

TECHNICAL GUIDE

A2 TOOL STEEL




Steel Description

A2 is a 5% Chromium, air hardening, cold work tool steel and can be hardened to 57-62 HRC with good dimensional stability. The lower chromium content in A2 tool steel means that it does not provide the same wear and abrasion resistance shown by D2 and D3 tool steels. A2 tool steel delivers good toughness with medium wear resistance, is relatively easy to machine and will hold a good edge. Typical Applications include blanking tools, dies, gauges & shear blades.

BS 4659	COLOUR CODE	DESCRIPTION
BA2		Die Steel

CHEMICAL ANALYSIS		MECHANICAL PROPERTIES	
Car	0.95/1.05	Tensile Strength N/MM2 Min Rm	
Sil	0.40 Max	Yield Stress N/MM2 Min Rm	
Mang	0.30/0.70	Elongation A Min % on 5.65√SO	
Phos		Izod Min	
Sul		Kcv Min	
Chr	4.75/5.25	Proof Stress 0.2% N/MM2 Min	
Moly	0.90/1.10	Brinell Hardness	Ann'd 241max
Van	0.15/0.40		

INTERNATIONAL SPECIFICATION COMPARISON	
BS 4659	BA2
GERMAN DIN	X210CR12
FRENCH AFNOR	
SWEDISH SS	
AMERICAN SAE	A2
EUROPEAN STEEL NO.	1.2080
EUROPEAN STEEL NAME	
EUROPEAN STANDARD	

SIZE RANGE SUMMARY			
	Rounds	MM	16-91MM Dia
	Flats	IMP/MM	Contact sales with your required size.
	Squares	IMP/MM	Contact sales with your required size.

QUICK VIEW SYSTEM	
MACHINEABILITY	40
WELDABILITY	Not recommended
HARDENABILITY	Good
SELECTION GUIDE AND USAGE EXAMPLES	Dies, Shear blades, Cutting Knives

SEE STOCK RANGE FOR SPECIFIC SIZES.