

Mechanical properties of die-cast, sand-cast and wrought copper

Cu

Material and process	Tensile strength (psi)	Yield strength (psi)	% elongation	Fatigue (psi) 10M
<u>Copper</u>				
C80100 sand cast	25,000	9,000	40	N/A
C11000 die cast	28,000	13,800	35.5	7,000
C11000 hot rolled	32,000	10,800	55	N/A
<u>Aluminum</u> (for comparison)				
P1020 die cast	9,400	6,500	19	5,750

Source: internal measurements, International Copper Association