similar to the VIRGO 17.4 PH grade having equivalent mechanical properties. Due to the lower Chromium content and increased Nickel content the VIRGO 15.5 PH grade contains less ferrite which provides better through thickness properties particularly when considering thick plates. The corrosion behavior is close to 304 grade and better than 410 grade. The main applications are those of VIRGO 17.4 PH grade i.e. mechanical components and offshore industry when considering heavy plates. Information provided by manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Industeel-VIRGO-155PH-15Cr-5Ni-3Cu-Precipitation-Hardening-Martensitic-Stainless-Steel-480C-900F-1-hour-air-cooling.php

Physical Properties	Metric	English	Comments
Density	7.80 g/cc	0.282 lb/in ³	

Mechanical Properties	Metric	English	Comments
Modulus of Elasticity	197 GPa	28600 ksi	
Tensile Modulus	77.0 GPa	11200 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	10.8 Åµm/m-Å°C	6.00 Åµin/in-Å°F	
	@Temperature 0.000 - 100 Å°C	@Temperature 32.0 - 212 Å°F	
	11.0 Åµm/m-Å°C	6.11 Åµin/in-Å°F	
	@Temperature 0.000 - 100 Å°C	@Temperature 32.0 - 212 Å°F	
	11.6 Åµm/m-Å°C	6.44 Åµin/in-Å°F	
	@Temperature 0.000 - 400 Å°C	@Temperature 32.0 - 752 Å°F	
Specific Heat Capacity	12.0 Åµm/m-Å°C	6.67 Åµin/in-Å°F	
	@Temperature 0.000 - 500 Å°C	@Temperature 32.0 - 932 Å°F	
	0.460 J/g-Å°C	0.110 BTU/lb-Å°F	
	@Temperature 20.0 Å°C	@Temperature 68.0 Å°F	

Thermal Properties Thermal Conductivity	Metric 14.0 W/m-K	English 97.2 BTU-in/hr-ftÅ²-	Comments
	@Temperature 20.0 ÅC	@Temperature 68.0 Å°F	

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.070 %	<= 0.070 %	
Chromium, Cr	15 %	15 %	
Copper, Cu	3.5 %	3.5 %	
Iron, Fe	76.63 - 76.7 %	76.63 - 76.7 %	As remainder
Nickel, Ni	4.5 %	4.5 %	
Niobium, Nb (Columbium, Cb)	0.30 %	0.30 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000800 ohm-cm @Temperature 20.0 ÅC	0.0000800 ohm-cm @Temperature 68.0 Å°F	

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