





회사소개 Introduction to Company

당사는 1991년 스테인리스 전문 유통·가공업체로 출발해서, 매년 고객들의 지속적인 지원과 사랑으로 발전을 거듭하고 있습니다. 현재 토지 8,687.1㎡, 건물 5,210.78㎡의 사업장에 연간 120,000톤을 생산할 수 있는 대형가공설비와 다양한 강종의 재고를 보유한 스테인리스 스틸 서비스센터입니다.

스테인리스 스틸 서비스센터는 산업의 고도화와 다양성에 따른, 열연·냉연·스테인리스 코일을 수요가 요구하는 다양한 규격과 자동화 생산 라인에 맞게 사빙, 슬리팅, 표면가공을 하고 있습니다.

당사는 최고의 기술수준으로 시장을 선도하며, 고객이 원하는 품질, 가격, 서비스의 제품을 적시에 공급하여, 고객의 성장을 돕고, 경쟁력을 갖추게 하는 고객만족을 최우선으로 하는 신뢰 경영의 기업이 되었습니다.

언제나 변함없이 (주)광일금속을 사랑해 주신 것에 감사드리며 고객 여러분의 지속적인 관심과 성원을 부탁드립니다.

Welcome to Kwang Il Corp.!!

We, Kwang Il Corp. started in 1991 as a firm specialized in processing and distribution. With the customers' persistent support and love, we grow up to a Stainless Steel Service Center on a site of 8,687.1㎡, the floor space of 5,210.78㎡ with huge processing equipment. Our production capacity of 120,000 tons over a year, as well as possession of various stainless steel grade in stock.

Corresponding to the growing customers' needs and wants for various sizes of stainless steel, caused by recent diversified and highly developed industry, we are supplying worked Cold Rolled and Hot Rolled products according to customer's requirements, through shearing, slitting and surface treatment.

With highest technology, we will lead market trend and become reliable enterprise with supplying high quality product, best price and best service in time. We will put customers' satisfaction in our top priority, and this will help customers' growth.

Once again, we would like to express our hearty gratitude to our customers who have rendered steady, close business cooperation to us and ask customers' continuous interest and support.

Best regards,

Cho Jae-joo
President

CONTENTS

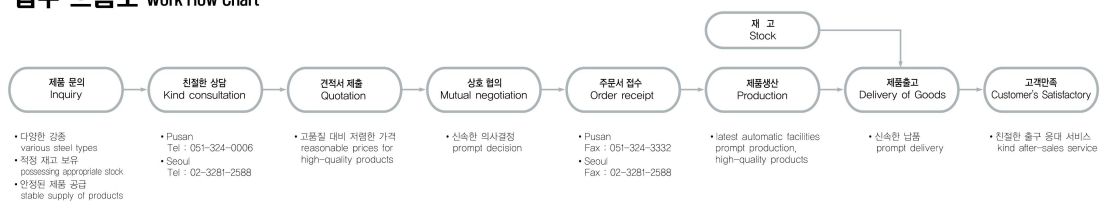
회사소개 Introduction to Company	3
업무흐름도 Work Flow Chart	4
생산 설비현황 Production Facilities	6
STS 냉연 절단가공 설비 STS CR Rotary Shear	8
STS 냉연 천단가공 설비 STS CR Slicer	10
STS 냉연 압축가공 설비 STS CR Mini Shear	12
STS 열연 절단가공 설비 STS Heavy Gauge Shear Line	14
강종별 화학성분 및 기계적 성질 Chemical Composition And Mechanical Property /	15
스테인리스 강종 Stainless Steel type	16
취급강종 목록 Available Item list	18
표면재품 Surface Products / 보호피막 Protective Films	19
표면상태별 세척방법 Surface Cleansing Method /	20
운송 Transportation / 보관방법 Storage	20
주문안내 Guide to Order	21



“고객만족을 최우선으로 하는
신뢰 경영의 기업이 되겠습니다”



업무 흐름도 Work Flow Chart



생산 가능 치수 product specifications

구분 classification	두께(mm) thickness	폭(mm) width	길이(mm) length
냉연철단재품 CP products	0.3 ~ 3.0	400 ~ 1500	450 ~ 5000
열연철단재품 HP products	3.0 ~ 130	900 ~ 2000	500 ~ 13000
냉연철단재품 HPS products	0.4 ~ 4.0	21 ~ 1550	-
냉연철합금재품 mini shear products	0.2 ~ 1.8	200 ~ 750	250 ~ 3000



생산설비 현황 Production Facilities

설비명 Description	가공능력 Working Capacity	생산능력 Production Capacity	설비특징 Features	설비명 Description	가공능력 Working Capacity	생산능력 Production Capacity	설비특징 Features
CR ROTARY SHEAR LINE No.1	thickness	0.3~3.0mm	- 60m/min - side trimmer - heavy leveler (6h 13rolls) - light leveler (6h 21rolls) - vinyl, paper coater - rotary shear (non-stop running up cut) - Zoller - touch panel (auto program)	CR SLITTER LINE No.4	width	0.4~4.0mm	- 10~150M/MIN - pull & drive cutting system - roll tension a form - hydraulic expansion type - Tress type - Precise division operation) - omiga box (belt bridge and tension pad) - vinyl, paper coater - touch panel (auto program) - set up the separator in recoler
	width	400~1,550mm			before slitting	~1,550mm	
	length	450~5,000mm			slit strip	min 21mm	
	length tolerance	±0.2mm/M			stands	max. 24	
	square tolerance	±0.5mm/M			tension	max. 3,500kg	
CR SHEAR LINE No.2	thickness	0.3~1.5mm	- stop running cutting type - vinyl, paper coater	CR MINI ROTARY SHEAR LINE No.5	width & quantity of belt	28mm X50 belt SX2 heads	- 60M/MIN - leveler (6h 17rolls) - rotary shear - vinyl, paper coater - touch panel (auto program)
	width	320~1,250mm			thickness	0.2~1.6mm	
	length	430~4,000mm			width	200~750mm	
	length tolerance	±0.5mm/M			length	250~3,000mm	
	square tolerance	±0.5mm/M			length tolerance	±0.2mm/M	
HR SHEAR LINE No.3	thickness	3.0~12.0mm	- paper coater - stop running cutting type - plate (3m) - touch panel (auto program)	HEAVY GAUGE SHEAR LINE No.6	square tolerance	±0.3mm/M	- 10~35M/MIN - uncoiler double cone type - leveler (4h 13rolls) - quality improvement by sheet trimmer - shearing up to 2m width - stop running cutting type - perfect recoil, up to 15mm thickness - vinyl, paper coater - touch panel (auto program)
	width	1,000~1,600mm			thickness	3.0~130mm	
	length	500~13,000mm			width	900~2,000mm	
	length tolerance	±0.5mm/M			length	1,000~13,000mm	
	square tolerance	±1.0mm/M			length tolerance	±1.0mm/2M	
					square tolerance	±3.0mm/2M	

STS 냉연 절단가공 설비

ROTARY SHEAR LINE은 장입된 코일을 요구되는 길이만큼 절단하여 CR STS SHEET 제품을 생산하는 설비이다. ROTARY SHEAR LINE은 코일을 풀어주는 UNCOILER, 요구되는 길이만큼 장입된 코일을 절단하는 ROTARY SHEAR, STS SHEET 제품을 적재하는 PILER등과 같은 일련의 설비로 구성되어 있다.



STS CR Rotary Shear

ROTARY SHEAR LINE is the facility that produces customer's required length of CR STS sheet from loaded coils. It is composed of an UNCOILER that uncoils strips, a ROTARY SHEAR that cuts the loaded coils with the required length and a PILER that loads steel sheets.

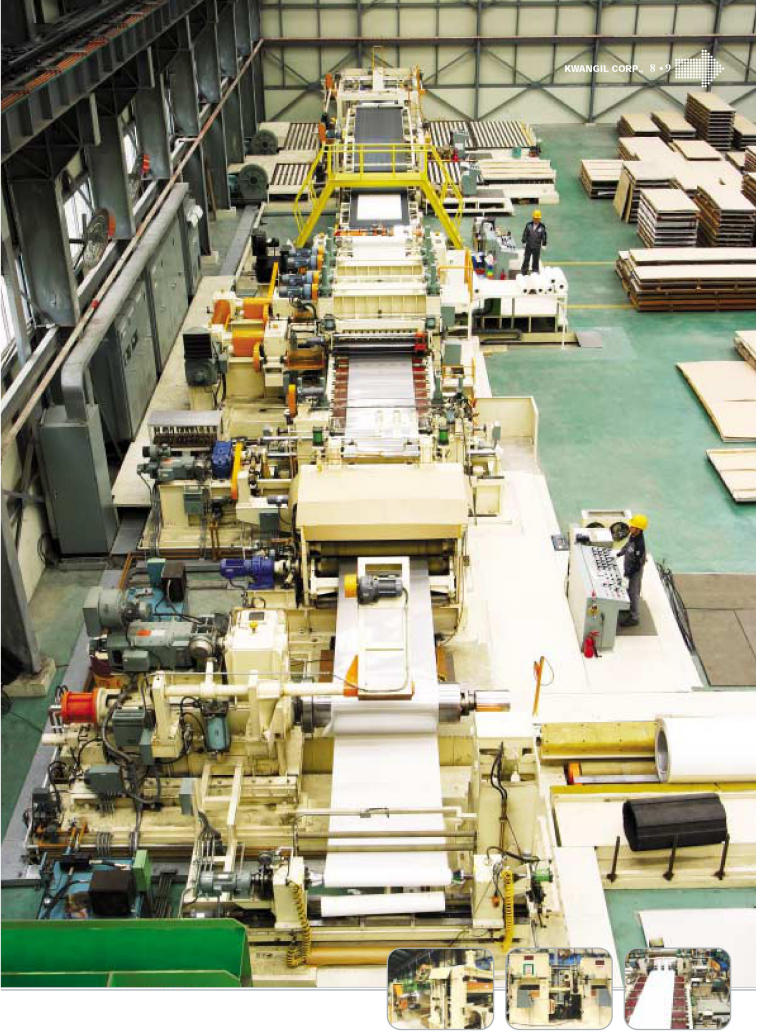
■ 설비특징 (FEATURES)

- SIDE TRIMMER makes it possible to realize clean edges with continuous trimming as per customer's required width.
- HEAVY LEVELLER WITH PINCH ROLL with upper and lower correction rolls is a facility that produce high quality product by adjusting the flatness of 1.0mm~3.0mm plates.
- LIGHT LEVELLER WITH PINCH ROLL is a facility that adjust the flatness of 0.3mm~1.0mm sheets. Each upper and lower 3 correction rolls make it possible to control obtaining highly flattened sheet.
- ROTARY SHEAR is a kind of equipment cutting the loaded coils on customer's required length with continuous up-and-down and back-and-forth moving knife linked to crank shaft. Maximum cutting capacity is 100 cut/min.



■ 설비 가공능력 (PROCESSING CAPACITY)

두께(mm) thickness	폭(mm) width	길이(mm) length	길이공차 length tolerance	대각공차 square tolerance	소재단중 Weight per unit	생산능력 Production capacity
0.3~3.0	400~1,550	450~5,000	±0.2mm	±0.5mm	20tons	25,000ton/year





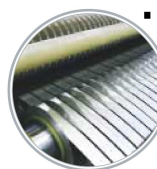
STS 냉연 전단가공 설비

SLITTER LINE은 기본적으로 인입코일을 SKELP상태로 CUTTING함으로써 요구되는 폭만큼 생산할 수 있는 설비이다. SLITTER LINE은 코일을 푸는 장치인 UNCOILER, 인입된 코일을 요구되는 폭으로 CUTTING하는 SLITTER 및 SLIT된 코일을 되감는 RECOILER와 같은 연속적인 설비로 구성되어 있다.



STS CR Slitter

SLITTER LINE is the facility to cut the loaded SKELP status of coils into sheets customers' requested width. SLITTER LINE is composed of an UNCOILER that uncoils strips, a SLITTER that cut loaded coils and recoils that coils the slitted strips again.



■ 설비특징 (FEATURES)

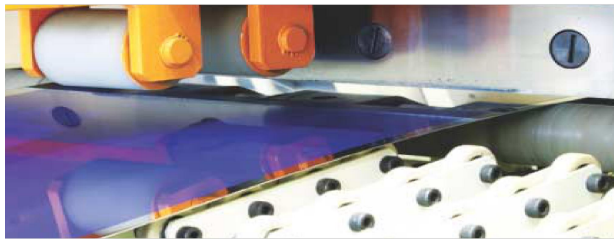
- PULL & DRIVE CUTTING SYSTEM improves productivity and minimizes the tolerances of products with high capability of cutting precise width.
- ROLL TENSION prevents possible occurrence of scratch the surface treatment course of the sheets.
- HES TYPE STAND which fixes the slitter knife by hydraulic expansion method makes it possible to cut sheets of precise customer's requested dimensions under the automatic control on the knife location by digital scale method, meeting with customer requirements.
- OMEGA TYPE(BELT BRIDLE AND TENSION PAD)
- LEVELER TYPE'S TENSION is the device to completely remove BURR and CAMBER and make skelp tolerances even.

■ 설비 가공능력 (PROCESSING CAPACITY)

두께(mm) thickness	strip width			tension	width & quantity of belt	소재단중 Weight per unit	생산능력 Production capacity
	coil slitting(mm)	slit strip(mm)	stands				
0.4~4.0	~1550	MIN 21	MAX. 24	MAX 3,500Kg	28mm 50belts 2heads	20 tons	25,000ton/year

STS 냉연 협폭가공 설비

MINI ROTARY SHEAR LINE은 장입된 코일을 요구되는 길이만큼 절단하여, STS SHEET 제품을 생산하는 설비이다. MINI ROTARY SHEAR LINE코일을 풀어주는 UNCOILER, 요구되는 길이만큼 장입된 코일을 절단하는 ROTARY SHEAR, 절단재품을 적재하는 PILER등과 같은 일련의 설비로 구성되어 있다.

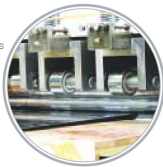


STS CR Mini Shear

MINI ROTARY SHEAR LINE is the facility that produce STS sheets by cutting the loaded coils into sheets with length that customers want. This is composed of an UNCOILER that uncoil strips, a ROTARY SHEAR that cut the loaded coils and a PILER that carries the sheets.

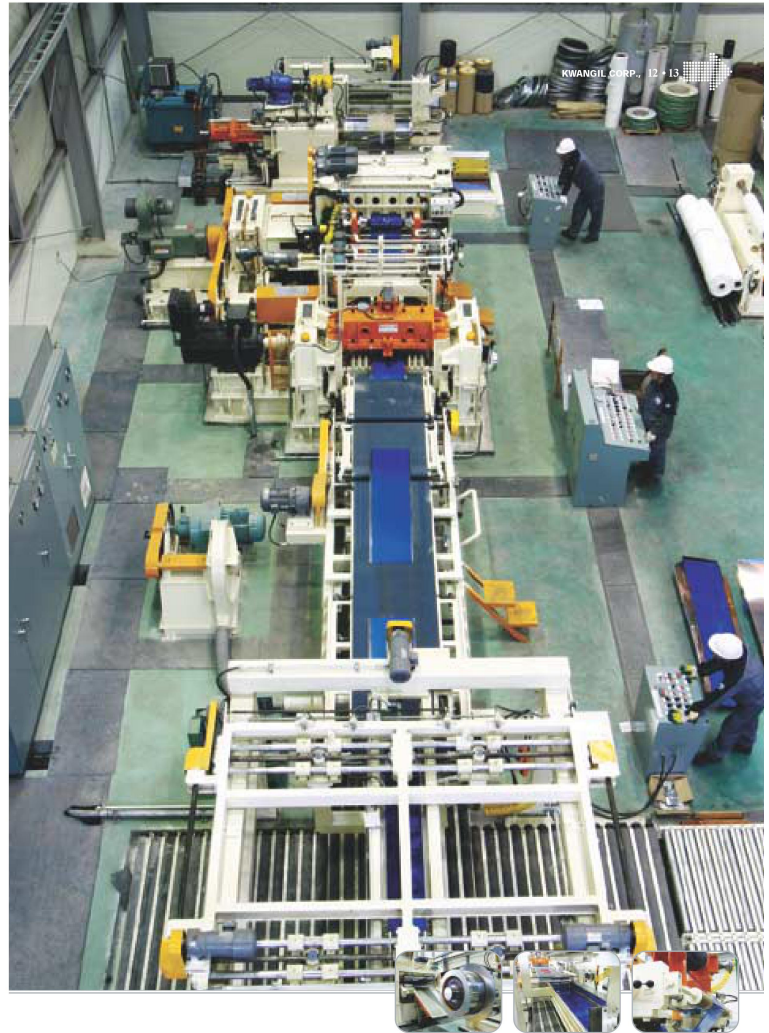
■ 설비특징 (FEATURES)

- 8-STAGE LEVELLER is to correct strip shapes by adjusting pressure of work rolls in accordance with strip grade and thickness in order to keep the highest processing capability and excellent flatness of sheets in the particular case of narrow-width and short length products.
- Adopting NON-STOP RUNNING-UP CUT TYPE, CR MINI ROTARY SHEAR LINE is suitable for processing short-length product in particular, it makes possible to maintain strict right-angle and clean edges by continuous shearing work.



■ 설비 가공능력 (PROCESSING CAPACITY)

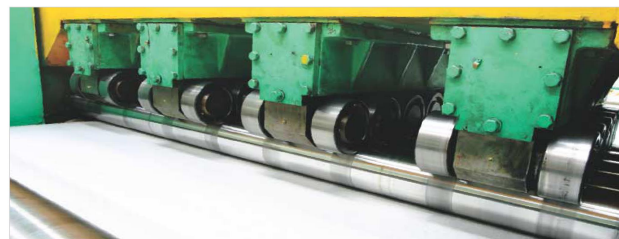
두께(mm) thickness	폭(mm) width	길이(mm) length	길이공차 length tolerance	대각공차 square tolerance	스케단중 Weight per unit	생산능력 Production capacity
0.2~1.6	200~750	200~3,000	±0.2mm	±0.3mm	7.5tons	10,000ton/year





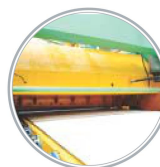
STS 열연 절단가공 설비

HEAVY GAUGE SHEAR LINE은 장안된 코일을 요구되는 길이만큼 절단하여, HR STS SHEET제품을 생산하는 설비이다. HEAVY GAUGE SHEAR LINE은 코일을 풀어주는 UNCOILER, 요구되는 길이만큼 장입된 코일을 절단하는 SHEAR, 절단제품을 적재하는 PILER등과 같은 일련의 설비로 구성되어 있다.



STS Heavy Gauge Shear Line

HEAVY GAUGE SHEAR LINE is the facility that cuts loaded coils into HR STS sheets with customer's requested length. HEAVY GAUGE SHEAR LINE is composed of facilities such as an UNCOILER that unrolls strips and a shear that cut coils and a piler that carries products.



■ 설비특징 (FEATURES)

- With shearing capacity of wide-width up to 2 meters, Kwang il Corp. is supplying customers with various high quality products.
- STOP RUNNING CUTTING TYPE enables to perfectly to shear sheets with thickness up to 13mm and 13,000mm length.
- With the installation of SHEET LEVELER, clean edges of threaded sheets are enhancing the quality of products by one more notch.

■ 설비 가공능력 (PROCESSING CAPACITY)

두께(mm) thickness	폭(mm) width	길이(mm) length	길이공차 length tolerance	면적공차 square tolerance	스케인중 Weight per unit	생산능력 production capacity
3.0~13.0	900~2,000	1,000~13,000	±0.1mm/2M	±0.3mm/2M	25tons	42,000ton/year

강종별 화학성분 및 기계적 성질
Chemical Composition And Mechanical Property

Classification	각국의 규격 Standard					화학성분 Chemical components (%)										기계적성질 Mechanical property				
	Korea (Japan) KS (JIS)	U.S.A AISI, ASTM	Germany DIN	England BS	Sweden SS	C MAX	Mn MAX	P MAX	S MAX	Si MAX	Cr MAX	Ni MAX	Other elements MAX	내력 Yield Strength (Kgf/cm ²)	인장강도 Tensile Strength (Kgf/cm ²)	연신율 Elongation (%)	경도 Hardness HRV HV			
Austenite	STS SUS304	304	14301	304S15	2333	0.08	2.00	0.045	0.03	1.00	18.00~20.00	8.00~10.50	-	205	520	40	90	200		
	STS SUS304L	304L	14306	304S11	2352	0.03	2.00	0.045	0.03	1.00	18.00~20.00	9.00~13.00	-	175	480	40	90	200		
	STS SUS309S	309S	14833	309S16	-	0.08	2.00	0.045	0.03	1.00	22.00~24.00	12.00~15.00	-	205	520	40	90	200		
	STS SUS310S	310S	14845	310S16	2381	0.08	2.00	0.045	0.03	1.50	24.00~26.00	19.00~22.00	-	205	520	40	90	200		
	STS SUS316	316	14401, 14436	316S11, 13	2343, 2347	0.08	2.00	0.045	0.03	1.00	16.00~18.00	10.00~14.00	MO: 2~3	175	480	40	90	200		
	STS SUS316L	316L	14435	316S12	2353, 2348	0.03	2.00	0.045	0.03	1.00	16.00~18.00	12.00~15.00	MO: 2~3	205	480	40	90	200		
	STS SUS317	317	14436	317S16	2366	0.08	2.00	0.045	0.03	1.00	18.00~20.00	11.00~15.00	-	205	520	40	90	200		
	STS SUS321	321	14541	321S31	2337	0.08	2.00	0.045	0.03	1.00	17.00~19.00	9.00~13.00	Ti: 5xC% more than	205	520	40	90	200		
Martensite	STS SUS410	410	14024	410S21	2302	0.15	1.00	0.030	0.03	1.00	11.50~13.50	0.60	-	205	440	20	93	210		
	STS SUS420J1	420	14021	420S29	-	0.16~0.25	1.00	0.030	0.03	1.00	12.00~14.00	0.60	-	205	520	18	97	234		
	STS SUS420J2	420	14034	420S45	-	0.26~0.40	1.00	0.300	0.03	1.00	12.00~14.00	0.60	-	225	540	18	99	247		
Ferrite	STS SUS430	430	14016	430S07	2320	0.12	1.00	0.040	0.03	0.75	16.00~18.00	0.60	-	205	450	22	88	200		
	STS SUS409L	409L	-	-	-	0.08	1.00	0.040	0.03	1.00	10.50~11.75	-	Ti: 6XC%~0.75	175	360	25	80	175		
	STS SUS436L	436L	-	-	-	0.15	1.00	0.040	0.03	1.00	16.00~19.00	-	Mo: 0.75~1.25	245	410	20	96	230		

스테인리스 강종 Stainless Steel type

강종 Type	대표조성 Chief components	특 성 Characteristics	용 도 application	분 류 series
STS 304	18Cr-8Ni	• 가장 넓은 용도로 사용 Most widely used • 내식성, 내열성 Corrosion resistance, heat-resistance, Good toughness at low-temperature • 기계적 성질 우수 Good mechanical properties	• 가정용 식기, 욕조, 실내용, 자동차부품, 건축자재, 화학공업, 선박용부품 home tableware, bathuin, indoor piping, auto parts, construction materials, chemical industry, vessels	Austenite
STS 304L	18Cr-8Ni-Low C	• 304의 저탄소강 Low-carbon version of 304 • 내열성 부식성이 우수 Strict corrosion resistance • 용접 후 용접이 풀기 불필요 사용 No heat treatment after welding	• 저장기(화학공업, 석탄공업, 석유공업, 약품저장) 내열부품류 Storage equipment (Chemical, coal, petro, medicine industries) Heat resistance parts	Austenite
STS 309S	22Cr-13Ni	• 304보다 Cr, Ni를 높여 용접열에 대한 저항성이 높고, 내식성, 내열성으로 많이 사용. Good weldability with higher Cr and Ni and lower C compared with 304.	• 산성용액 및 기타 화학공업장치 용접용 Wire 용기 Acetic acid tanks and other chemical plant facilities, welding wire, muffler	Austenite
STS 310S	25Cr-20Ni	• Cr 비율이 가장 높으며, 내산용성이 우수하고 내열성으로 많이 사용. High Cr rate, excellent oxidation resistance and heat resistance	• 산성용액, 화학공업장치, 저장기, 소각로 Acetic acid tanks and chemical plant facilities, incinerators	Austenite
STS 316	18Cr-12Ni-2.5Mo	• 내식성과 고온강도 우수 Excellent oxidation resistance and heat resistance	• 제지, 화학공업, 합성수지, 염료, 조선, 비료 등의 제조설비, 사진공업, 식품공업, 해안 부근 건축물 외장재 Manufacturing equipment for dyest, paper-making, chemical fiber, synthetic resin, acetic acid, fertilizer, photo industry, building materials of coastal zone	Austenite
STS 316L	18Cr-12Ni-2.5Mo-Low C	• 용접 후 용접열이 열처리후의 입계부식에 대한 저항성이 뛰어나 Stress removed after welding, Great granular corrosion resistance after heat treatment • 용접 후 Tempering 없이도 사용 Suitable for use in parts that need not tempering	• 비료공업, 합성섬유공업, 제지공업 Fertilizer industry, Synthetic fiber and paper industry	Austenite
STS 317	18Cr-12Ni-3Mo	• 316보다 Mo를 높여 용접 열에 대한 저항성이 높고, 내식성, 내열성으로 많이 사용. Improves antioxidizing properties with Mo higher than 316, high-grade steel together with 316S • 유독가스를 부식성으로 많은 용기에 적합 Suitable for use against poisonous substance	• 염색설비, 잉크제조설비, 화학, 석탄, 석유화학저장탱크 dyeing facilities, ink-making facilities and petrochemical storage tanks	Austenite
STS 321	18Cr-9Ni-Ti	• 티타늄을 첨가하여 입계부식을 방지한 강종, 고온 • 고압 430~900도 구간사용적합 Titanium-added steel with high resistance against grain boundary corrosion, Suitable for use in high temperature in a range from 430~900 degree C	• 화학공업 열교환기, 연료터빈 및 배기관 재료, 항공기 보일러(케미컬, expansion joint) Heat exchanger of Chemical plants, turbine facilities, airplane, boiler coverand expansion joint	Austenite
STS 410	13Cr	• 양호한 내식성, 기계 가공성(용접성 있음, 열처리하여 경화됨) Great corrosion resistance & weldability, Hardened by heat treatment • 부식환경에 견디기 어려움 Difficult to endure corrosion environment	• 일반용도, Knife소재용, 기계부품, 석유공업장치, 볼트, 너트 general use, knife material, machinery parts, bolts and nuts	Martensite
STS 420J1	13Cr	• 소입상태에서 경도가 높고 내식성 우수 High hardness and corrosion resistance in quenched condition	• 칼, 터빈블레이드 Knife, Turbineblade	Martensite
STS 420J2	13Cr	• 420J1보다 소입 후 경도가 높음 After quenching, higher hardness than 420J1 • 저탄소 함유 함유 martensite	• 기계부품, 기구등의 고경도용 Auto parts, machinery parts, etc.	Martensite
STS 430	16Cr	• 가격이 싸고 가공성이 좋음 Cheap & Good formability • 강형성 및 내산용성 우수 Great oxidation resistance • 오스테나이트계 대체용 Substitute for austenite series	• 자동차배출, 프레스용, 렌더, 전기기구, 건축물, 각종용도, 가전제품, 컴퓨터부품, 각종용도 기계부품 Auto parts, heaters, electric appliances, computer parts and various tankwashing machines	Ferrite
STS 409L	11Cr-2Mo-Low-C	• 저탄소, Ti 함유강종으로 내산화성, 내열성, 가공성 우수, 가격이 저렴 Low Carbon, Ti alloy steel, Great oxidation & heat resistance, Good formability & cheap	• 자동차 배기계 부품, 내열기(기계부품, Plant설비부품, 냉동 Container 외장) Automotive exhaust parts, heat-resisting equipment, plant facility parts, exterior for freezing container	Ferrite
STS 436L	18Cr-1Mo-0.3Ti-LCN	• 434에서 C, N을 낮추고 Ti, Nb 또는 Zr 또는 복합으로 첨가시켜 가공성과 용접성을 개선한 강종 With less C, N and high Ti, Nb or Zr on 434, steel that improved processability and weldability	• 건축 내외장재, 차량부품, 자동차 배기가스 처리부품, 주방기기, 금수기 building materials, Auto parts, Auto parts of gas exhauster kitchen utensils water heater	Ferrite

취급강종 목록 Available item list

KWANG IL CORP. (Inventory item : ○ producible item : ◯)

Thic	Type	SIZE	304	304L	316	316L	304Ti	410S	430	HL	85	-	-
0.3	1XC	4XC	○	○	○	○	○	-	-	-	-	-	-
0.4	1XC	4XC	○	○	○	○	○	-	-	-	-	-	-
0.5	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
0.6	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
0.7	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
0.8	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
0.9	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
10	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
12	1XC	4XC	○	○	○	○	○	-	○	○	○	-	-
15	1XC	4XC	○	○	○	○	○	○	○	○	○	-	-
20	1XC	4XC	○	○	○	○	○	○	○	○	○	-	-
25	1XC	4XC	○	○	○	○	○	○	○	○	○	-	-
30	1XC	4XC	○	○	○	○	○	○	○	○	○	-	-
Thic	Type	SIZE	304	304L	316	316L	317L	321H	304	HL	85	-	-
30	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
40	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
50	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
60	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
70	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
80	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
90	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
100	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
120	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-
127	1XC	4XC	○	○	○	○	○	○	-	-	-	-	-

* Above item list can be changed at the time of order placement.
Size = 1m(XC)coil, 4m(XC)coil, 5m(XC)coil, 2m(XC)coil

표면제품 Surface Products

표면기호 Surface No.	표면상태 및 가공방법 Surface status and how to process	적용용도 Application
1D	열간 압연 후, 열처리, 산세척 또는 이에 준하는 처리를 한 것. Products by hot-rolling, annealing and pickling or those having finished similar treatments	공업용탱크, 화학공업장치, 산업시설체, 빌딩구조재 Industrial tanks, chemical tanks, industrial facility materials, building structure materials
HD	가공경화성을 이용한 냉간압연 제품으로 고경도성을 갖게 한 것. Products by cold-rolling using hardness in forming to have high hardness	고경도롤, SPRING롤, KNIFE롤, 철도차량용, 압연대 High hardness products, materials for spring knifes and rolling stocks
2D	냉간압연 후, 열처리, 산세척 또는 여기에 준한 처리를 한 것. (deep drawing 강화) Products by cold-rolling, heat treatments and annealing and pickling or those having finished similar treatments (with good deep drawing)	일반용, 건축용, 석유화학 플랜트, 자동차부품 General appliance for construction/petrochemical plants and auto parts
2B	2D를 조절 압연한 제품으로 2D에 비해 광택과 표면명도도가 향상되고 기계적 성질이 개선된 제품(냉간압연) Products made through refined rolling of 2D to get higher brightness, fineness and improved mechanical properties compared with 2D(rolled products)	일반용도에 사용되는 대표적인 냉간압연제품으로 거의 모든 용도에 이용 Typical cold-rolled products for general appliance
NO.3	KSL 6001 (연마재입도) 규정에 따라 100~120MESH의 연마지로 연마한 제품으로 미려한 광택을 가짐. According to KSL 6001, Products grinded with abraser of 100~120Mesh have graceful brightness	건축내외장체, 주방용품, 전자제품 외장용 Interior and exterior decoration for construction, kitchen utensils and exterior for electronic appliances
NO.4	150~180MESH의 연마지로 연마한 제품으로 NO.3 보다 미세하고 은백색의 미려한 표면상태를 가짐. Products grinded with abraser of 150~180Mesh, have more graceful silver gray surface than No.3	건축용, 주방용품, 차량용, 의료기구, 식품설비, 욕조 Construction, kitchen utensils, bath-tub, medical appliances, food-processing facilities
BA	냉간압연 후, 광학열처리를 하여 조절압연을 가친 제품으로 고도의 반사를 및 광택을 가짐. Products made by cold-rolling, bright annealing and skimpass, have highly reflectivity & luster	자동차부품, 가전제품, 주방용품, 장식용, 건축용, 소형기울 Auto parts, home appliance, kitchen utensils, building materials, ornamentation, small-sized mirror
HL	NO.4 제품외 적당할 정도의 연마제를 사용하여 연속 연마부리가 생기도록 연마한 제품. Products have continuous abrasive pattern acquired by polishing on No.4 with an abraser of appropriate density	건축내외장체로 SASH, 도어, PANEL 등 Building exterior and interior including sash, door, panel
NO.8	상당한 광택 및 반사기능을 가진 연마제로 800MESH이상의 연마제로 BUFF를 회전시켜 연마한 제품. (간식) Products obtained by abraser of over 800Mesh to have considerable brightness and reflection. (grayscale) (grayscale)	건축용, 반사경, 입안대용, 장식용 construction, mirror, decoration
MR	고도의 광택 및 반사기능을 가진 연마제로 1000MESH이상의 연마제로 BUFF를 회전시켜 연속 가공연마한 제품으로 연마 흔적이 거의 없음. (간식) Products obtained by abraser of over 1000 Mesh have the highest brightness, reflection and no polishing marks. (grayscale) (grayscale)	건축용, 반사경, 입안대용, 장식용 construction, mirror, decoration

보호피막 Protective Films

종류 Classification	특성 Characteristics	용도 Application
PVC-BLUE	가공성, 고광택용 High workability, High brightness	2중 양식지 SHARK BOWL
PVC-WHITE	강한 접착력, 내후성, 내열성 Strong adhesive strength, heat resistance, atmospheric corrosion resistance	ROLL FORMING
PE-BLUE	원가축면에서 유리, 단순표면보호 Cost saving, simple surface protection	경가공용 LIGHT PROCESSING

표면상태별 세척방법 Surface Cleansing Method

표면상태 Surface	세척방법 Washing method
라벨 및 보호필름 Label and protective film	• 따뜻한 물, 중성세제로 닦으며 잔여물 선포는 알코올이나 유기용매 사용 Clean up with warm water or mild detergent and alcohol or organic solvent in case of adhesives
먼지등 쉽게 지워지는 때 Easy cleaning case such as dust	• 비누, 중성세제 또는 따뜻한 물로 세척 Clean up with soap, warm water or mild detergent
무지개 무늬 Rainbow figure	• 과다 세제사용 혹은 기름으로 인하여 발생되면 따뜻한 물, 중성세제로 세척 In case of being caused by excessive detergent or oil, it can be removed by warm water or neutral detergent
용접열흔 Discoloration by welding heat	• 10%염산용액 혹은 불화수소산 세척후 알코올이나 중탄산소다용액으로 중화처리 및 물로 세척후 건조 Clean with 10% nitric acid solution or hydrofluoric acid, neutralize with ammonia solution to neutralize boric acid and rinse with water
지문 Fingerprint	• 알코올이나 유기용매(에테르, 벤젠)를 사용하여 부드러운 천으로 닦아낸 후 물로 세척 Clean with soft cloth dipping into alcohol or organic solvent like ether and benzene and rinse with water
지방, 기름, 그리스오 오염 Fat, oil and grease	• 부드러운 천이나 종이로 닦아낸 후 중성세제나 암모니아 용액 혹은 중탄산세제용액으로 세척 Clean with soft cloth or paper and clean with neutral detergent, ammonia solution or special detergent
탄 유기물질, 탄소부착물 Burnt organic matter and carbide	• 세척전에 뜨거운 중성세제나 암모니아 용액에 담근후 약한 연마제가 함유된 세제 사용 Do in hot water of neutral detergent or ammonia solution and then clean with detergent containing soft abrasive
표면 오염물질로 발생된 녹 Rust caused by external contaminant	• 수소 산화, 질산용액(10%) 혹은 염산용액(10%)을 사용하여 세척전 역침 사용 Wipe with nitric acid solution, sulfuric acid, nitric acid solution (10%) and clean with detergent containing abrasive
표면의 각종 산성부착물 Stain and various acid materials	• 즉시 물로 세척하고 암모니아나 중탄소 소다 용액에 담근 후 중성세제나 따뜻한 물로 세척 Rinse immediately, do into ammonia solution or sodium bicarbonate and then clean with warm water or neutral detergent

운송 Transportation

제품이동시 표면결함이 발생하지 않도록 고무, 목재 받침재를 사용하고 운반장비는 Stainless전용장비를 사용하여 지면에 의한 표면 오염을 막고 안전사고와 방지를 위해 밀히 장갑을 착용한다.
It is necessary to use rubber or wooden supporters to avoid scratching on the surface of steel products, to wear gloves to avoid a possible safety accident and contamination by fingerprint.

보관방법 STORAGE

스테인리스강은 녹을 안습게 하기 위해 다량의 크롬 (통상 12%Cr이상)을 포함한 내식성을 목적으로 제조된 강으로 표면에 부동태피막이 형성되어 있기 때문이므로 이 표면을 보존, 유지하는데 주의하여야 한다.
Stainless steel contains a lot of chrome (usually over 12%Cr) for high corrosion resistance purpose with passive film on it's surface. Therefore, it is necessary to carefully keep and preserve it.

1. 강재를 포함한 포장재를 습기, 수분 침투방지 - 잔여물 즉시 제거
Keep away the packing materials including slip sheets from moisture or water. If they are wet, they should be immediately replaced.
2. 보호피막이 부착된 제품은 직사광선 노출방지 - 광선유형 6개월이상 교체
Prevent those products that have protection film on surface from being exposed to direct light and be sure that they should be replaced every six months.
3. 보호피막과 원판사이 수분 침투방지 - 수분증발방지 부식방지
Avoid water spreading into gap between the protection film and original sheets. When water is penetrated, corrosion will be progressed rapidly.
4. 수분, 먼지, 기름, 염류유, 분진등 접촉방지 - 장시간 노출, 용접 및 18%산 감소
Store products in a way to avoid water, dust, oil, grease or lime. When they are in contact with such materials, they will get rusty and their corrosion resistance will become weak in welding work.
5. 창고보관시 건조하고 환기가 잘되는 곳 보관 - 제품개별 부식시 상면90%
Store production in dry warehouse that have good ventilation facilities and cover up products when storing.

- 녹이나 부식이 발생할 경우
Stained steel is apt to get rusty or corroded in following cases
- 온도가 많은 경우, 이황화수소나 염분이 있는 분위기
When steel is exposed to warm place having sulfurous acid gas or salt
 - 먼지나 흙먼지 표면에 쌓이는 경우 - 국부부식등의 경우 가능 있음
When dust or iron is piled up the surface of steel (local cell may be generated, causing crack on it)
 - 표면에 흙이 생기는 경우 - 18%부식 저항
When rust occurs on the surface of steel and corrosion resistance has dropped
 - 납땜을 한 경우 후리스를 온전하게 제거하지 않는 경우
When flux has not been completely removed after welding
 - 염려를 많이 할 경우 갈라 그 자체가 불결한 경우
When steel has been welded with a dirty dust.

주문안내 Guide to Order

스테인리스 제품 주문시 아래항목의 기본사항 및 특별협의 사항을 알려주시면 최적의 제품 생산에 많은 도움이 되겠습니다. 주문 상담, 기술상담, 불만사항은 아래의 연락처로 문의하시면, 최선의 서비스로 신속히 처리하겠습니다.
When you order Stainless steel products, please kindly inform us following basic clause and special requirement, it will helpful for us to produce most suitable products.
As per all inquiries, complaint, technical advice for our products, please ask to the following contact points.



항 목 Classification	기 본 사 항 General information	특별 협의사항 Special conditions
적용규격 Standard	• Applied Standard ex. KS, JIS, AISI, ASTM, DIN, BS, SS, etc.	• 설계조건 design condition purpose of usage • 사용목적 special uses • 환경조건 environmental condition • 허용공차 allowable tolerances
강종 및 표면 Type and Finish	• 강종/종류 및 표면 Steel Type and Surface condition ex. 304, 2B, 304, L, etc.	
치수 Size	• 두께(Thickness) 폭(Width) 길이(Length) (mm) ex. 2T x 1000 x 2,000	
수량 Quantity	• 톤(TON), 중량(KG) 또는 매수(SH) Weight or number of sheets ex. 200TON, 100sheets	-
납품 Delivery date and Place	• 납기(EX. 2020년 10월 19일(목) 14:00까지) 납품장소 (EX. ㈜광일공사 공장내) delivery date (ex. 2022. 10. 19.(Sat), 14:00), delivery place (ex. Kwangil Corp.)	-
포장 Packing	• COIL 내경, COIL 중량, SHEET모양 단위 등 Inner diameter of coil, coil weight, sheet packing unit etc.	• 수출용 특수포장 special packing for exports
표면보호테이프 Surface protection tape	• 보호 TAPE 선택 여부 surface protective tape is need or not.	• 특수용 보호피막 special protection film (PE-BLUE, PE-WHITE, PVC-BLUE, PVC-WHITE)
간지 Paper-interleaf	• 간지 삽입 여부 paper-interleaf is need or not	-
연락처 Contact point	• Sales Dept., Main office at Hackjang - dong, Pusan TEL. : +82 51 324 0006 FAX : +82 51 324 3332 • Sales Dept., Seoul office at Guro - dong, Seoul TEL. : +82 2 3281 2588 FAX : +82 2 3281 5682 • Homepage : http://www.k-i-co.kr E-mail : jgcho@k-i-co.kr	

