

GRADE	DESCRIPTION / PROPERTIES	APPLICATION EXAMPLES	GRADE COMPARISON
302	Austenitic Stainless Steel Excellent corrosion resistance and high strength and hardness.	FFI SST Lift Slide Hardware ----- Food and beverage, sanitary, cryogenic and pressure-containing application	Higher carbon version of 304 grade – Higher strength than 304 grade
303	Austenitic Stainless Steel with best machinability properties. Addition of sulfur or selenium adds machinability property but slightly reduces corrosion resistance compared to 304.	FFI SST Lift Slide Hardware ----- Bushings, Nuts & Bolts, Aircraft fittings and Gears	Slightly lower corrosion resistance than 304 grade. Best machinability of all Austenitic grades.
304 *304L **304H	Austenitic Stainless Steel Non-magnetic in annealed condition Slightly magnetic when cold worked Excellent corrosion resistance but susceptible to pitting corrosion in warm chloride environments Excellent toughness Accounts for 50% of all stainless steel produced.	FFI SST Lift Slide Hardware FFI Edge Pulls ----- Architecture, chemical equipment, cooling coils, cryogenic vessels, dairy equipment, evaporators, flexible metal hose, food processing equipment, nuclear vessels, refrigeration equipment, pressure vessels, sanitary fittings, valves, tubing.	Less costly than 316 grade
316 *316L **316H	Austenitic Stainless Steel Same mechanical and physical properties as 304 Grade but has greater pitting corrosion resistance especially in warm chloride environments. Virtually non-magnetic. Often described as “Marine Grade”	FFI Top-Flight Sliding Hardware ----- Architectural components for marine applications, food processing, hot water systems	Greater Corrosion resistance than 302, 303 and 304 grades
430	Grade 430 is a ferritic stainless steel and one of the most widely used "non-hardenable" stainless steels; magnetic in all conditions it has good physical and mechanical characteristics. Grade 430 has good resistance to a wide variety of corrosive environments, in general its resistance to pitting and crevice corrosion resistance is close to that of grade 304.	FFI SST Lift Slide Hardware ----- Cabinet hardware, decorative appliance and automotive molding and trim, range hoods, restaurant equipment, drawn and formed parts and stampings.	Excellent resistance to citric and nitric acid, sulfur gases; slightly less corrosion and heat resistant than Types 301, 302, and 304.
440	High carbon martensitic stainless steel, magnetic in all conditions with moderate corrosion resistance Superior strength and hardness	FFI SST Ball Bearings ----- Ball bearings, gage blocks, dies, knives and cutlery	Higher strength and hardness in relation to austenitic steels (302, 304, 316)
630	ASME 630 also known as type 17-4 PH is a martensitic precipitation-hardening stainless steel. It withstands corrosive attack better than any of the standard hardenable stainless steels and is comparable to type 304 in most media.	FFI SST Ball Bearings ----- Aerospace applications, Ball bearings, Chemical processing equipment, Oil and petroleum refining equipment, Marine	Greater Corrosion resistance than 400 grades

* ‘L’ denotes Low Carbon Content: less carbon content to increase corrosion resistance.

** ‘H’ denotes High Carbon Content: more carbon content to increase strength.

Disclaimer: All technical information contained herein has been compiled from external technical sources and as such, its accuracy is limited to the accuracy of those sources.