



Casting Material: Alloy Steel A217 GR WC6

Grade WC6 is covered by ASTM A217 standard; it's a good **Chromium Molybdenum steel** for Sand Casting and Investment Casting purpose.

ASTM A217 / A217M - 14 Standard Specification for Steel Castings, Martensitic Stainless and Alloy, for Pressure-Containing Parts, Suitable for High-Temperature Service

ASTM A217 Grade WC6 Casting Chemical Composition Requirements and Mechanical Property:

Carbon: 0.05-0.20

Manganese: 0.50-0.80

Silicon: 0.60 max

Sulfur: 0.045 max

Phosphorus: 0.04 max

Chromium: 1.00-1.50

Molybdenum: 0.45-0.65

Copper: 0.50 max

Nickel: 0.50 max

Tungsten: 0.10 max

Total content of residual elements (Cu/Ni/W): 1.00

max



Tensile Strength: 70ksi-95ksi (485-655Mpa)

Yield Strength: 40ksi (275Mpa) min

Elongation in 2in. or 50mm: 20.0% min

Reduction of Area: 35% min

ASTM A217 Grade WC6 Casting Heat treatment process:

Generally all castings need to be tempered at 1100°F [595°C] min

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ASTM A217 Grade WC6 Application: Not to be used over 1100°F [593°C]

Pump casing, Pump impeller.

Valve Body, Valve Bonnet, Valve Disc.

Machinery Spare Part.

Automobile Industry.

Similar cast steel grade:

EN 10293 Grade 17CrMo5.5, EN1.7357; JIS G5151 Grade SCPH21; Chinese Steel Grade 14CrMo

Manufacture Process in Casting Quality: Sand Casting, Precision Lost Wax Investment Casting.