STAINLESS STEEL - APPLICATION / PROPERTY

ALLOYS	NOMINAL CHEMICAL COMPOSITION								MECHANICAL PROPERTIES						
AISI	C max	MIN max	SI max	P max	S max	CR	NI	MO	HARDNESS BRINEL APPROACHES.	LIMIT OF RESISTANCE Kgm/mm²	LIMIT ESCO. Kgm/mm²	ELONGATION	MINIMUM STRIATION	SIMILAR	APPLICATIONS
302	0,15	2,00	1,00	0,045	0,030	17,00 a 19,00	8,00 a 10,00	—	149	50-70	22	50%	—	V-302 SAE 303021	Architectural Elements, hospital equipment and pharmaceuticals, for food and beverage industry, packaging machinery, springs, pieces of pipes, housewares, sporting goods etc..
303	0,15	2,00	1,00	0,020	0,15 (min)	17,00 a 19,00	8,00 a 10,00	—	163	50-70	22	50%	—	V-303 SAE 30303	Parts produced in automatic lathes with high removal chips, such as screws, studs, nuts, bolts, parts threaded etc., subject to moderate mechanical stress, with corrosion resistance characteristics.
304	0,08	2,00	1,00	0,045	0,03	18,00 a 20,00	8,00 a 10,50	—	149	60	20	50%	—	V-304 SAE 30303	Equipment, industrial chemical, pharmaceutical, textile, oil, pulp and paper etc.. Hospital equipment, heat exchangers. Valve and piping parts. Refrigeration industry and cryogenic installations in general.
304-L	0,03	2,00	1,00	0,045	0,30	18,00 a 20,00	8,00 a 12,00	—	143	55	18	50%	—	V-304-L SAE 30304-L	Field of application similar to 304, with however, thanks to the following carbon stock, preferred in cases where there are favorable conditions for the occurrence of intercrystalline corrosion.
310	0,25	2,00	1,50	0,045	0,30	24,00 a 26,00	19,00 a 22,00	—	185	60	30	40%	—	V-310 SAE 30310	Parts of furnaces, annealing boxes and Cementation equipment for the chemical industry and oil, engine parts heat, air heaters, furnaces internal carriers.
316	0,08	2,00	1,00	0,045	0,30	16,00 a 18,00	10,00 a 14,00	2,00 a 3,00	149	60	20	45%	—	V-316 SAE 30316	Chemical equipment, pharmaceutical, textile, oil, pulp and paper etc.. Parts and components used in various shipbuilding. Equipment for the refrigeration industry and applications cryogenic in general.
316-L	0,03	2,00	1,00	0,045	0,30	16,00 a 18,00	10,00 a 14,00	2,00 a 3,00	143	45	18	50%	—	V-316-L SAE 30316-L	Scope similar to AISI 316, but it is being preferred by its low carbon content, where favorable conditions occur competition for intercrystalline corrosion.
410	0,15	1,00	1,00	0,040	0,30	15,50 a 13,50	—	—	155	50-6	30	20%	60%	V-140 SAE 51410	Blades and other turbine parts, valve parts, axles and parts Threaded chemical and petroleum, pump shafts, railway equipment, parts, equipment and paper industry cellulose, oven parts (less than 400 ° C) and so on.
416	0,15	1,25	1,00	0,06	0,15 (min)	12,00 a 14,00	—	—	155	50-6	30	20%	60%	V-416 SAE 51416	Parts produced in automatic lathes, such as screws, prisoners, nuts etc., exposed to attack by agents and soft mechanical strength properties are higher than those obtained with AISI 303.
420	0,15 (min)	1,25	1,00	0,040	0,030	12,00 a 14,00	—	—	195	85-80	35	18%	55%	V-150 SAE 51420	Cutlery, surgical instruments and dental, axles, parts pumps and valves, blades and other parts of steam turbines and equipment in general, and plastic molds for the glass industry etc..