



HSM Wire International, Inc

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Common Tensile Strength Ranges and Hardness by Stainless Steel Type

Size and Hardness	TYPE 302	TYPE 304	TYPE 316	TYPE 430
AWG 44 - 40 0.002" – 0.030"	PSI	PSI	PSI	PSI
Dead Soft Annealed	90,000 - 110,000	90,000 - 110,000	75,000 – 95,000	75,000 – 85,000
Annealed	100,000 – 135,000	100,000 – 135,000	90,000 – 110,000	85,000 – 95,000
¼ Hard	140,000 – 190,000	140,000 – 175,000	115,000 – 140,000	90,000 – 110,000
½ Hard	190,000 – 240,000	180,000 – 215,000	145,000 – 170,000	110,000 – 130,000
¾ Hard	240,000 – 290,000	220,000 – 265,000	175,000 – 200,000	130,000 – 150,000
Full Hard / Spring Temper	290,000 – 360,000	270,000 – 350,000	205,000 – 240,000	150,000 – 200,000
AWG 40 - 28 0.030" – 0.125"				
Dead Soft Annealed	85,000 – 105,000	85,000 – 105,000	85,000 – 100,000	75,000 – 85,000
Annealed	95,000 – 115,000	95,000 – 115,000	95,000 – 115,000	85,000 – 95,000
¼ Hard	120,000 – 160,000	120,000 – 155,000	120,000 – 145,000	90,000 – 100,000
½ Hard	165,000 – 230,000	160,000 – 210,000	150,000 – 180,000	110,000 – 130,000
¾ Hard	195,000 – 270,000	190,000 – 255,000	185,000 – 225,000	130,000 – 150,000
Full Hard / Spring Temper	230,000 – 315,000	225,000 – 300,000	215,000 – 270,000	140,000 – 170,000
AWG 28 - 22 0.125" – 0.250"				
Dead Soft Annealed	75,000 – 95,000	75,000 – 95,000	75,000 – 95,000	70,000 – 90,000
Annealed	90,000 – 110,000	90,000 – 110,000	90,000 – 110,000	70,000 – 90,000
¼ Hard	115,000 – 140,000	115,000 – 140,000	115,000 – 130,000	90,000 – 105,000
½ Hard	145,000 – 170,000	145,000 – 170,000	135,000 – 155,000	105,000 – 120,000
¾ Hard	175,000 – 200,000	175,000 – 200,000	160,000 – 185,000	120,000 – 140,000
Full Hard / Spring Temper	205,000 – 240,000	205,000 – 240,000	190,000 – 220,000	130,000 – 145,000

**To be used as a guideline only