

This page is mainly introduced the 4?5??1? Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 4?5??1?,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Tool Steel And Hard Alloy 4X5ΜΦ1C

	4?5??1? Standard Number:					
ITEM	ITEM Standard Number Descriptions					

4?5??1? Chemical composition(mass fraction)(wt.%)									
Chemical Min.(%) Max.(%)									
С	Si	Mn	Р	S	Cr	Ni	Мо	V	Та
W	N	Cu	Co	Pb	В	Nb	Al	Ti	Other

4?5??1? Physical Properties					
Tensile strength	115-234	σb/MPa			
Yield Strength	23	σ 0.2 ≥/MPa			
Elongation	65	δ5≥ (%)			
Ψ	-	ψ≥ (%)			
Akv	-	Akv≥/J			
HBS	123-321	-			
HRC	30	-			

4?5	4?5??1? Mechanical Properties			
Tensile strength	231-231	σb/MPa		
Yield Strength	154	σ 0.2 ≥/MPa		

Steel Grades 4?5??1? Chemical information, Mechanical properties

Physical properties, Mechanical properties, Heat treatment, and Micro structure

Elongation	56	δ5≥(%)
Ψ	-	ψ≥(%)
Akv	-	Akv≥/J
HBS	235-268	-
HRC	30	-

4?5??1? Heat Treatment Regime							
Annealing	Annealing Quenching Tempering Normalizing Q & T						
√	√	√	√	√			

4?5??1? 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	Ф8-1200mm*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			

We can produce Tool Steel And Hard Alloy the specifications follows: