

## **BLACK CARBON STEEL SUMMARY OF GRADES**

Grade Reference AS 1442	CHEMICAL COMPOSITION							
		C%	Si%	Mn%	P%	S%		
1020	Min.	0.18	0.10	0.30	-	-		
	Max.	0.23	0.35	0.60	0.04	0.04		

## TYPICAL APPLICATIONS

General purpose low tensile, low hardenability carbon steel supplied in the black hot rolled condition.

Good machinability with reasonable strength, ductility and weldability.

1045	Min.	0.43	0.10	0.60	-	-
	Max.	0.50	0.35	0.90	0.04	0.04

## **TYPICAL APPLICATIONS**

1045 is a medium tensile, low hardenability carbon steel generally supplied in the black hot rolled condition. Used in engineering applications when better strength and impact properties than 1020 is a requirement and higher strength of the low alloy high tensile steels is not required. Typical tensile strength range 570 - 700MPa and Brinell hardness range 170 - 210 in either condition. Can be flame or induction hardened.

