

Technical Data Sheet

Product Name: Tantalum Tube, Tantalum Pipe
Catalog No.: TA0004
Standard: ASTM B521-98
Size: Customized
Color: Grey
Grade UNS R05200, UNS R05400



Specification

Form	O.D (mm)	Wall (mm)	Length (mm)	Standard	Purity
Tube	1.0-150	0.2-5.0	200-6000	ASTM B521	≥99.95%
Pipe					99.99%

Chemical Composition (% , Max.)

Element	C	O	N	H	Fe	Mo	Nb	Ni	Si	Ti	W	Ta
R05200	0.01	0.015	0.01	0.0015	0.01	0.02	0.1	0.01	0.005	0.01	0.05	Remainder
R05400	0.01	0.03	0.01	0.0015	0.01	0.02	0.1	0.01	0.005	0.01	0.05	Remainder

Properties

Properties	Unit	Value
Density	g/cm ³	16.6
Melting Point	°C	2,996
Boiling Point	°C	5,430
Tensile Strength	psi	35,000-70,000
Young's Modulus of Elasticity	lb/in ²	27 x 10 ⁶
Poisson's Ratio	-	0.35
Linear Coefficient of Expansion	per °C	6.5 x 10 ⁻⁶
Thermal Conductivity	W/m·K	57.5
Thermal Expansion	μm/m·K	6.3
Vickers Hardness	MPA	870-1200
Specific Heat at 20°C	cal/g/°C	0.036
Electrical Conductivity	IACS	13%
Electrical Resistivity at 20°C	nΩ·m	135.0
Recrystallization Temperature	°C	1200-1400
Stress Relieving Temperature	°C	850

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By..... *Norman*