GI/GA - Mill Specifications

Specifications

- Using Cold-Rolled Steel Plate

Classification	Standards					
	POSCO	KS D 3506	JIS G3302	ASTM		EN 10142
				89	95	
General Use	CGCC	SGCC	SGCC	A 526	A 653-CQ	DX51D
Lock Forming	CGCF	SGCD 1	SGCD 1	A 527	A 653-LFQ	-
Drawing	CGCD	SGCD 2	SGCD 2	A 528	A 653-DQ	DX52D
Deep Drawing	CGCP	SGCD 3	SGCD 3	-	-	DX53D
Non-aging (stabilized) deep drawing	CGCN	SGCD 3N	SGCD 3N	A 642	A 653-DQSK	DX54D
Non-aging extra deep drawing	CGCE	-	-	-	-	-
Structural Quality[1)]	CGL 35	SGC 35	SGC 340	A446 Gr A[2)]	A 653-SQ230	S220 GD
	-	-	-	A446 Gr B	A 653-SQ255	S250 GD
	CGC 41	SGC 41	SGC 400	A446 Gr C	A 653-SQ275	S280 GD
	CGC 45	SGC 45	SGC 440	A446 Gr D	A 653-SQ340	S320 GD
	CGC 50	SGC 50	SGC 490	A446 Gr F	-	S350 GD
	CGC 58	SGC 58	SGC 570	A446 Gr E	A 653-SQ550	S550 GD
High Strength Steel	CGCHS 35	-	-	-	-	-
	CGCHS 40					
	CGCHS 45					
	CGCHS 50					
	CGCHS 60					

-1) Size for EN Structural Quality is EN10147
-2) The tensile strength of A446 Grade A is 310MPa (N/mm^2)

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Classification	Standards					
	POSCO	KS D 3506	JIS G3302	ASTM		EN 10142
				89	95	
Drawing	CGHD	-	-	-	-	-
General Use	CGHC	SGHC	SGHC	A526-H	A653-CQ	EN-DX51DH
Lock Forming	-	-	-	A527-H	A653-LFQ	-
Structural Quality	CGH 35	SGH 340	SGH 340	-	-	EN-S250GDH
	CGH 41	SGH 400	SGH 400	-	A653H-SQ275	EN-S280GDH
	CGH 45	SGH 440	SGH 440	A446-DH	A653H-SQ341	EN-S320GDH
	CGH 50	SGH 490	SGH 490	A446-FH	A653H-SQ343	EN-S350GDH
	CGH 55	SGH 540	SGH 540	A446-EMH	-	-
	CGH 58	-	-	-	-	-

-Size for EN Structural Quality is EN10147

Yield Point, Tensile Strength, Elongation

- Using Cold-Rolled Steel Plate

Classification	Yield Point (min. N/mm²)	Tensile Strength (min. N/mm²)	Elongation (min. %) Thickness (mm)						Test Piece
			0.25 and over, under 0.40	0.40 and over, under 0.60	0.60 and over, under 1.00	1.00 and over, under 1.60	1.60 and over, under 2.50	2.50 and over	
SGCC	-	-	-	-	-	-	-	-	No. 5 Rolling Direction
SGCD1	-	270	-	34	36	27	38	-	
SGCD2	-	270	-	36	38	39	40	-	
SGCD3	-	270	-	38	40	41	42	-	
SGC340	245	340	20	20	20	20	20	20	
SGC400	295	400	18	18	18	18	18	18	
SGC440	335	440	18	18	18	18	18	18	
SGC490	365	490	16	16	16	16	16	16	
SGC570	560	570	-	-	-	-	-	-	

-1.When the anti-aging characteristics are featured in the SGCD3 sheets and coils, the anti-aging characteristics are guaranteed for six (6) months after shipment from the manufacturer
-2.In principle, tensile strength tests are not performed on plates with thickness under 0.25mm

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Classification	Yield Point (min. N/mm²)	Tensile Strength (min. N/mm²)	Elongation (min. %)	Test Piece
SGHC	205	270	-	No. 5 Rolling Direction
SGH340	245	340	20	
SGH400	295	400	18	
SGH440	335	440	18	
SGH490	365	490	16	
SGH540	400	540	-	

Coating Weight

- Minimum Coating Weight (both-sided coating)

Coat Weight Type	Average value of Double-sided, Triple Spots Method	Average value of Double-sided, Single Spot Method	ASTM		
			KS D 3506	JIS G 3302	POSCO
60	60	51	(Z06), F06	(Z06), F06	K060, S060
80	80	68	Z08, F08	Z08, F08	K080, S080
100	100	85	Z10, F10	Z10, F10	K100, S100
120	120	102	Z12, F12	Z12, F12	K120, S120
180	180	153	Z18, (F18)	Z18, (F18)	K180
200	200	170	Z20	Z20	K200
220	220	187	Z22	Z22	K220
250	250	213	Z25	Z25	K250
275	275	234	Z27	Z27	K270
350	350	298	Z35	Z35	K350
450	450	383	Z45	Z45	K450
600	600	510	Z60	Z60	K600

-For non-alloy products, “Z” is added in front for KS and JIS and “K” for POSCO products. For alloy products, “F” is added in front for KS and JIS and “S” for POSCO products
-Coat weight types Z35, Z45, Z60, F10, F12 and F18 are not applied to screw type 1,2 and 3
-For both-sides, triple spots coating weight, the average value of the measurement of 3 test pieces is applied
-For one-side, single spot coating weight, the minimum value of the measurement of 3 test pieces is applied
-Separate consultation is available for the maximum coating weight on both sides

Thickness Tolerances

- Using Cold-Rolled Steel Plate

(Unit : mm)

Thickness	Width				
	630 or under	630 and over, under 1,000	1,000 and over, under 1,250	1,250 and over, under 1,600	1,600 and over
Under 0.25	±0.04	±0.04	±0.04	-	-
0.25 and over, under 0.40	±0.05	±0.05	±0.05	±0.06	-
0.40 and over, under 0.60	±0.06	±0.06	±0.06	±0.07	±0.08
0.60 and over, under 0.80	±0.07	±0.07	±0.07	±0.07	±0.08
0.80 and over, under 1.00	±0.07	±0.07	±0.08	±0.09	±0.10
1.00 and over, under 1.25	±0.08	±0.08	±0.09	±0.10	±0.12
1.25 and over, under 1.60	±0.09	±0.10	±0.11	±0.12	±0.14
1.60 and over, under 2.00	±0.11	±0.12	±0.13	±0.14	±0.16
2.00 and over, under 2.50	±0.13	±0.14	±0.15	±0.16	±0.18
2.50 and over, under 3.15	±0.15	±0.16	±0.17	±0.18	±0.21
3.15 and over	±0.17	±0.20	±0.20	±0.21	-

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(Unit : mm)

Thickness	Width			
	Under 1,200	1,200 and over, under 1,500	1,500 and over, under 1,800	1,800 and over, 2,300 or under
1.60 and over, under 2.00	±0.17	±0.18	±0.19	±0.22*
2.00 and over, under 2.50	±0.18	±0.20	±0.22	±0.26*
2.50 and over, under 3.15	±0.20	±0.22	±0.25	±0.27*
3.15 and over, under 4.00	±0.22	±0.24	±0.27	±0.28*
4.00 and over, under 5.00	±0.25	±0.27	-	-
5.00 and over, under 6.00	±0.27	±0.27	-	-
6.00 and over	±0.30	±0.31	-	-

* Applied to under 2,000mm width