

# ● Stainless Steel



Our company has emerged as one of the reliable Traders of **SS Coils** in Pohang, Korea. The Coils that we offer are manufactured using modern technologies in order to assure the finest quality and durability. Corrosion resistant and smooth finishing are some of the main attributes of our Product. They are widely used in manufacturing kitchenware, electronics and other household items. We can provide Coils in different quantities at the most feasible prices in the market.

## 1. Stainless Steel Introduce

POSCO stainless steel products are manufactured in state-of-the-art facilities applying the latest technology. Stainless steel has excellent corrosion resistance property and a fine surface without painting or plating/coating and is thus widely used in kitchenware, exterior and interior building materials, electronic appliances, as well as chemical and heavy industries.

POSCO provides such customer-oriented services as quality and delivery control, along with before and after service. POSCO is committed to continual R&D and investments to achieve total customer satisfaction.

## 2. Characteristics and Usage by Steel Type

### • Austenitic Type

Classification		Characteristics	Usage
Austenitic	301	- Has lower Cr, Ni content than 304 steel. Its tensile strength increases with cold working. It is non-magnetic but becomes magnetic when cold worked.	- Trains, aircraft parts, belt conveyors, vehicles, bolts, springs, automotive wheel covers
	301L	- 301L is produced by lowering the C content in 301 in order to improve grain boundary corrosion resistance of the welding part. A drop in strength due to reduced C content is reinforced by adding N.	- Train frames, building exterior material
	303	- Improved machining by adding S.	- Shafts for home appliances, bolts and nuts, machined parts
	304	- Most widely used steel type. 304 is known for good corrosion resistance, thermal resistance, low-temperature strength and mechanical properties. 304 has good drawability such as deep drawing and bending. 304 is not hardened by heat treatment. (non-magnetic, usable temperature: -196~800°C)	- Kitchen ware, sinks, interior piping, hot-water boilers, bath tubs, boilers, automobile parts(wiper, muffler, molding), medical instruments, building materials, facilities in chemical, food and dairy industries, vessel parts
	304L	- 304L is low carbon 304 steel. Under normal conditions, it has similar corrosion resistance to 304. Excellent resistance to inter-granular corrosion after welding and stress relieving. Has corrosion resistant properties without heat treatment and is generally used at temperatures under 400°C (non-magnetic, usable temperature:-196~800°C)	- Machinery and tools used in the chemical, coal, and petroleum industry that require high inter-granular corrosion resistance, building materials, heat resistant part and parts that are difficult to heat-treat
	304Cu	- By adding Cu, it has anti-microbial property and good drawability. Useful for deep drawing products which requires a hygienic environment	- Thermos bottles, kitchen sinks, pots, group food serving facilities, door knobs, products requiring spinning

## ● Austenitic Type

Classification		Characteristics	Usage
Austenitic	<b>304N1</b>	- 304steel is made by lowering the S and Mn content in 304 steel and adding N to prevent ductility reduction. Strength is improved and thickness reduced.	- Structural use, street lights, water tanks, water pipes
	<b>304LN</b>	- Strength and inter-granular corrosion resistance are improved by adding N.	- Structural use, heat exchange systems, chemical vessels
	<b>304H,M,S</b>	- Steel types formed for wire rods by adjusting the C content in 304 steel. Strength increases with cold drawing.	- H: wire ropes, hooks, CD Bars - M: mesh, bolts, nuts, CD Bars - S: mesh
	<b>304HA,HC</b>	- Steel types formed for wire rods by adjusting the C content in 304. Good cold workability and free-cutting property.	- HA: shaft - HC: medium and large size bolts and nuts - HD: CD Bars HN: nails
	<b>305</b>	- High Ni content. Non-magnetic and suitable for deep drawing use due to good cold formability.	- Dinnerware, electrical parts
	<b>316</b>	- Excellent corrosion resistance, pitting corrosion resistance and high temperature strength by adding Mo. Useful in severe/harsh conditions. Excellent work hardening (non-magnetic).	- Sea water equipment, equipment for chemicals, paper, dye, acetic acid, fertilizer, photo and food industry and construction in coastal areas, ropes, CD Bars, nuts and bolts
	<b>316L</b>	- Low carbon steel type. Has the normal properties of 316 plus excellent inter-granular corrosion resistance.	- Made with 316 steel, excellent inter-granular corrosion resistance, mesh
	<b>316S</b>	- Has 316 steel properties and suitable for ultra fine wire.	- Mesh
	<b>321</b>	- By adding Ti, prevents intra-granular corrosion, suitable for temperatures between 430°C~900°C	- Airplane exhaust pipes, boilers, heat exchangers.

## ● Ferritic & Martensitic Type

Classification		Characteristics	Usage
Ferritic	409L	- By adding Ti, 409L has good weldability and drawability.	- Used for automobile exhaust pipes, heat exchangers, container for which post-heat treatment is not applied.
	410L	- Excellent welding bendability by lowering the C content in 410 steel; high temperature oxidation resistance (magnetic).	- Machine frames, engine exhaust pipes, boiler combustors, burners
	430	- 430 is the basic ferritic steel type. 430 is known for low thermal expansion rate and excellent drawing and oxidation resistance.	- Heat resistant tools, burners, home appliance sink covers, building materials, nuts and bolts, CD Bars, mesh
	430J1L	- Adding Mo, Ti and Nb results in good corrosion resistance, weldability and high temperature oxidation resistance.	- Washing machine drums, automobile exhaust pipes, electric appliance parts, three-layer laminated bottom pots.
	436L	- Adding Mo, Ti and Nb results in excellent corrosion resistance, drawability and weldability.	- Automobile exhaust pipes, warm water supply facilities.
Martensitic	410	- 410 is the basic martensite steel type known for its good strength but it is not suitable for uses in harsh/severe corrosion conditions. 410 hardens with heat treatment (magnetic).	- General knife, machine parts, petroleum refining apparatus, bolts, nuts, pump shafts, spoons, forks
	420J1	- In quenching condition, has high strength and good corrosion resistance (magnetic)	- Tweezers, dinner knives, turbine blades
	420J2	- Compared to 420J1, higher post-quenching strength (magnetic).	- Knife blades, nozzles, valves, rulers, scissors, general knives