

This page is mainly introduced the BH224/5 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of BH224/5, 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 BH224/5

BH224/5 Standard Number:

ITEM	Standard Number	Descriptions
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BH224/5 Chemical composition (mass fraction) (wt.%)

Chemical			Min. (%)				Max. (%)		
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
0.49-0.57	≤0.35	0.70-1.00			0.70-1.10	1.25-1.80	0.25-0.40		
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other
									Cu ≤ 0.20, S ≤ 0.05

BH224/5 Physical Properties

Tensile strength	115-234	σ _b /MPa
Yield Strength	23	σ _{0.2} ≥ /MPa
Elongation	65	δ ₅ ≥ (%)
ψ	-	ψ ≥ (%)
A _{kv}	-	A _{kv} ≥ /J
HBS	123-321	-
HRC	30	-

BH224/5 Mechanical Properties

Tensile strength	231-231	σ _b /MPa

Yield Strength	154	$\sigma_{0.2} \geq \text{MPa}$
Elongation	56	$\delta 5 \geq (\%)$
ψ	-	$\psi \geq (\%)$
Akv	-	$Akv \geq \text{J}$
HBS	235-268	-
HRC	30	-

BH224/5 Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
✓	✓	✓	✓	✓

BH224/5 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: