

MetalTek RENE® 220 Centri-Vac Nickel Cobalt Based Alloy

Categories: [Metal](#); [Nonferrous Metal](#); [Nickel Alloy](#); [Superalloy](#)

Material Notes: Information provided by MetalTek

Wrought Grade RENE® 220

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	>= 1105 MPa	>= 160300 psi	
Tensile Strength, Yield	>= 830 MPa	>= 120000 psi	
Elongation at Break	>= 6.0 %	>= 6.0 %	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.020 - 0.040 %	0.020 - 0.040 %	
Chromium, Cr	18 - 22 %	18 - 22 %	
Cobalt, Co	11 - 13 %	11 - 13 %	
Molybdenum, Mo	3.0 - 3.4 %	3.0 - 3.4 %	
Nickel, Ni	51.46 - 59.08 %	51.46 - 59.08 %	As Balance
Niobium, Nb (Columbium, Cb)	5.0 - 5.5 %	5.0 - 5.5 %	
Tantalum, Ta	3.0 - 3.5 %	3.0 - 3.5 %	
Titanium, Ti	0.90 - 1.1 %	0.90 - 1.1 %	

Descriptive Properties

Heat Treatment Sol. Anneal & Age

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.