

A234 WPB

Description

ASTM A234 WPB is the Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service.

Specifications

ASTM: A234 WPB

ASME: B16.9, B.11

NACE: MRO175

MSS: SP-83, SP-95

Chemical Composition%

Grade	C	Mn	P	S	Si	Cr	Mo	Ni	Cu	Others
–	–	–	max	max	–	–	–	–	–	–
WPB	0.3	0.29-1.06	0.05	0.058	0.1	0.4	0.15	0.4	0.4	V 0.08
(1,2,3,4,5)	max	–	–	–	min	max	max	max	max	max

1. Fittings made from bar or plate may have 0.35 max carbon.
2. Fittings made from forgings may have 0.35 max Carbon and 0.35 max Silicon with no min.
3. For each reduction of 0.01% below the specified Carbon maximum, an increase of 0.06% Manganese above the specified maximum will be permitted, up to a maximum of 1.35%.
4. The sum of Copper, Nickel, Niobium, and Molybdenum shall not exceed 1.00%.
5. The sum of Niobium and Molybdenum shall not exceed 0.32%.

Tensile Requirements

Tensile Strength: (KSI) = 60

Yield Strength: (KSI) = 35

(KSI converts to MPA {Megapascals} by multiplying by 6.895)

Typical Application

- Pressure Piping
- Pressure Vessel Fabrication