



# HSM Wire International, Inc

Ph: 330-244-8501 Fax: 330-244-8561

www.hsmwire.com



## Stainless Steel Alloys Comparison Chart

304 Stainless Steel - Annealed Condition		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	73,200	73.2
	Yield Strength	31,200	31.2
	Elongation	70%	70%
	Rockwell Hardness	B70	B70

316 Stainless Steel - Annealed Condition		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	89,900	89.9
	Yield Strength	60,200	60.2
	Elongation	45%	45%
	Rockwell Hardness	B91	B91

302 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	89,900	89.9
	Yield Strength	39,900	39.9
	Elongation	55%	55%
	Rockwell Hardness	B85	B85

303 Stainless Steel (Cold Drawn Annealed, Room Temperature)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	89,900	89.9
	Yield Strength	34,800	34.8
	Elongation	50%	50%
	Rockwell Hardness	B83	B83

301 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	74,700	74.7
	Yield Strength	29,700	29.7
	Elongation	40%	40%
	Rockwell Hardness	B85	B85

310 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	89,900	89.9
	Yield Strength	45,000	45.0
	Elongation	45%	45%
	Rockwell Hardness	B85	B85

\* To be used as a guideline only. We may not carry all alloys listed in this chart.



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321 Stainless Steel - Annealed Condition		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	89,900	89.9
	Yield Strength	34,800	34.8
	Elongation	45%	45%
	Rockwell Hardness	B80	B80

347 Stainless Steel - Annealed Condition		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	95,000	95.0
	Yield Strength	39,900	39.9
	Elongation	45%	45%
	Rockwell Hardness	B85	B85

410 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	65,000	65.0
	Yield Strength	30,000	30.0
	Elongation	20 - 34%	20 - 34%
	Rockwell Hardness	B82	B82

416 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	74,700	74.7
	Yield Strength	39,900	34.8
	Elongation	30%	30%
	Rockwell Hardness	B82	B82

420 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	95,000	95.0
	Yield Strength	50,000	50.0
	Elongation	25%	25%
	Brinell Hardness	241	241

430 Stainless Steel (Annealed Condition)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	75,000	75.0
	Yield Strength	50,000	50.0
	Elongation	25%	25%
	Rockwell Hardness	B85	B85

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## Stainless Steel Alloys Comparison Chart

15-5 PH Stainless Steel Condition A (Annealed)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	161,000	161
	Yield Strength	140,000	140
	Elongation	7.6%	7.6%
	Rockwell Hardness	C35	C35
17-4 PH Stainless Steel Condition A (Annealed)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	160,000	160
	Yield Strength	145,000	145
	Elongation	5%	5%
	Rockwell Hardness	C35	C35
17-7 PH Stainless Steel Condition A (Annealed)		Psi	Ksi
<b>Minimum Properties</b>	Ultimate Tensile Strength	130,000	130
	Yield Strength	40,000	40.0
	Elongation	35%	35%
	Rockwell Hardness	B85	B85

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