

TECHNICAL GUIDE

SI CHISEL STEEL

Steel Description

SI is a shock-resisting tool steel which is suited for hot and cold work applications. The tungsten content of this steel grade confers fatigue resistance and the chromium gives depth of hardness and resistance to abrasion. SI steel is suitable for cold work tools subject to heavy shock and is typically used for shear blades and pneumatic chisels & punches.

BS 4659	COLOUR CODE	DESCRIPTION
BSI		Shock resisting steel

TYPICAL ANALYSIS		MECHANICAL PROPERTIES	
Car	0.45/0.55	Tensile Strength N/MM2 Min Rm	
Sil	0.70/1.0	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	1.20/1.70	Proof Stress 0.2% N/MM2 Min	
Moly		Brinell Hardness	Ann'd 229max
Van	0.10/0.30		
Tung	2.0/2.50		

INTERNATIONAL SPECIFICATION COMPARISON	
BS 4659	BSI
GERMAN DIN	
FRENCH AFNOR	
SWEDISH SS	
AMERICAN SAE	SI
EUROPEAN STEEL NO.	1.2550
EUROPEAN STEEL NAME	
EUROPEAN STANDARD	

SIZE RANGE SUMMARY			
	Rounds	MM	20-120mm dia

SEE STOCK RANGE FOR SPECIFIC SIZES.

QUICK VIEW SYSTEM	
MACHINEABILITY	30
WELDABILITY	Not recommended
HARDENABILITY	Good
SELECTION GUIDE AND USAGE EXAMPLES	Cold work tools subject to heavy shock e.g. chisels, punches