

Material Recommendation List for Steam Pipeline

Sr. No.	Description	MOC
1	Pipes	Carbon steel pipes design to ASME A 106 GR.B SEAMLESS , Sch. 40 Thickness to suit ANSI B 36.10 Pipe ends to be Bevel
2	Elbows	Standard/Type : ANSI B-16.9 Material : - ASME A 234 GR.WPB , Sch. 40 End : Bevel End
3	Flanges	Standard/Type : ANSI B-16.5 Grade - 300# SORF Material Spec : ASTM A 105
4	Blind Flanges	Standard/Type : ANSI B-16.5 Grade - 300# SORF Material : ASME A 105
5	Ecentric Reducer	Standard/Type : ANSI B16.9 Material Spec: ASTM A 234 Gr. WPB , Schedule.40 Ends : Bevel End
6	Nipples	Carbon steel pipes design to ASME A 106 GR.B SEAMLESS , Sch. 80 Thickness to suit ANSI B 36.10 Pipe ends to be Bevel
7	Sockets	Standard/Type : ANSI B36.11 Grade/Class: 3000# Material Spec: ASME A105 , HVY Ends : Socket Weld / Screwd
8	Gaskets	Standard/Type : ANSI B-16.20 Grade/Class: 300# Material : ASME , ASBESTOS FREE SPIRAL WOUND CS CENTERING RING SS INNER RING SS304 METAL STRIP,3 THK,RING TYPE Suitable for insertion between ANSI B 16.5, Raised face, A 300# rated flanges and able to withstand High Temperatures upto 400 o C
9	Nut & Bolts	Standard/Type : ANSI B18.2.1 & ANSI B 18.2.2 Stainless steel machined hexagonal headed bolts, fully threaded with hexagonal nuts & a pair of washers. Material Spec: ASME A193 GR.B5, M/C BOLTS ASTM A 194 Gr.3 - Nuts
10	Thermodynamic Steam Traps S/E	Standard/Type :A351 GR CF8 End Connections :BSPT , BSP, NPT ,SW, Flanged to 150, 300 ,600 Body Design Condition : Class 600 Max Operating Pressure :48 Bar (G) Max Operating Temp : 538 Deg C Limiting Back Pressure : Should not exceed 80 % of inlet pressure Cold Hydraulic Pressure : 96 Bar (G)
		Grade - 300# Body : ASTM A216 GR. WCB Bonnet : ASTM A216 GR. WCB Piston : ASTM A351 GR. CF8 Spindle : AISI 420 Lantern Ring : ASTM A743 GR CA40 Seal Ring : Graphite with AISI 304 Bush: Aluminium Bronze

11	Valves (Gate Valve) F/E	Split Nut: Brass Thrust Disc : AISI 420 (H.T) Stem :AISI 304 Back Seat Bush: AISI 304 Tapered Seal Ring : Graphite with AISI304 Gland Packing :Graphite with AISI304 Gland Nut : AISI 304 Stem Nut : ASTM A194 GR. 2H Stem Washer : AISI 304 Bush Retainer : Spring Steel Belleville Washer : 51CrV4 Stud : ASTM A194 GR. B7 Nut : ASTM A194 GR. 2H Handwheel : Cast Nameplate : AISI 304 Nyloc Nut : AISI 304
12	Valves (Gate Valve) S/W	Grade - 800# Body : ASTM A105 Bonnet : ASTM A105 Piston : AISI 304 Spindle : AISI 420 Lantern Ring : AISI 420 Seal Ring : Graphite with AISI 304 Belleville Washer : 51CrV4 Stud : ASTM A194 GR. B7 Nut : ASTM A194 GR. 2H Handwheel : Cast Nameplate : AISI 304 Nyloc Nut : AISI 304
13	Check Valves (NRV) F/E	