

Special Metals INCOLOY® 25-6M0 Super Austenitic Stainless Steel (UNS N08926)

Category : Metal , Ferrous Metal , Stainless Steel

Material Notes:

Data provided by the manufacturer, Special Metals.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Special-Metals-INCOLOY-25-6M0-Super-Austenitic-Stainless-Steel-UNS-N08926.php

| Physical Properties | Metric | English | Comments |
|---------------------|-----------|--------------------------|----------|
| Density | 8.03 g/cc | 0.290 lb/in ³ | |

| Mechanical Properties | Metric | English | Comments |
|----------------------------|----------------------------|------------------------------|---|
| Hardness, Rockwell B | 86 | 86 | |
| Tensile Strength, Ultimate | 689 MPa | 100000 psi | |
| Tensile Strength, Yield | 331 MPa @Strain 0.200 % | 48000 psi @Strain 0.200 % | |
| Elongation at Break | >= 42 % | >= 42 % | in 2 in (50 mm) or 4D |
| Modulus of Elasticity | 188 GPa | 27300 ksi | for Hot Rolled and Annealed Plate [2100°F (1149°C)/1h/WQ] |
| Poissons Ratio | 0.33 | 0.33 | |
| Shear Modulus | 77.0 GPa | 11200 ksi | |

| Thermal Properties | Metric | English | Comments |
|--------------------|--|---|--|
| CTE, linear | 15.18 Åµm/m-Å°C @Temperature 25.0 - 100 Å°C | 8.433 Åµin/in-Å°F @Temperature 77.0 - 212 Å°F | Mean for Hot Rolled and Annealed Plate [2100Å°F (1149Å°C)/1h/WQ] |
| | 16.03 Åµm/m-Å°C @Temperature 25.0 - 300 Å°C | 8.906 Åµin/in-Å°F @Temperature 77.0 - 572 Å°F | Mean for Hot Rolled and Annealed Plate [2100Å°F (1149Å°C)/1h/WQ] |
| | 16.56 Åµm/m-Å°C @Temperature 25.0 - 500 Å°C | 9.200 Åµin/in-Å°F @Temperature 77.0 - 932 Å°F | Mean for Hot Rolled and Annealed Plate [2100Å°F (1149Å°C)/1h/WQ] |
| | 17.18 Åµm/m-Å°C @Temperature 25.0 - 700 Å°C | 9.544 Åµin/in-Å°F @Temperature 77.0 - 1290 Å°F | Mean for Hot Rolled and Annealed Plate [2100Å°F (1149Å°C)/1h/WQ] |

| Specific Heat Capacity Thermal Properties | 0.500 J/g-Â°C Metric | 0.120 BTU/lb-Â°F English | Comments |
|--|-------------------------|-----------------------------|----------|
| Thermal Conductivity | 11.5 W/m-K | 79.8 BTU-in/hr-ftÂ²- Â°F | |
| Melting Point | 1320 - 1400 Â°C | 2410 - 2550 Â°F | |
| Solidus | 1320 Â°C | 2410 Â°F | |
| Liquidus | 1400 Â°C | 2550 Â°F | |

| Component Elements Properties | Metric | English | Comments |
|-------------------------------|---------------|---------------|--------------|
| Carbon, C | <= 0.20 % | <= 0.20 % | |
| Chromium, Cr | 19 - 21 % | 19 - 21 % | |
| Copper, Cu | 0.50 - 1.5 % | 0.50 - 1.5 % | |
| Iron, Fe | 47.3 % | 47.3 % | As remainder |
| Manganese, Mn | <= 2.0 % | <= 2.0 % | |
| Molybdenum, Mo | 6.0 - 7.0 % | 6.0 - 7.0 % | |
| Nickel, Ni | 24 - 26 % | 24 - 26 % | |
| Nitrogen, N | 0.15 - 0.25 % | 0.15 - 0.25 % | |
| Phosphorous, P | <= 0.030 % | <= 0.030 % | |
| Silicon, Si | <= 0.50 % | <= 0.50 % | |
| Sulfur, S | <= 0.010 % | <= 0.010 % | |

| Electrical Properties | Metric | English | Comments |
|------------------------|------------------|------------------|----------------------------|
| Electrical Resistivity | 0.0000800 ohm-cm | 0.0000800 ohm-cm | |
| Magnetic Permeability | 1.005 | 1.005 | at 200 Oersted (15.9 kA/m) |

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