

**HIGH TEMPERATURE / CORROSION  
RESISTANT ALLOYS**

**TANTALUM  
(R05200/UNALLOYED)**

**DENSITY: 16.6 gm/cc**

**TANTALUM CHEMICAL COMPOSITION**

CARBON (C)	0.010
OXYGEN (O)	0.015
NITROGEN (N)	0.010
HAFNIUM (HF)	0.0015
NIOBIUM (NB)	0.100
IRON (FE)	0.010
TITANIUM (TI)	0.010
TUNGSTEN (W)	0.05
MOLYBDENUM (MO)	0.020
SILICON (SI)	0.005
NICKEL (NI)	0.010
TANTALUM (TA)	REMAINDER

**TANTALUM MECHANICAL PROPERTIES**

**ULTIMATE TENSILE STRENGTH, MIN, PSI (MPA)**

30,000 (207)	<0.060 IN. THICK
25,000 (172)	>0.060 IN. THICK



**YIELD STRENGTH, MIN, PSI (MPA)**

**(2% OFFSET)**

20,000 (138)	<0.060 IN. THICK
15,000 (103)	>0.060 IN. THICK

**ELONGATION, MIN, %**

**(1-IN. GAGE LENGTH)**

20	<0.060 IN. THICK
	>0.060 IN. THICK