



## Material - ASTM A 217 Grade WC9

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 217 Grade WC9 Steel Castings for Pressure Purposes

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.050 - 0.180	Normalizing or Quenching or Solution Annealing	
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.400 - 0.700		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	2.000 - 2.750		
Molybdenum	Mo %	0.900 - 1.200		
Nickel	Ni %	0.500 max.		
Copper	Cu %	0.500 max.		
Tungsten	W %	0.100 max.		
Other	Ot %	1.000 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	485 - 655
-	-	-	Yield Strength in Mpa	275 min.
-	-	-	Elongation in %	20 min.
-	-	-	Reduction of Area in %	35 min.
-	-	-	Hardness in HB	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
EN 10213 G17CrMo9-10	BS	British	Plate, Tubes and Forging
G17CrMo9-10	ISO	International	Casting
1.7379	ISO	International	Casting
15 CD9.10-M	AFNOR NF	France	Pump, Valve and Fitting
SCPH 32	JIS	Japan	Casting
A 217 J21890	ASTM	USA	Casting
SCPH 32-CF	JIS	Japan	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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