

Grade Designation		CHEMICAL COMPOSITION OF RAW MATERIAL					Charactristics
TP	IS-6911	C. Max	Mn. Max	Cr.	NI	Other Elements	
321	04cR18Ni10Ti20	0.08	2.00	17.00/13.00	9.00/13.00	Ti=5xCmin ,max. 0.70	Titanium addition makes this steel a varbide stablized type, which offers improved intergranular corrosion resistance. Used in Heat Exchanger and superheater tubes for high temperature high pressure bollers.
304	04Cr18Ni10	0.08	2.00	18.00/20.00	08.00/11.00	-	Basic Steel for austentic stainless steel tubes, featuring excellent corrolon resistance and weldability.
304L	02Cr18Ni11	0.04	2.00	18.00/20.0	0 8.00/13.00	-	A very low carbon steel, offering good intergranular corrosion resistance even in " as welded " condition.
310	10Cr25Ni18	0.15	2.00	24.00 / 26.00	19.00 / 22.00	-	Excellent high temperature properties, with ductility and weldability.
316	04Cr17Ni12Mo2	0.08	2.00	16.00 / 18.00	10.00 / 14.00	Mo2.00 / 3.00	Molybdnum gives this steel, higher resistance to non - oxidising acides, as well as good resistance to crevice corrosion. It also offers excellent high temperature creep characteristics.
316L	02Cr17Ni12Mo2	0.04	2.00	16.00 / 18.00	10.00 / 15.00	Mo2.00 / 3.00	Lower carbon content provides better intergranular corrosion resistance than 316.
202	-	0.15	7.5 / 10.00	17.00 / 19.00	4.00 / 6.00	Si1, No. 25	Austentic stainless steel tube. Moderate corrosion resistant & good weldability.
409L	-	0.03	1.00	10.50 / 13.50	0.50 Max	Ti = 6xCmin max. 0.75	A ferritic stainless steel offering resistance to chloride stress corrosion. Primarily used in automotive industry or muffers, tail pipes, etc.
410	12Cr13	0.15	1.00	11.50 / 13.50	0.50 max	-	A ferritic stainless steel offering good corrosion resistance and machinability.
430	05Cr17	0.12	1.00	16.00 / 18.00	0.50max	-	Good combination of corrosion resistance, useful mechanical properties, and good formability.
436L	18Cr1Mo0.3TiLCN	0.03	-	46.00 / 19.00	-	Ti, Nb, Zr8Xo% +N%)/0.8	Excellent in corrosion resistance, drawability & weldability due to the addition of Mo, Ti & Nb.
439	18Cr0.4TiLCN	0.03	-	17.00 / 19.00	-	TiO2 / 1.0	With high thermal conductivity & low thermal expansion coefficiency, its is suitable for heat exchanger & auto exhaust parts.
441	8Cr0.3SiTiNbLCN	0.03	-	17.5 / 18.5	1.00	Si1.0Ti.1 - 0.6Nb9C + 0.3 / 1.0	The content of 18Cr and Si secures oxidation resistance. The addition of Ti and Nb and the reduction of C and N improve high temperature strength, weldability and formability.