Subject: copper strength hardening
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Date: 8/24/2015 1:47 PM
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Calum,
Pure copper is designated C11000 in the Unified Numbering System (UNS).
According to wikipedia, copper can only be strengthened via work hardening (not via heat treatment).

Copper State	Tensile Yield (MPa)	Tensile Ultimate (MPa)	Modulus (GPa)	Source
annealed	33.3	210	110	MatWeb
cold worked	?	?	110	MatWeb
cold drawn	333.4	344	110	MatWeb
annealed	76 (table 8)	235 (table 8)		copper.org
H02, 1/2 hard temper	255 (table 7)	290 (table 2) 283 (table 7)		copper.org
H06, extra hard	324 (table 8)	358 (table 8)		copper.org

So, according to the Copper Organization publication, one can get pretty significant increase in the tensile ultimate strength (see Fig. 5). I suggest buying H06, "extra hard" foil.

Goodfellow sells "half-hard" and "hard":
http://www.goodfellow.com/E/Copper-Foil.html

All foils Inc sells "full hard":
http://www.allfoils.com/products/copper-products/

FIGURE 5: Tensile Strength as a Function of Increasing Cold Rolling Reduction of Commercial Wrought Copper Alloys Initially in the Annealed or Soft Temper (0% Reduction)