

PROPERTIES OF RAW MATERIALS

Technical Bulletin 3.1.1

Material	Density gm/cc	Melting Point °C	Specific Heat Capacity J/Kg/K	Thermal Conductivity WmK	Electrical Resistivity $\Omega m \times 10^{-8}$	Tensile Strength $N/m^2 \times 10^6$
Aluminium (01E)	2.70	660	913	201	2.65	80
Brass (13E - 70 Cu/30 Zn)	8.50	1027	370	110	~8	550
Aluminium Bronze (10E)	8.80	1027	360	180	30	260
Copper (05E)	8.96	1083	385	385	1.7	150
Wrought Iron	7.85	1537	480	60	14	~370
Monel (71E)	8.80	1327		210	42	520
Nickel (06E)	8.90	1453	460	59	59	300
Phosphor Bronze (15E)					7	800
18/8 Stainless Steel (80E)	7.93	1527	510	150	96	600
Low Carbon Steel (30E)	7.86	1427	420	63	15	460
Tin (18E)	7.30	232	226	65	11	30
Zinc (02E)	7.14	419	385	111	5.9	150
Alumina (C205)	3.96	2020	800	29	-	~150
Molybdenum (99E)	10.20	2600	270	139	5.7	