



DEACON INDUSTRIAL SUPPLY COMPANY, INC.

ASTM specifications for weld fittings and flanges.
Grade & composition symbols for carbon weld fittings.

Material Specifications for Carbon Steel BUTT WELDING FITTINGS

ASTM SPECIFICATION A234		
GRADE SYMBOL	WPA (Grade A)	WPB (Grade B)
TYPE OF STEEL	Carbon	Carbon
CHEMICAL COMPOSITION	C-0.25 max.	C-0.30 max.
MINIMUM PHYSICAL REQUIREMENTS	TS-48,000 YP-30,000	TS-60,000 YP-35,000
HEAT TREATMENT	Cooled in Still Air	Cooled in Still Air

Material Specifications for Carbon Steel FLANGES

ASTM SPECIFICATION*					
		A181		A105	
GRADE SYMBOL		I	II	I	II
TYPE OF STEEL		Carbon		Carbon	
CHEMICAL COMPOSITION		C-0.35 max.		C-0.35 max.	
MINIMUM PHYSICAL REQUIREMENTS		TS-60,000 YP-30,000	TS-70,000 YP-36,000	TS-60,000 YP-30,000	TS-70,000 YP-36,000
HEAT TREATMENT		Hot forged with finishing temp. above upper critical Cooled in still air		Normalized	

GRADE AND COMPOSITION SYMBOLS FOR CARBON STEEL BUTT- WELDING FITTINGS

	Seamless Pipe.....	ASTM A106 Grade A
	Plate.....	ASTM A285 Grade C
WPA	Forgings.....	ASTM A105 Grade 1
	Bars*.....	ASTM A107 GR. 1008-1022
	Seamless Pipe.....	ASTM A106 Grade B
	Plate.....	ASTM A515 Grade 6S
WPB	Forgings.....	ASTM A105 Grade 11
	Bars*.....	ASTM A107 Gr. 1025-1030
	Seamless Pipe.....	ASTM A106 Grade C
WPC	Plate.....	
	Forgings.....	ASTM A104 Grade 11'

* For fittings 2" nominal size and smaller

Low Temperature Carbon Steel

	Seamless and Welded Pipe.	ASTM A332 Grade O
WPLO	Plate.....	ASTM A300 Class 1
	Forgings.....	ASTM A350 Grade LF1

*Material specifications for the ASME Boiler Code are the same ASTM except the letter S is prefixed thereto.

A 35% Carbon maximum for flanges which are to be welded has been established by ASTM A181 and A105.