

Metallic Coated Steel

KG Steel's Metallic Coated Steel Sheet is produced by our riched operating experience and advanced technology, and it has a beautiful surface and excellent quality.

Incheon Works

No. 1 CGL SPECIFICATION

Thickness	0.3 ~ 1.6mm
Width	700 ~ 1,250mm
Coating weight	60 ~ 300g/m ²
Inner diameter/ Outer diameter (I.D / O.D)	508 and 610mm / Max. 1880mm
Unit weight	Max. 20 ton

No. 2 CGL SPECIFICATION

Thickness	SuperGalum [®] 0.35 ~ 1.2mm GI 0.35 ~ 1.6mm
Width	700 ~ 1,300mm
Coating weight	SuperGalum [®] 30 ~ 200g/m ² GI 60 ~ 300g/m ²
Inner diameter/ Outer diameter (I.D / O.D)	508 and 610mm / Max. 2100mm
Unit weight	Max. 20 ton
Product	SuperGalum [®] , GI

* Depending on the product, there may be restrictions on Spec.

Dangjin Works

No. 3 CGL SPECIFICATION

Thickness	0.35 ~ 3.0mm
Width	800 ~ 1,600mm
Coating weight	GI 60 ~ 600g/m ² , SuperGalum [®] 60 ~ 200g/m ²
Inner diameter/ Outer diameter (I.D / O.D)	508 and 610mm / Max. 2100mm
Unit weight	Max. 25 ton
Product	GI, GA, SuperGalum [®]

No. 4 CGL SPECIFICATION

Thickness	0.25 ~ 1.2mm (SuperGalum [®] Max. 0.8mm)
Width	800 ~ 1,350mm
Coating weight	MgCOT [®] 60 ~ 275g/m ² , SuperGalum [®] 60 ~ 200g/m ²
Inner diameter/ Outer diameter (I.D / O.D)	508 and 610mm / Max. 2100mm
Unit weight	Max. 25 ton
Product	MgCOT [®] , SuperGalum [®]

* Depending on the product, there may be restrictions on Spec.



Continuous Galvanization

Produced in a thoroughly modern continuous galvanizing line based on techniques refined through the years of experiences, KG Steel's "Hot-Dip Galvanized Steel Sheet" provides a smooth and cutting-edge quality products. KG Steel has been fully committed to offer galvanized steel sheets with a broad range of base metals quality, including commercial, lock-forming, drawing, and structural quality. Moreover, each product may be supplied chromated to minimize the possibility of rust.



Super Formability

Highly workable steel sheets and strips are used as raw materials for all the galvanized steel sheet products at the Cold-Rolled Mill of KG Steel Co., LTD. The raw materials in coil forms are continuously annealed, galvanized, and properly leveled, granting final products superior formability.



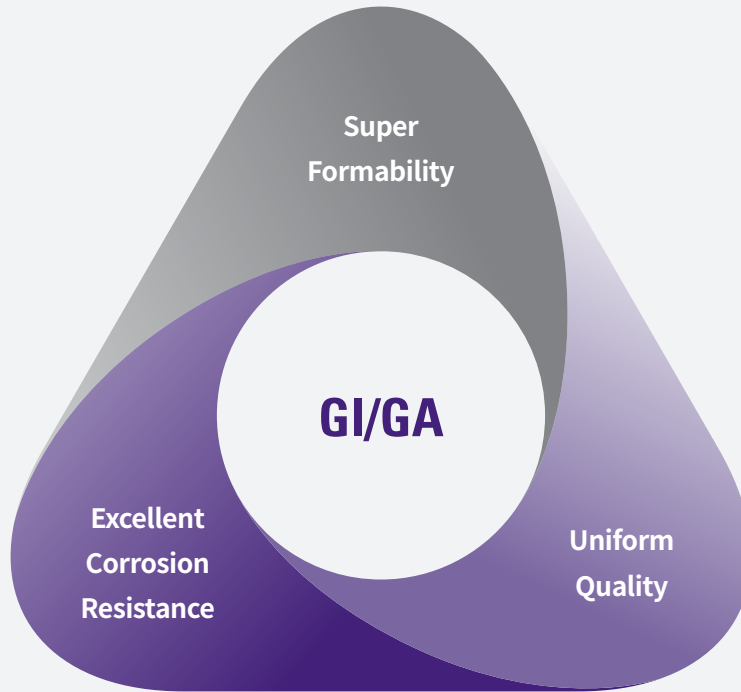
Excellent Corrosion Resistance

Galvanized steel sheet products are treated with chromic acid in order to minimize the possibility of rust, which also enables surface luster to last longer.



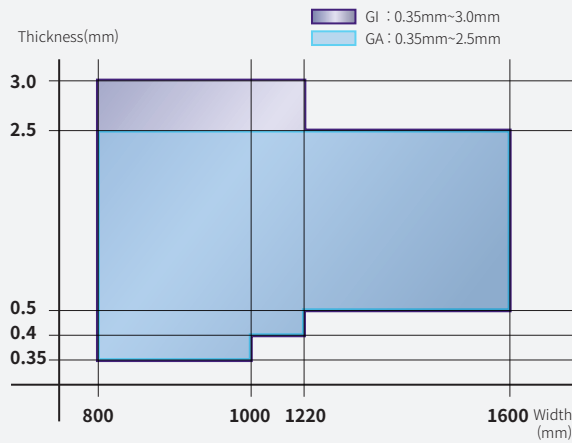
Uniform Quality

Production is carried out through a strict quality control and inspection in order to maximize customers' satisfaction.

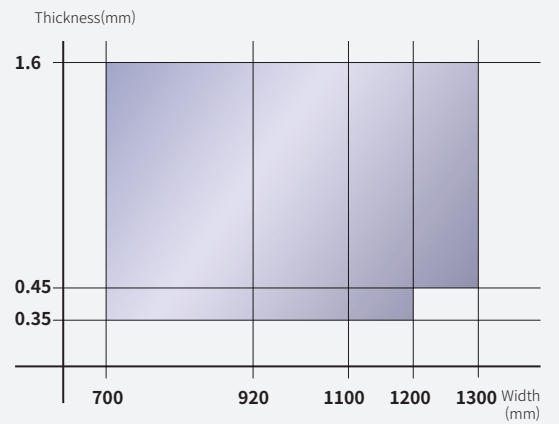


Size Availability

Dangjin



Incheon



※ There may be restrictions for each type of steel, so please consult with the sales and quality department in advance when ordering new products.

Specification

Designation	KS D 3506		JIS G 3302		ASTM A653	EN 10346
	CR	HR	CR	HR		
Commercial Quality	SGCC	SGHC	SGCC	SGHC	CS Type A&B	DX51D
Lock Forming Quality	SGCC-F	-	SGCC-F	-	CS Type C	
Commercial Soft Quality	SGCC-L	-	SGCC-L	-	FS Type A&B	DX52D
Commercial Hard Quality	SGCH	-	SGCH	-		DX53D
Drawing Quality	SGCD1	-	SGCD1	-	DDS EDDS	DX54D
	SGCD2	-	SGCD2	-		DX56D
	SGCD3	-	SGCD3	-		DX57D
Structural Quality						S220GD
						S250GD
	SGC245Y	SGH245Y	SGC340	SGH340	Grade 230	S280GD
	SGC295Y	SGH295Y	SGC400	SGH400	Grade 255	S320GD
	SGC335Y	SGH335Y	SGC440	SGH440	Grade 275	S350GD
	SGC365Y	SGH365Y	SGC490	SGH490	Grade 340 class 1,2,3	S390GD
	SGC560Y	SGH400Y	SGC570	SGH540	Grade 550	S420GD
						S450GD
						S550GD

High strength steel 340 / 440 / 590

Surface Treatment

Type	Main Applications
No Chromate	General painting
Chromate	General
Non-Cr	Home appliances
Antimicrobial Coating	Antimicrobial

* Organic Coating enhances Anti Fingerprint Properties and drawability.


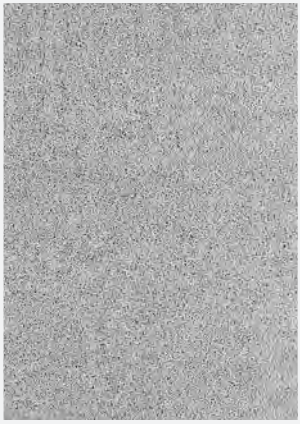

Oiling

Oiling Classification
No-oiled
Oiled

Surface Finish

Type	Surface Finish
Zero Spangle Finish (No Skinpass)	Skinpass X, Excellent gloss
Zero Spangle Finish (Skinpass)	Skinpass O, Surface is beautiful, Excellent processability due to removal of elongation at yield point
Galvannealed Finish	Galvannealed steel sheets have a highly workable iron-zinc alloy layer. Good paint-adherence properties, corrosion resistance and weldability make them ideal for use in automobile home appliances and buildings.

Surface Finish & Applications

Classification	Zero Spangle Finish (No Skinpass)	Zero Spangle Finish (Skinpass)	Galvannealed Finish
Surface Finish			
Weight of Zinc Coating	Z05 - Z60	Z05 - Z60	F06 - F18
Quality	CQ DQ SQ	CQ DQ SQ	CQ DQ SQ
Application	<ul style="list-style-type: none"> Steel furniture & office equipment For painting 	<ul style="list-style-type: none"> Steel furniture & office equipment For painting Home applications 	<ul style="list-style-type: none"> Home applications (Washer, Micro wave oven) Building materials Automotive parts

Thickness Tolerances

● JIS

(Unit : mm)

Nominal Thickness	Width				
	Up to 630	630 and over, up to 1000	1000 and over, up to 1250	1250 and over, up to 1600	1250 and over, up to 1600
Up to 0.25	± 0.04	± 0.04	± 0.04	-	-
0.25 and over, up to 0.40	± 0.05	± 0.05	± 0.05	± 0.06	-
0.40 and over, up to 0.60	± 0.06	± 0.06	± 0.06	± 0.07	± 0.08
0.60 and over, up to 0.80	± 0.07	± 0.07	± 0.07	± 0.07	± 0.08
0.80 and over, up to 1.00	± 0.07	± 0.07	± 0.08	± 0.09	± 0.10
1.00 and over, up to 1.25	± 0.08	± 0.08	± 0.09	± 0.10	± 0.12
1.25 and over, up to 1.60	± 0.09	± 0.10	± 0.11	± 0.12	± 0.14
1.60 and over, up to 2.00	± 0.11	± 0.12	± 0.13	± 0.14	± 0.16
2.00 and over, up to 2.50	± 0.13	± 0.14	± 0.15	± 0.16	± 0.18
2.50 and over, up to 3.15	± 0.15	± 0.16	± 0.17	± 0.18	± 0.21
3.15 and over	± 0.17	± 0.18	± 0.20	± 0.21	-

● ASTM

Specified Width, mm	SI Units							
	Specified Thickness, mm ^A							
	0.4 and thinner	Over 0.4 Through 1.0, inclusive	Over 0.4 Through 1.5, inclusive	Over 1.5 Through 2.0, inclusive ^B	Over 2.0 Through 2.5, inclusive	Over 2.5 Through 5.0, inclusive	Over 5.0 Through 6.0, inclusive	Over 6.0 Through 6.3, inclusive
Thickness Tolerances, Over, mm, No Tolerance Under ^C								
To 1500, inclusive	0.08	0.10	0.13	0.15	0.30	0.34	0.42	0.50
Over 1500	0.08	0.10	0.13	0.15	0.34	0.34	0.46	0.52

A The Specified thickness range captions apply independently of whether the ordered thickness is stated as a nominal or minimum. B

B If hot rolled substrate is used, it is permissible for the seller to provide total thickness tolerance 0.009 in. [0.23 mm], provided that the purchaser is notified and agrees.

C The tolerances provided in the table are based on minimum thickness (tolerance over, no tolerance under). For nominal thickness, the tolerance is divided equally over and under (tolerance over, tolerance under).

● EN

Tolerances for steel grades with specified minimum yield strength R_e or specified minimum proof strength $R_{p0.2} < 260$ MPa

Nominal Thickness t	Nomal tolerances ^a for a nominal width w			Special tolerances (S) ^a for a nominal width w		
	≤ 1200 ^b	$1200 < w \leq 1500$	> 1500	≤ 1200 ^b	$1200 < w \leq 1500$	> 1500
$0.20 < t \leq 0.40$	± 0.04	± 0.05	± 0.06	± 0.030	± 0.035	± 0.040
$0.40 < t \leq 0.60$	± 0.04	± 0.05	± 0.06	± 0.035	± 0.040	± 0.045
$0.60 < t \leq 0.80$	± 0.05	± 0.06	± 0.07	± 0.040	± 0.045	± 0.050
$0.80 < t \leq 1.00$	± 0.06	± 0.07	± 0.08	± 0.045	± 0.050	± 0.060
$1.00 < t \leq 1.20$	± 0.07	± 0.08	± 0.09	± 0.050	± 0.060	± 0.070
$1.20 < t \leq 1.60$	± 0.10	± 0.11	± 0.12	± 0.060	± 0.070	± 0.080
$1.60 < t \leq 2.00$	± 0.12	± 0.13	± 0.14	± 0.070	± 0.080	± 0.090
$2.00 < t \leq 2.50$	± 0.14	± 0.15	± 0.16	± 0.090	± 0.100	± 0.110
$2.50 < t \leq 3.00$	± 0.17	± 0.17	± 0.18	± 0.110	± 0.120	± 0.130
$3.00 < t \leq 5.00$	± 0.20	± 0.20	± 0.21	± 0.15	± 0.16	± 0.17
$5.00 < t \leq 6.50$	± 0.22	± 0.22	± 0.23	± 0.17	± 0.18	± 0.19

a The thickness tolerance in the region of coil welds may be increased by a maximum of 50% over a length of 10 m. This increase is applicable to all thicknesses and, unless otherwise agreed at the time of enquiry and order, to normal and special (negative and positive) tolerances.

b Wide strip : width ≥ 600 mm; slit wide strip: rolling width ≥ 600 mm, slit to width less than 600 mm.

Tolerances for steel grades with specified minimum proof strength $R_{p0.2} < 360$ MPa and for grades DX51D and S550GD

Nominal Thickness t	Nomal tolerances ^a for a nominal width w			Special tolerances (S) ^a for a nominal width w		
	≤ 1200 ^b	$1200 < w \leq 1500$	> 1500	≤ 1200 ^b	$1200 < w \leq 1500$	> 1500
$0.20 < t \leq 0.40$	± 0.05	± 0.06	± 0.07	± 0.035	± 0.040	± 0.045
$0.40 < t \leq 0.60$	± 0.05	± 0.06	± 0.07	± 0.040	± 0.045	± 0.050
$0.60 < t \leq 0.80$	± 0.06	± 0.07	± 0.08	± 0.045	± 0.050	± 0.060
$0.80 < t \leq 1.00$	± 0.07	± 0.08	± 0.09	± 0.050	± 0.060	± 0.070
$1.00 < t \leq 1.20$	± 0.08	± 0.09	± 0.11	± 0.060	± 0.070	± 0.080
$1.20 < t \leq 1.60$	± 0.11	± 0.13	± 0.14	± 0.070	± 0.080	± 0.090
$1.60 < t \leq 2.00$	± 0.14	± 0.15	± 0.16	± 0.080	± 0.100	± 0.110
$2.00 < t \leq 2.50$	± 0.16	± 0.17	± 0.18	± 0.110	± 0.120	± 0.130
$2.50 < t \leq 3.00$	± 0.19	± 0.20	± 0.20	± 0.130	± 0.140	± 0.150
$3.00 < t \leq 5.00$	± 0.22	± 0.24	± 0.25	± 0.17	± 0.18	± 0.19
$5.00 < t \leq 6.50$	± 0.24	± 0.25	± 0.26	± 0.19	± 0.20	± 0.21

a The thickness tolerance in the region of coil welds may be increased by a maximum of 50% over a length of 10 m. This increase is applicable to all thicknesses and, unless otherwise agreed at the time of enquiry and order, to normal and special (negative and positive) tolerances.

b Wide strip : width ≥ 600 mm; slit wide strip: rolling width ≥ 600 mm, slit to width less than 600 mm.

Tolerances for steel grades with specified minimum proof strength $360 \text{ MPa} \leq R_{p0.2} \leq 420 \text{ MPa}$

Nominal Thickness t	Nomal tolerances ^a for a nominal width w			Special tolerances (S) ^a for a nominal width w		
	≤ 1200 ^b	$1200 < w \leq 1500$	> 1500	≤ 1200 ^b	$1200 < w \leq 1500$	> 1500
$0.35 < t \leq 0.40$	± 0.05	± 0.06	± 0.07	± 0.040	± 0.045	± 0.050
$0.40 < t \leq 0.60$	± 0.06	± 0.07	± 0.08	± 0.045	± 0.050	± 0.060
$0.60 < t \leq 0.80$	± 0.07	± 0.08	± 0.09	± 0.050	± 0.060	± 0.070
$0.80 < t \leq 1.00$	± 0.08	± 0.09	± 0.11	± 0.060	± 0.070	± 0.080
$1.00 < t \leq 1.20$	± 0.10	± 0.11	± 0.12	± 0.070	± 0.080	± 0.090
$1.20 < t \leq 1.60$	± 0.13	± 0.14	± 0.16	± 0.080	± 0.090	± 0.110
$1.60 < t \leq 2.00$	± 0.16	± 0.17	± 0.19	± 0.090	± 0.110	± 0.120
$2.00 < t \leq 2.50$	± 0.18	± 0.20	± 0.21	± 0.120	± 0.130	± 0.140
$2.50 < t \leq 3.00$	± 0.22	± 0.22	± 0.23	± 0.140	± 0.150	± 0.160
$3.00 < t \leq 5.00$	± 0.22	± 0.24	± 0.25	± 0.17	± 0.18	± 0.19
$5.00 < t \leq 6.50$	± 0.24	± 0.25	± 0.26	± 0.19	± 0.20	± 0.21

a The thickness tolerance in the region of coil welds may be increased by a maximum of 50% over a length of 10 m. This increase is applicable to all thicknesses and, unless otherwise agreed at the time of enquiry and order, to normal and special (negative and positive) tolerances.

b Wide strip : width ≥ 600 mm; slit wide strip: rolling width ≥ 600 mm, slit to width less than 600 mm.

Tolerances for steel grades with specified minimum proof strength

420 MPa < R_{p0.2} < 900 MPa

Nominal Thickness <i>t</i>	Nomal tolerances ^a for a nominal width <i>w</i>			Special tolerances (S) ^a for a nominal width <i>w</i>		
	≤ 1200 ^b	1200 < <i>w</i> ≤ 1500	> 1500	≤ 1200 ^b	1200 < <i>w</i> ≤ 1500	> 1500
0.35 < <i>t</i> ≤ 0.40	± 0.06	± 0.07	± 0.08	± 0.045	± 0.050	± 0.060
0.40 < <i>t</i> ≤ 0.60	± 0.06	± 0.08	± 0.09	± 0.050	± 0.060	± 0.070
0.60 < <i>t</i> ≤ 0.80	± 0.07	± 0.09	± 0.11	± 0.060	± 0.070	± 0.080
0.80 < <i>t</i> ≤ 1.00	± 0.09	± 0.11	± 0.12	± 0.070	± 0.080	± 0.090
1.00 < <i>t</i> ≤ 1.20	± 0.11	± 0.13	± 0.14	± 0.080	± 0.090	± 0.110
1.20 < <i>t</i> ≤ 1.60	± 0.15	± 0.16	± 0.18	± 0.090	± 0.110	± 0.120
1.60 < <i>t</i> ≤ 2.00	± 0.18	± 0.19	± 0.21	± 0.110	± 0.120	± 0.140
2.00 < <i>t</i> ≤ 2.50	± 0.21	± 0.22	± 0.24	± 0.140	± 0.150	± 0.170
2.50 < <i>t</i> ≤ 3.00	± 0.24	± 0.25	± 0.26	± 0.170	± 0.180	± 0.190
3.00 < <i>t</i> ≤ 5.00	± 0.26	± 0.27	± 0.28	± 0.23	± 0.24	± 0.26
5.00 < <i>t</i> ≤ 6.50	± 0.28	± 0.29	± 0.30	± 0.25	± 0.26	± 0.28

a The thickness tolerance in the region of coil welds may be increased by a maximum of 50% over a length of 10 m. This increase is applicable to all thicknesses and, unless otherwise agreed at the time of enquiry and order, to normal and special (negative and positive) tolerances.

b Wide strip : width ≥ 600 mm; slit wide strip: rolling width ≥ 600 mm, slit to width less than 600 mm.

Zinc Coating

GI

Nominal Thickness	Triple	Single	JIS	ASTM	EN
060	060	51	Z06	-	-
080	080	68	Z08	-	-
90	90	75	-	G30 (Z90)	-
100	100	85	Z10	-	Z100
120	120	102	Z12	G40 (Z120)	-
140	140	120	Z14	-	Z140
180	180	153	Z18	G60 (Z180)	-
200	200	170	Z20	-	Z200
220	220	187	Z22	-	-
225	225	195	-	-	Z225
250	250	213	Z25	-	-
275	275	234	Z27	G90 (Z275)	Z275
300	300	255	-	-	-
350	350	298	Z35	G115 (Z350)	Z350
370	370	315	Z37	-	-
450	450	383	Z45	G140 (Z450)	Z450
500	500	425	-	G165 (Z500)	-
600	600	510	Z60	G21 (Z600)	Z600

GA

Coating Weight Code	Triple Spot Test	Singles Spot Test	JIS	ASTM	EN
040	40	34	F04	-	-
060	60	51	F06	-	-
075	75	60	-	A25 (ZF75)	-
080	80	68	F08	-	-
100	100	85	F10	-	ZF100
120	120	102	F12	A40 (ZF120)	ZF120
140	140	120	-	-	-
180	180	153	F18	A60 (ZF180)	-

SuperGalum®

Coating Weight Code	Triple Spot Test	Singles Spot Test	JIS	ASTM	EN
070	70	60	AZ70	-	-
090	90	76	AZ90	-	-
100	100	85	-	AZ30 (AZM100)	AZ100
110	110	95	-	AZ35 (AZM110)	-
120	120	102	AZ120	AZ40 (AZM120)	-
150	150	130	AZ150	AZ50 (AZM150)	AZ150
165	165	150	-	AZ55 (AZM165)	-
170	170	145	AZ170	-	-
180	180	155	-	AZ60 (AZM180)	-
185	185	160	AZ185	-	AZ185
200	200	170	AZ200	-	-
210	210	180	-	AZ70 (AZM210)	-

Type

Designation Type	JIS		ASTM	EN
	GI	SuperGalum®		
Commercial Quality	SGCC	SGLCC	CS	DX51D, DX52D
Lock Forming Quality			FS	DX53D
Drawing Quality	SGCD1	SGLCD	DDS	DX54D
	SGCD2			DX54D
	SGCD3	SGLCDD		EDDS
Structural Quality	SGC340		Grade 230	S220GD
	SGC400	SGLC400	Grade 255	S280GD
	SGC440	SGLC440	Grade 275	S320GD
	SGC490	SGLC 490	Grade 340	S350GD
	SGC570	SGLC570	Grade 550	S550GD

Mechanical Properties & Chemical Composition

● JIS | GI/GA

Classified Symbol	Yield Point (N/mm ²)	Tensile Strength (N/mm ²)	Elongation %						Test Piece and direction of tensile test
			Nominal Thickness mm						
			0.25 and over up to 0.40	0.40 and over up to 0.60	0.60 and over up to 1.0	1.0 and over up to 1.6	1.6 and over up to 2.5	2.5 and over up to 3.2	
SGCC	-	-	-	-	-	-	-	-	No.5 in rolling direction
SGCH	-	-	-	-	-	-	-	-	
SGCD1	-	Min. 270	Min. 32	Min. 34	Min. 36	Min. 37	Min. 38	-	
SGCD2	-	Min. 270	-	Min. 36	Min. 38	Min. 39	Min. 40	-	
SGCD3	-	Min. 270	-	-	Min. 40	Min. 41	Min. 42	-	
SGCD4	-	Min. 270	-	-	Min. 42	Min. 43	Min. 44	-	
SGC340	Min. 245	Min. 340	Min. 20	Min. 20	Min. 20	Min. 20	Min. 20	Min. 20	
SGC400	Min. 295	Min. 400	Min. 18	Min. 18	Min. 18	Min. 18	Min. 18	Min. 18	
SGC440	Min. 335	Min. 440	Min. 18	Min. 18	Min. 18	Min. 18	Min. 18	Min. 18	
SGC490	Min. 365	Min. 490	Min. 16	Min. 16	Min. 16	Min. 16	Min. 16	Min. 16	
SGC570	Min. 560	Min. 570	-	-	-	-	-	-	

● JIS | SuperGalum[®]

Classified Symbol	Yield Point (N/mm ²)	Tensile Strength (N/mm ²)	Elongation %					Test Piece and direction of tensile test
			Nominal Thickness mm					
			0.25 and over up to 0.40	0.40 and over up to 0.60	0.60 and over up to 1.0	1.0 and over up to 1.6	1.6 and over up to 2.3	
SGLCC	(205 ↑)	(270 ↑)	(20 ↑)	(21 ↑)	(24 ↑)	(24 ↑)	(25 ↑)	No.5 in rolling direction
SGLCD	-	270 ↑	-	27 ↑	31 ↑	32 ↑	33 ↑	
SGLCDD	-	270 ↑	-	29 ↑	32 ↑	34 ↑	35 ↑	
SGLC400	295 ↑	400 ↑	16	17 ↑	18 ↑	18 ↑	18 ↑	
SGLC440	335 ↑	440 ↑	14	15 ↑	16 ↑	18 ↑	18 ↑	
SGLC490	365 ↑	490 ↑	12	13 ↑	14 ↑	16 ↑	16 ↑	
SGLC570	560 ↑	570 ↑	-	-	-	-	-	

● ASTM | Commercial Drawing Quality

Designation	Chemical Composition %					Mechanical Properties(Nonmandatory)			
	C, Max.	Mn, Max.	P, Max.	S, Max.	Al, Min.	Yield Point Ksi(Mpa)	Elongation Min. %	r Value	n Value
CS Type A	0.10	0.60	0.030	0.035	-	25/55(170/380)	20	-	-
CS Type B	0.02-0.15	0.60	0.030	0.035	-	30/55(205/380)	20	-	-
CS Type C	0.08	0.60	0.100	0.035	-	25/60(170/410)	15	-	-
FS Type A	0.10	0.50	0.020	0.035	-	25/45(170/310)	26	1.0/1.4	0.17/0.21
FS Type B	0.02-0.10	0.50	0.020	0.030	-	25/45(170/310)	26	1.0/1.4	0.17/0.21
DDS Type A	0.06	0.50	0.020	0.025	0.01	20/35(140/240)	32	1.4/1.8	0.19/0.24
DDS Type C	0.02	0.50	0.020	0.025	0.01	25/40(170/280)	32	1.2/1.8	0.17/0.24
EDDS	0.02	0.40	0.020	0.020	0.01	15/25(105/170)	40	1.6/2.1	0.22/0.27

* For CS and, specify Type B to avoid carbon level 0.02%

* When a deoxidized steel is required for the application, CS may be ordered to a minimum of 0.01% total aluminum.

● ASTM | Structural Quality

Designation	Chemical Composition %					Mechanical Properties(Nonmandatory)					
	C, Max.	Mn, Max.	P, Max.	A, Max.	Al, Max.	Tensile Strength. Min.		Yield Point. Min.		Elongation Min. %	
						Ksi	Mpa	Ksi	Mpa		
SS Grade	Grade 33(230)	0.20	1.35	0.10	0.04	-	45	310	33	230	20
	Grade 37(255)	0.20	1.35	0.10	0.04	-	52	360	37	255	18
	Grade 40(275)	0.25	1.35	0.10	0.04	-	55	380	40	275	16
	Grade 50(340) Class1	0.25	1.35	0.20	0.04	-	65	450	50	340	12
	Grade 50(340) Class2	0.25	1.35	0.20	0.04	-	-	-	50	340	12
	Grade 50(340) Class3	0.25	1.35	0.04	0.04	-	70	480	50	340	12
	Grade 50(340) Class4	0.25	1.35	0.20	0.04	-	60	410	50	340	12
	Grade 55(380)	0.25	1.35	0.04	0.04	-	70	480	55	380	11
	Grade 80(550) Class1	0.20	1.35	0.04	0.04	-	82	570	80	550	-
	Grade 80(550) Class2	0.20	1.35	0.05	0.02	-	82	570	80	500	-
HSLAS	Grade40(275)	0.20	1.20	-	0.035	-	50	340	40	275	22
	Grade50(340)	0.20	1.20	-	0.035	-	60	410	50	340	20
	Grade55(380) Class1	0.25	1.35	-	0.035	-	70	480	55	380	16
	Grade55(380) Class2	0.15	1.20	-	0.035	-	65	450	55	380	18
	Grade60(410)	0.20	1.35	-	0.035	-	70	480	60	410	16
	Grade70(480)	0.20	1.65	-	0.035	-	80	550	70	480	12
	Grade80(550)	0.20	1.65	-	0.035	-	90	620	80	550	10
HSLAS-f	Grade40(275)	0.15	1.20	-	0.035	-	50	340	40	275	24
	Grade50(340)	0.15	1.20	-	0.035	-	60	410	50	340	22
	Grade55(380) Class1	0.20	1.35	-	0.035	-	70	480	55	380	18
	Grade55(380) Class2	0.15	1.20	-	0.035	-	65	450	55	380	20
	Grade60(410)	0.15	1.20	-	0.035	-	70	480	60	410	18
	Grade70(480)	0.15	1.65	-	0.035	-	80	550	70	480	14
	Grade80(550)	0.15	1.65	-	0.035	-	90	620	80	550	12

● EN | Commercial Drawing Quality

Designation		Symbols for the type of hot-dip coating	Mechanical Properties		
Steel Grade			Yield Strength, Mpa	Tensile Strength, Mpa	Elongation, % Min.
Steel Name	Steel No.				
DX51D	1.0917	+Z, +ZF, +AZ, +ZM, +AS	-	270 to 500	22
DX52D	1.0918	+Z, +ZF, +AZ, +ZM, +AS	140 to 300	270 to 420	26
DX53D	1.0951	+Z, +ZF, +AZ, +ZM, +AS	140 to 260	270 to 380	30
DX54D	1.0952	+Z	120 to 220	260 to 350	36
DX54D	1.0952	+ZF, +ZM	120 to 220	260 to 350	34
DX56D	1.0963	+Z	120 to 180	260 to 350	39
DX56D	1.0963	+ZF, +ZM	120 to 180	260 to 350	37
DX57D	1.0853	+Z	120 to 170	260 to 350	41
DX57D	1.0853	+ZF, +ZM	120 to 170	260 to 350	39

● EN | Structural Quality

Designation		Symbols for the type of hot-dip coating	Mechanical Properties		
Steel Grade			Yield Strength, Mpa Min.	Tensile Strength, Mpa Min.	Elongation, % Min.
Steel Name	Steel No.				
S220GD	1.0241	+Z, +ZF, +AZ	220	300	20
S250GD	1.0242	+Z, +ZF, +AZ	250	330	19
S280GD	1.0244	+Z, +ZF, +AZ	280	360	18
S320GD	1.0250	+Z, +ZF, +AZ	320	390	17
S350GD	1.0529	+Z, +ZF, +AZ	350	420	16
S550GD	1.0531	+Z, +ZF, +AZ	550	560	-