

This page is mainly introduced the 17-22-A Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 17-22-A, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 17-22-A

17-22-A Standard Number:		
ITEM	Standard Number	Descriptions
1	SAE AMS 6304L (2012)	Low-Alloy Steel, Heat-Resistant, Bars, Forgings, and Tubing 0.95Cr - 0.55Mo - 0.30V (0.40 - 0.50C)
2	SAE AMS 6305F (2012)	Steel, Heat-Resistant, Bars, Forgings, and Tubing 0.95Cr - 0.55Mo - 0.30V (0.40 - 0.50C) Vacuum Arc Remelted
3	SAE J 467 (1968)	Special Purpose Alloys ("Superalloys")

17-22-A Chemical composition(mass fraction)(wt.%)									
Chemical		Min.(%)				Max.(%)			
C						0.45			
Si						0.65			
Mn						0.55			
P									
S									
Ni									
Cr						12.50			
Al									
Cu									
Ti									
Fe		remaining							
V						0.30			
Mo						0.55			
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Steel, Heat-Resistant, Bars, Forgings, and Tubing 0.95Cr - 0.55Mo - 0.30V (0.40 - 0.50C) Vacuum Arc Remelted

17-22-A Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	123-321	-
HRC	30	-

17-22-A Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	235-268	-
HRC	30	-

17-22-A Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

17-22-A Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting

Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID- WASHED
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We can produce Specialsteel the specifications follows: