

This page is mainly introduced the **:BH10 Datasheet**, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of **:BH10**, 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 **:BH10**

### **:BH10 Standard Number:**

ITEM	Standard Number	Descriptions
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### **:BH10 Chemical composition(mass fraction)(wt.%)**

Chemical			Min.(%)				Max.(%)			
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta	
0.30-0.40	0.75-1.10	≤0.40			2.80-3.20	≤0.40	2.65-2.95	0.30-0.50		
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other	
									Cu≤0.20, S n≤0.05, Co 2.80-3.20	

### **:BH10 Physical Properties**

Tensile strength	115-234	σ <sub>b</sub> /MPa
Yield Strength	23	σ <sub>0.2</sub> ≥/MPa
Elongation	65	δ <sub>5</sub> ≥ (%)
ψ	-	ψ ≥ (%)
Akv	-	Akv ≥/J
HBS	123-321	-
HRC	30	-

### **:BH10 Mechanical Properties**

Tensile strength	231-231	σ <sub>b</sub> /MPa
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Yield Strength	154	$\sigma_{0.2} \geq / \text{MPa}$
Elongation	56	$\delta_5 \geq (\%)$
$\psi$	-	$\psi \geq (\%)$
Akv	-	$Akv \geq / \text{J}$
HBS	235-268	-
HRC	30	-

### :BH10 Heat Treatment Regime

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

### :BH10 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	$\Phi 8$ -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:**