

UNS N04400

Monel 400

W.Nr. 2.4360

Nickel

Copper

www.arialloy.com/monel-400/

• Chemical Composition •

S%	Si%	C%	Mn%
≤ 0.024	≤ 0.50	≤ 0.30	≤ 2.00
Fe%	Cu%	Ni%	
≤ 2.5	28.0 ~ 34.0	≥ 63	

• Mechanical Properties •

Product	Condition	T.S.	Y.S.	EL	RA	Hardness
		MPa, min	MPa, min	%, min	%, min	HRB
Pipe	Annealed	480	170	35	...	...
Tube	Annealed	480	195	35	...	...
Pipe & Tube	Stress-Relieved	585	380	15	...	...
Round Bar	≤ 12.7mm Cold-worked	760	585	8	...	...
	≤ 12.7mm Cold-worked & Stress-Relieved	580	345	10	...	...
	12.7 ~ 88.9mm Cold-worked & Stress-Relieved	600	415	20	...	...
	88.9 ~ 101.6mm Hot-worked & Stress-Relieved	580	380	20	...	...
Round Bar Flat Bar Square Bar	≤ 305mm Hot-worked	552	276	30	...	...
	305 ~ 356mm Hot-worked	517	276	30	...	...
Flat Bar Square Bar Hexagon Bar	≤ 12.7mm Cold-worked	585	380	10	...	...
	≤ 50.8mm Cold-worked & Stress-Relieved	580	345	20	...	...
	50.8 ~ 79.4mm Cold-worked & Stress-Relieved	552	345	20	...	...
Hexagon Bar	≤ 54mm Hot-worked	552	276	30	...	...
	54 ~ 102mm Hot-worked	517	207	25	...	...
Bar & Rod	Annealed	480	170	35	...	...
Wire	Annealed	483 ~ 586	...	...	...	...
	No.0 temper	552 ~ 655	...	...	...	...
	No.1 temper	621 ~ 758	...	...	...	...

Product	Condition	T.S.	Y.S.	EL	RA	Hardness
		MPa, min	MPa, min	%, min	%, min	HRB
Wire	≤ 12.7mm Cold-worked	758 ~ 965	...	...	...	...
	12.7 ~ 88.9mm Cold-worked	621 ~ 896	...	...	...	...
Spring Wire	≤ 0.71mm	1138	...	...	...	...
	0.71 ~ 1.45	1103	...	...	...	...
	1.45 ~ 2.90	1034	...	...	...	...
	2.90 ~ 7.92	965	...	...	...	...
	7.92 ~ 9.53	931	...	...	...	...
	9.53 ~ 12.7	896	...	...	...	...
	12.7 ~ 14.3	827	...	...	...	...
Sheet	Annealed	485 ~ 585	195	35	...	...
	Quarter-hard	...	...	...	...	73 ~ 83
	Half-hard	...	...	...	...	82 ~ 90
	Hard	690	620	2	...	...
Plate	Annealed	485	195	35	...	...
	Hot-rolled	515	275	25	...	...
Strip	Annealed	485 ~ 585	195	35	...	...
	Skin-hard	...	...	...	...	68 ~ 73
	Quarter-hard	...	...	...	...	73 ~ 83
	Half-hard	...	...	...	...	82 ~ 90
	Three-quarter-hard	...	...	...	...	89 ~ 94
	Hard	690	620	2	...	...
	Spring	...	...	...	...	≥ 98

• Physical Properties •

Density		Melting Range		Curie Temperature	
lb/in ³	g/cm ³	°F	°C	°F	°C
0.318	8.80	2370 ~ 2460	1300 ~ 1350	70 ~ 120	21 ~ 49

• Main Standards •

Bar, Rod, Wire & Forgings	Plate, Sheet & Strip	Pipe & Tube	Welding Products	Other Products
ASTM B164 ASME SB 164 ASTM B564 ASME SB 564	ASTM B127 ASME SB 127 SAE AMS 4544	ASTM B163/ASME SB 163 ASTM B165/ASME SB 165 ASTM B725/ASME SB 725 ASTM B730/ASME SB 730 ASTM B751/ASME SB 751 ASTM B775/ASME SB 775 ASTM B829/ASME SB 829	AWS A5.14/ ERNiCu-7 AWS A5.11/ ENiCu-7	ASTM B366 ASME SB 366 SAE AMS 7233