

Hastelloy C-22HS

UNS N07022

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Nickel

Chromium

Molybdenum

www.arialloy.com/hastelloy-c22hs/

• Chemical Composition •

C%	Mn%	Si%	P%	S%	Cr%	Co%	Mo%
≤ 0.010	≤ 0.5	≤ 0.08	≤ 0.025	≤ 0.015	20.0 ~ 21.4	≤ 1.0	15.5 ~ 17.4
Al%	B%	Fe%	Cu%	Ni%	Ta%	W%	
≤ 0.5	≤ 0.006	≤ 1.8	≤ 0.5	Balance	≤ 0.2	≤ 0.8	

• Mechanical Properties •

Product	Condition	T.S.	Y.S.	EL	RA	Hardness
		MPa, min	MPa, min	%, min	%, min	HR, max
Seamless Pipe & Tube	Type 1A solution + cold worked	1103	1034	17	...	42C
Seamless Pipe & Tube	Type 1B solution + cold worked	1276	1240	13	...	46C
Seamless Pipe & Tube	Type 2 solution + cold worked + precipitation harden	1227	1103	15	...	50C
Bar & Rod	Type 1A solution + cold worked	1103	1034	17	50	382B
Bar & Rod	Type 1B solution + cold worked	1276	1240	13	30	425B
Bar & Rod	Type 2 solution + cold worked + precipitation harden	1227	1103	15	24	479B
Bar & Rod	Type 3 solution + precipitation harden	1000	552	15	14	228B

• Physical Properties •

Density		Melting Range	
lb/in ³	g/cm ³	°F	°C
0.314	8.69	2475 ~ 2550	1357 ~ 1399

• Main Standards •

Forgings, Billet, Rod and Bar	Seamless Pipe & Tube
ASTM B637	ASTM B983