



以客为尊 以质为本

Take customers as the honoured
Take quality as the foundation



山东港中钢铁有限公司

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Shandong
Sino Steel (Stainless) Co., Ltd

山东港中钢铁(不锈钢)有限公司



COMPANY PROFILE

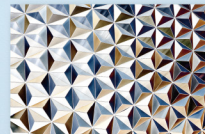
Shandong Sino Steel (Stainless) Co., Ltd., with registered capital of USD 50,000,000, specializes in sale and manufacture of Stainless Steel, is a large-scale shareholding steel corporation. As one of the leading foreign trade gateways of Chinese iron and Stainless steel industry, basing on a foundation of equality relationship, mutual benefit and win-win principle, the group has established extensive and friendly business cooperation in both domestic and overseas market, giving its best support to the expansion of the industry.

In accordance with its strategy of diversified development and specialized operation, Shandong Sino Steel (Stainless) Co., Ltd. now engages in business covering import of iron and stainless steel raw material like, manufacture and export high value-added steel products, including Stainless Steel Sheet series (Hot & Cold Rolled 200, 300, 400 series, with brands like Tisco, Bao Steel, Jisco, Lisco, Eaststeel, Baoxin Steel, Krupp and Pohang), Stainless Steel Pipe series (Welded Pipe, Seamless Pipe), Stainless Steel Bar (Angle Bar, Channel Steel, H-beam, Round Bar, Square Bar, Hexagon Bar, Flat Bar) as well as Stainless Steel Wire, with support of its R&D division, it ensures the manufacture section capacity of various of processing and customizing.

With a floor space of more than 173,000 square meters, the company now has adopted 4 Machining & Cutting Lines, 4 Surface Treatment Line, 4 Pipe & Welding Line, 4 sets of DK7725-7780 CNC Wire-cut Machine, 1 set of Plasma Flame Cutting Machine, realizing an annual capacity of more than 7,000 tons of stainless steel products in stock. Mainly operate with 200, 300 and 400 series stainless steel. And special series like 2507 (S32750) 2205 (S31803) 904L (N8904) duplex stainless steel could meet with standards like GB, ASTM as well as DIN.

With double guarantee of Certificate of ISO9001:2000 & ISO14001:2004 Certificate for its production, inspection, service and management system, the company now has grown to a leading supplier in the stainless industry, found its good sale market in North and South America, South-east Asia, Africa and Middle East area. The company has taken over Oil and Gas Pipe construction projects in Russia, Malaysia, Mauritius, South Africa, Kenya, Nigeria, UAE and Mexico, giving it abundant experience of project operation, products and service supplying as well as government bidding in overseas market.

Under leading and management of the group, Shandong Sino Steel (Stainless) Co., Ltd. will always set its goal to promoting the healthy and fast development of the Industry in good faith, be realistic and pragmatic, and maintain our brand stronger, devote ourselves to provide customers with both our high quality products and first class service. We sincerely hope to establish a long-term win-win cooperation in the future.





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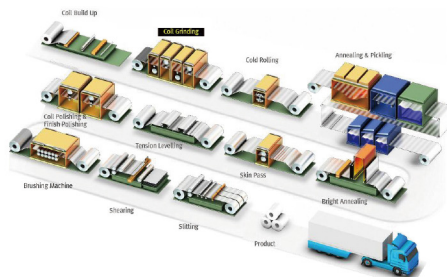
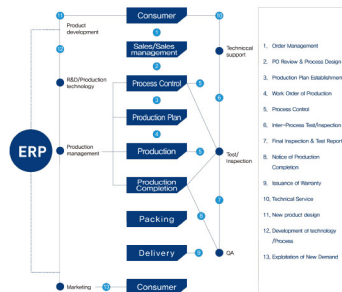
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01 Manufacturing Process & Facilities

Each process is completely and quality-assured via online network of ERP system, which enables us to achieve high-performances.





Main Product Series:
Stainless Steel Coil
Stainless Steel Sheet
Stainless Steel Strips
Surface Treatment



Shearing & Slitting



A process shearing and
slitting coil products



Suitable for dimensions



Requested by customers



02 Chemical Composition & Mechanical Properties

Chemical Composition

Austenite									
Steel Grade Code	Standard Code	Chemical Composition (%)							
		C	Si	Mn	P	S	Cr	Ni	other
301	STS301	<0.15	<1.00	<2.00	<0.045	<0.030	16.0~18.0	6.0~8.0	-
301L	STS301L	<0.03	<1.00	<2.00	<0.045	<0.030	16.0~18.0	6.0~8.0	N<0.20
304	STS304	<0.08	<1.00	<2.00	<0.045	<0.030	18.0~20.0	8.0~10.5	-
304L	STS304L	<0.03	<1.00	<2.00	<0.045	<0.030	18.0~20.0	9.0~13.0	-
304J1	STS304J1	<0.08	<1.70	<3.00	<0.045	<0.030	15.0~18.0	6.0~9.0	Cu1.0~3.0
316	STS316	<0.08	<1.00	<2.00	<0.045	<0.030	16.0~18.0	10.0~14.0	Mo2.0~3.0
316L	STS316L	<0.03	<1.00	<2.00	<0.045	<0.030	16.0~18.0	12.0~15.0	Mo2.0~3.0
321	STS321	<0.08	<1.00	<2.00	<0.045	<0.030	17.0~19.0	9.0~13.0	Ti5x% and higher

Ferrite									
Steel Grade Code	Standard Code	Chemical Composition (%)							
		C	Si	Mn	P	S	Cr	other	
409L ¹⁾	STR409L	<0.03	<1.00	<1.00	<0.040	<0.030	10.50~11.70	Ti6xC% and higher~0.75	
430	STS430	<0.12	<0.75	<1.00	<0.040	<0.030	16.00~18.00	-	
430J1L	STS430J1L	<0.025	<1.00	<1.00	<0.040	<0.030	16.00~20.00	N 0.025 and lower, Cu 0.30~0.80 Nb 8X(C%+N%)~0.80	
436L	STS436L	<0.025	<1.00	<1.00	<0.040	<0.030	16.00~19.00	Mo 0.75 1.25, N 0.025 and lower Ti, Nb, Zr or the combination 8X(C%+N%)~0.80	
439L	STS439	<0.030	<1.00	<1.00	<0.040	<0.030	16.00~19.00	Ti, Nb, Zr or the combination 8X(C%+N%)~0.80	
444	STS444	<0.025	<1.00	<1.00	<0.040	<0.030	17.00~20.00	Mo 1.75~2.50	
443CT ²⁾	BNG443CT	<0.015	<1.00	<1.00	<0.040	<0.030	20.00~23.00	N 0.025 and lower Ti, Nb, Zr or the combination 8X(C%+N%)~0.80	

1) Heat-resistant steel (KS D 3732) 2) HYUN DAI BNG STEEL ASTM A240

Martensite									
Steel Grade Code	Standard Code	Chemical Composition (%)							
		C	Si	Mn	P	S	Cr	Ni	
420J1	STS420J1	0.16~0.25	<1.00	<1.00	<0.040	<0.030	12.00~14.00	<0.60	
420J2	STS420J2	0.26~0.40	<1.00	<1.00	<0.040	<0.030	12.00~14.00	<0.60	

Mechanical Properties

Austenite								
Steel Grade Code	Standard Code	Proof stress (N/mm²)	Tensile strength (N/mm²)	Elongation (%)	Hardness			
					HB	HRB	HV	
301	STS301	205 and higher	520 and higher	40 and higher	207 and lower	95 and lower		218 and lower
301L	STS301L	215 and higher	550 and higher	45 and higher	207 and lower	95 and lower		218 and lower
304	STS304	205 and higher	520 and higher	40 and higher	187 and lower	90 and lower		200 and lower
304L	STS304L	175 and higher	480 and higher	40 and higher	187 and lower	90 and lower		200 and lower
304J1	STS304J1	155 and higher	450 and higher	40 and higher	187 and lower	90 and lower		200 and lower
316	STS316	205 and higher	520 and higher	40 and higher	187 and lower	90 and lower		200 and lower
316L	STS316L	175 and higher	480 and higher	40 and higher	187 and lower	90 and lower		200 and lower
321	STS321	205 and higher	520 and higher	40 and higher	187 and lower	90 and lower		200 and lower

Ferrite								
Steel Grade Code	Standard Code	Proof stress (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	HB	Hardness		
						HRB		HV
409L ¹⁾	STR409L	175 and higher	360 and higher	25 and higher	162 and lower	80 and lower		175 and lower
430	ST S430	205 and higher	450 and higher	22 and higher	183 and lower	88 and lower		200 and lower
430J1L	ST S430J1L	205 and higher	390 and higher	22 and higher	192 and lower	90 and lower		200 and lower
436L	ST S436L	245 and higher	410 and higher	20 and higher	217 and lower	96 and lower		230 and lower
439L	ST S439	175 and higher	360 and higher	22 and higher	183 and lower	88 and lower		200 and lower
444	ST S444	245 and higher	410 and higher	20 and higher	217 and lower	96 and lower		230 and lower
443CT ²⁾	BNG443CT	245 and higher	410 and higher	20 and higher	217 and lower	96 and lower		230 and lower

1) Heat-resistant steel (KS D 3732)

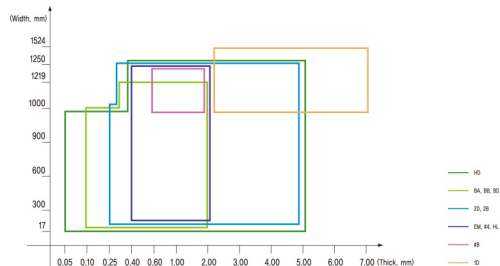
2) HYUN DAI BNG STEEL ASTM A240

Martensite								
Steel Grade Code	Standard Code	Proof stress (N/mm²)	Tensile strength (N/mm²)	Elongation (%)	Hardness			HV
					HB	HRB		
420J1	ST S420J1	225 and higher	520 and higher	18 and higher	223 and lower	97 and lower	234 and lower	
420J2	ST S420J2	225 and higher	540 and higher	18 and higher	235 and lower	99 and lower	247 and lower	

03 Surface Finish

Surface Code	Surface Status & Process	Application
No.1	Product processed with heat treatment, acid cleaning process or similar process after hot rolling	Used for applications no need of surface gloss such as industrial facilities, building materials and chemical tanks
HD (High hardened product)	Cold rolled product with high hardness, by applying the process of hardening	High hardened product, springs, knives, rolling stock, press bench, disk break and etc
No.2D	Product processed with heat treatment, acid cleaning process or similar process after cold rolling	Product no need of gloss: general use, construction, DDQ and anti-acid use.
No.2B	Product processed with heat treatment, acid cleaning process or similar process after cold rolling and tempered process to get appropriate gloss	Used for most applications as a representative of cold rolled product used for general use
No.4	Product ground with grinding belt of No.150 ~ 180 in accordance with KS L 6001 (abrasive particle size) Regulation	Construction, kitchenware, automobile, medical devices and food facilities
BA	Product processed with bright heat treatment after cold rolling to get high reflection and gloss	Automobile parts, household electronics, kitchenware, ornaments and constructions
BB	Product with metallic gloss by bright annealing after cold rolling	General use such as household electronics and kitchenware
HL	Product ground to have continuous grinding patterns using abrasive of appropriate particle size	General use for interior/exterior construction materials
No.8	Product ground by turning buff with abrasive of 800Mesh and higher to get high gloss and reflection, which is with grounding pattern(dry type)	Construction, reflector, press bench, ornaments and etc
MR	Product ground by turning buff with abrasive of 1000Mesh and higher to get high gloss and reflection, which is without grounding pattern(dry type)	Construction, reflector, press bench, ornaments and etc
EM	Cold rolled product with surface processed embossing roll	Construction, elevator interiors, press bench, kitchen, electronic parts and ornaments

| Dimensions by production surface |



Other dimensions unspecified in the above range are also available upon discussion of customer and manufacture

| Standard thickness |

Type		Standard thickness(mm)										Remarks
Cold rolling	steel plate	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2		KS D 3698
		1.5	2.0	2.5	3.0	4.0	5.0	6.0	7.0			
	coil	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0			
		1.2	1.5	2.0	2.5	3.0	4.0	5.0				
ultra thin stainless plate		0.03	0.05	0.08	0.10	0.12	0.15	0.20	0.25			

Other dimensions save for the above dimensions and the tolerance are also available upon discussion of customer and manufacture



AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

301
301L

17Cr-7Ni
17Cr-7Ni-LC

Characteristics

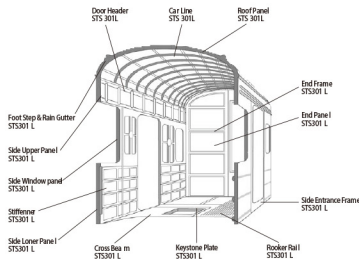
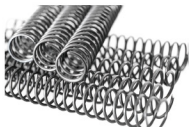
301 and 301L contain lower Cr and Ni content than 304 steel does. Cold working increases strength and generates magnetism. Compared to Aluminium, they are excellent in corrosion resistance, strength at high temperature, and fatigue strength. They are applicable for railway vehicles due to their economical efficiency, safety and light weight.

Products available

Hot rolled coil, Cold rolled coil

Applications

☑ Train interior and exterior panels ☑ Structural material ☑ Components of electronic products ☑ Spring



Chemical compositions and physical properties

Designations		Chemical compositions (%)					Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (Hv)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)
301	301	≤ 0.15	16.0-18.0	10.0-13.0	-	-	≥ 205	≥ 520	≥ 40	≤ 200	0.50	7.93	16.9	15.3
301L	301L	≤ 0.030	16.0-18.0	10.0-13.0	-	N ≤ 0.2	≥ 205	≥ 550	≥ 45	≤ 200	0.50	7.93	16.9	15.3

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

304N1

19Cr-8Ni-0.13N

Characteristics

S and Mn contents are lowered and N is added in 304 steel to protect from reducing ductility to prevent ductility reduction and to increase strength, which enables light-weight.

Products available

Cold rolled coil, Plate

Applications

☑ Structural material ☑ Street light ☑ Potable water pipe



Chemical compositions and physical properties

Designations		Chemical compositions (%)					Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (Hv)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)
304N1	304N1	≤ 0.08	18.0-20.0	12.0-13.0	-	N 0.10-0.25	≥ 215	≥ 550	≥ 35	≤ 220	0.50	7.93	11.3	16.3

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

304J1

17Cr-8Ni-2Cu

Characteristics

With an addition of Cu, 304J1 has excellent antibiosis, formability, and deep drawability, also used for products requiring sanitary environment.

Products available

Hot rolled coil, Cold rolled coil

Applications

☑ Thermos bottle ☑ Thermos lunch box ☑ Kitchen pot ☑ ~~Cy facilities~~ ☑ Products requiring spinning drawing



Chemical compositions and physical properties

Designation s		Chemical compositions (%)					Mechanical propertie s				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (HV)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)
304J1	304J1	≤ 0.08	15.0-18.0	8.0-9.0	-	Cu 1.0-3.0	≥ 155	≥ 450	≥ 40	≤ 200	0.50	7.98	17.3	16.3

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

309S 310S

22Cr-13Ni 25Cr-20Ni

Characteristics

Highly alloyed stainless steel. It has high strength and corrosion resistance in high temperature.

Products available

Hot rolled coil, Cold rolled coil, Plate

Applications

☑ Exhaust Manifold ☑ Heat exchanger ☑ Incinerator ☑ Furnace ☑ Contact components with high temperature



Chemical compositions and physical properties

Designation s		Chemical compositions (%)						Mechanical propertie s				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (HV)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
309S	309S	≤ 0.08	22.0-24.0	12.0-15.0	-	-	≥ 205	≥ 520	≥ 40	≤ 200	0.50	7.98	15.9	14.2	
310S	310S	≤ 0.08	24.0-26.0	18.0-22.0	-	-	≥ 205	≥ 520	≥ 40	≤ 200	0.50	7.98	15.9	14.2	



AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

316
316L

18Cr-12Ni-2Mo
18Cr-12Ni-2Mo-LC

Characteristics

316 : With the addition of Mo in 304, 316 steel is superior in corrosion resistance, pitting resistance and high temperature strength.

316L : Low carbon 316 steel type. It has all the properties of 316 steel and has excellent inter-granular corrosion resistance.

Products available

Hot rolled coil, Cold rolled coil, Plate

Applications

316 ☑ Potable water pipe ☑ Equipment for manufacturing chemicals, pig, dye, acetic and fertilizer ☑ Structures in the coastal area ☑ Photo industries, and food processing industries

316L ☑ Suitable for the corrosion-susceptible environments such as salt and toxic gas which one of the 316 steel usages



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (HV)	Specific Gravity	Thermal Expansion Coefficient W/m ² ·°C (20-100 °C)	Thermal Conductivity W/m ² ·°C (100 °C)		
316	316	≤ 0.08	16.0~18.0	10.00~14.0	2.00~3.00	-	≥ 205	≥ 520	≥ 40	≤ 200	0.50	17.8	15.9	16.3	
316L	316L	≤ 0.03	16.0~18.0	12.00~15.0	2.00~3.00	-	≥ 175	≥ 480	≥ 40	≤ 200	0.50	17.8	15.9	16.3	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

321

18Cr-9Ni-0.3Ti

Characteristics

Ti is added to 304 steel to prevent inter-granular corrosion. Applicable to usages at temperature between 430 and 900.

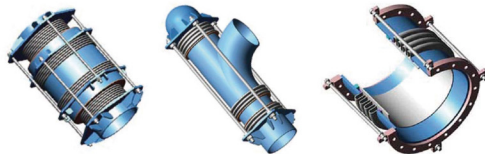
Products available

Hot rolled coil, Cold rolled coil, Plate

Applications

☑ Exhaust pipe of aircraft ☑ Boiler cover ☑ Heat exchanger ☑ Pipe

☑ Some parts that are impossible for heat treatment after welding assembling



Expansion Joint

Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (HV)	Specific Gravity	Thermal Expansion Coefficient W/m ² ·°C (20-100 °C)	Thermal Conductivity W/m ² ·°C (100 °C)		
321	321	≤ 0.08	17.0~19.0	9.00~13.00	-	Ti 5/C 0.15~0.20	≥ 205	≥ 520	≥ 40	≤ 200	0.50	17.8	16.7	16.1	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

409L

11Cr-0.2Ti-LCN

Characteristics

Excellent weldability and formability by adding Ti.

Products available

Hot rolled coil, Cold rolled coil

Applications

- ☑ Auto exhaust parts (front pipe, convert shell, center pipe, end pipe) ☑ Heat exchanger ☑ Container
- ☑ Heat resistance components



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (Hv)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
409L	409L	≤ 0.03	10.50~10.75	-	-	Ti 0.01~0.05	≥ 175	≥ 300	≥ 25	≤ 175	0.46	7.75	65	26.9	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

410L

12Cr-LCN

Characteristics

Lower C contents than 410 stainless steel. It has good formability, bendability and high temperature oxidation resistance.

Products available

Hot rolled coil, Cold rolled coil

Applications

- ☑ Products requiring abrasion resistance and good weldability: trailer container, automotive, mining & industrial machinery components.
- ☑ Products requiring formability and oxidation resistance at temperature lower than 820°C: Boiler combustion chamber, burner components.



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (Hv)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
410L	410L	≤ 0.03	11.0~13.5	-	-	-	≥ 185	≥ 300	≥ 22	≤ 200	0.46	7.75	69	25.1	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

430

16Cr-0.05C

Characteristics

Representative Ferritic Stainless Steel. It has low thermal expansion coefficient, excellent oxidation resistance.

Products available

Hot rolled coil, Cold rolled coil

Applications

Heat resistant products, Burner, Home appliances, Computer components (HDD), Flatware, Interior and exterior materials for architecture, Gas range stove, Washing machine



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (HV)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
430	430	≤ 0.12	16.0~18.0	-	-	-	≥ 205	≥ 450	≥ 22	≤ 200	0.46	7.70	10.5	239	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

430J1L

19Cr-0.5Cu-0.4Nb-LCN

Characteristics

Cu and Nb are added to 430 stainless steel. It has superior corrosion resistance, drawability, weldability and high temperature oxidation resistance.

Products available

Hot rolled coil, Cold rolled coil

Applications

- ☑ Manufacturing : Kitchenwares, home appliances (washing machine, electrical ice cooking machine, etc)
- ☑ Heat resistance : Auto exhaust system (exhaust manifold, front pipe, muffler)
- ☑ Exterior materials: Molding, Exterior materials for building, Guardrail pipes



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (HV)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
430J1L	430J1L	≤ 0.025	16.0~20.0	-	-	N ≤ 0.025	≥ 205	≥ 380	≥ 22	≤ 200	0.46	7.70	10.4	262	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

410

13Cr-0.04C

Characteristics

A representative type of Martensitic stainless steel. It has superior drawability and is hardened through heat treatment. (being magnetic)

Products available

Hot rolled coil, Cold rolled coil

Applications

☑ Knife blade ☑ Machinery parts ☑ Tableware cutlery (spoon, knife, etc)



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (Hv)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
410	410	≤ 0.15	11.5-13.5	-	-	-	≥ 205	≥ 440	≥ 20	≤ 210	0.48	7.70	99	24.9	

AUSTENITE
DUAL-PHASE
FERRITE
MARTENSITE

420N1 420J2

13Cr-0.1C-0.1N 13Cr-0.3C

Characteristics

420N1: Improved formability, corrosion resistance and strength / Abrasion resistance than 420J1(magnetism).

- ☑ Formability : minimize center segregation
- ☑ Corrosion resistance : restrain the formation of chrome carbide
- ☑ Strength / Abrasion resistance : precipitate of micro chromium nitride

420J2: Larger quenching hardness compared to 420J1

Products available

420N1, 420J2: Hot rolled coil

420J2: Cold rolled coil

Applications

- ☑ High-quality table knives requiring corrosion and abrasion resistance
- ☑ Machinery parts requiring abrasion resistance



Chemical compositions and physical properties

Designations		Chemical compositions (%)						Mechanical properties				Physical properties			
JIS (KS)	Posco	C	Cr	Ni	Mo	Others	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness (Hv)	Specific Heat J/g °C	Specific Gravity	Thermal Expansion Coefficient W/m °C (20-100 °C)	Thermal Conductivity W/m °C (100 °C)	
~	420N1	0.17 MAX	12.0-14.0	-	-	N ≤ 0.14	≥ 225	≥ 520	≥ 18	≤ 28	0.48	7.75	10.3	23.8	
420J2	420J2	0.28-0.4	12.0-14.0	-	-	-	≥ 225	≥ 540	≥ 18	≤ 247	0.48	7.75	10.3	23.8	



04 Protection Films & Packaging

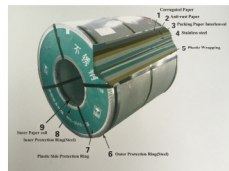
| Stainless steel surface protective film |

Type	Mark	Thickness (μm)	Color	Logo	Application	
					Product	Film
PVC (Poly VinylChloride)	WO	100	White	Printing	BA, #8	Simple cutting/ bending
	VO				EM, #4	Slight Drawing
	BO	80	Blue	No Printing (translucent)	2B, HL, #4, EM	Export
	RO	80	Black & White	No Printing (translucent)	Every Surface	General Forming
PE (Poly Ethylene)	PO	50	translucent	No Printing (translucent)	#3,D5	Forming
					Surface Process	simple surface protection

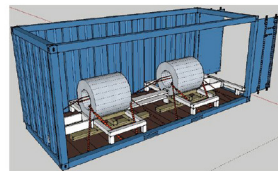
※ Since it is hardened if leaving alone for a long time, it should be immediately removed and stored indoors free of direct sunrays.

※ Please contact us for other surface protective film.

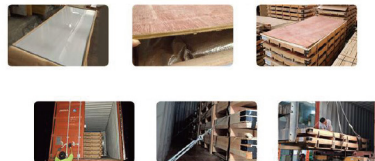
| Packing methods |



卷包装



卷加固



板加固

TRANSPORT

1. Sheets covered with wooden plate for protection in transportation.
2. All sheets will be loaded in strong wooden packages.
3. Every cartons loaded with good shoring and strengthening.
4. Take container loading pictures and seal the container.
5. Transportation speed is quick. And keep customer each step informed.



公司愿景：打造世界专业、安全、一流的钢材服务商

Our Version: To be world-class professional,
reliable and outstanding steel supplier.

公司使命：提供价值服务，让选择变得简单

Our Mission: Offer valuable services,
Be the best choice

公司价值观：只有至诚至信的理念，才有永续发展的空间

Our Value: The pursuit of integrity ensures
sustainable development.

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