
SHEET METAL

Sheeting and Slitting Services

Cold Rolled Steel

Electro Galvanised Steel

Galvanised Steel

Aluzinc

Laser Plate™



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SHEET METAL

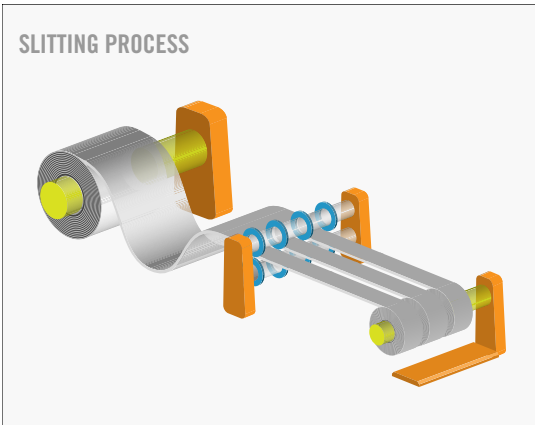
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SHEETING AND SLITTING SERVICES

Remark: All values are only for reference

SLITTING LINE

SLITTING PROCESS



Slitting Line

Thickness range : 0.25mm to 3.15mm

Coil width range : 800mm to 1600mm

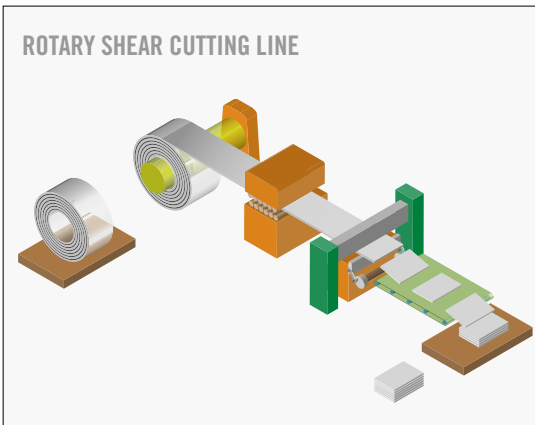
Slitted width range : 26mm to 1580mm

Maximum strip : 32 strips per setting

Slitted width tolerance : +/- 0.04mm

ROTARY SHEARING LINE

ROTARY SHEAR CUTTING LINE



Rotary Shearing Line

Thickness range : 0.30mm to 3.00mm

Coil width range : 400mm to 1325mm

Shearing length range : 500mm to 4000mm

Shearing length Tolerance : +/- 0.20mm

Shearing Line

Thickness range : 0.50mm to 3.00mm

Coil width range : 600mm to 1600mm

Shearing length range : 1000mm to 4200mm

Shearing length tolerance : +/- 0.50mm

COLD ROLLED STEEL



JIS G3141

Classification	Spec	Temper	Chemical Composition(%)					Tensile Strength N/mm ²	Elongation (Min, %)						Hardness	
			C	Si	Mn	P	S		≥0.25mm to <0.40mm	≥0.40mm to <0.60mm	≥0.60mm to <1.00mm	≥1.00mm to <1.60mm	≥1.60mm to <2.5mm	≥2.50mm	HRB	HV
Commercial Quality	SPCC	As Annealed	≤0.12	-	≤0.50	≤0.40	≤0.45	270 min.	32	34	36	37	38	39	≤57	≤105
		Normal Refining													≤67	≤115
Drawing	SPCD	As Annealed	≤0.10	-	≤0.45	≤0.35	≤0.35	270 min.	34	36	38	39	40	41	≤57	≤105
		Normal Refining													≤65	≤115
Deep Drawing	SPCE	As Annealed	≤0.08	-	≤0.40	≤0.30	≤0.30	270 min.	36	38	40	41	42	43	≤57	≤105
		Normal Refining													≤65	≤115

ASTM STANDARD

Specification	Type	Chemical Composition(%)				
		C	Si	Mn	P	S
ASTM A366-91	Commercial Quality	≤0.15	-	≤0.60	≤0.035	≤0.040
ASTM A619-91	Drawing Quality	≤0.10	-	≤0.50	≤0.025	≤0.035
ASTM A620-91	Special Killed for Drawing	≤0.10	-	≤0.50	≤0.025	≤0.035

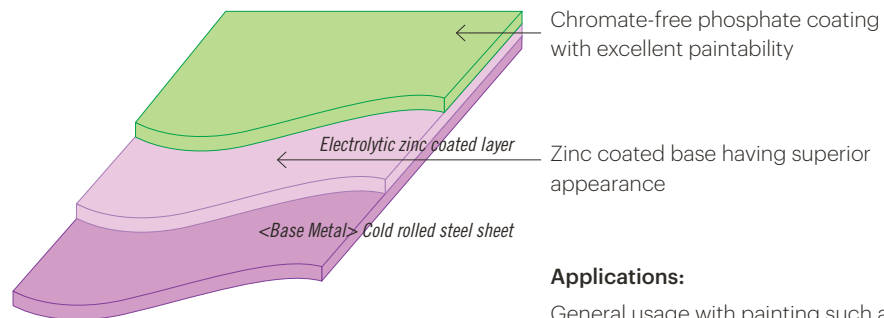
ELECTROLYTIC GALVANIZED STEEL



Remark: All values are only for reference

JIS3141	ASTM	Yield Point N/mm ²	Tensile Strength N/mm ²	Elongation (Min, %)								
				≥0.30mm to <0.40mm	≥0.40mm to <0.60mm	≥0.60mm to <0.80mm	≥0.80mm to <1.00mm	≥1.00mm to <1.20mm	≥1.20mm to <1.60mm	≥1.60mm to <2.00mm	≥2.00mm to <2.50mm	≥2.50mm to <3.00mm
SECC	A591-CQ	-	270 min.	36	37	38	39	40	41	42	43	44
SECD	A591-DQ	-	270 min.	-	40	41	42	43	44	45	46	47
SECEN	A591-DQSK	-	270 min.	-	42	43	44	45	46	47	48	49

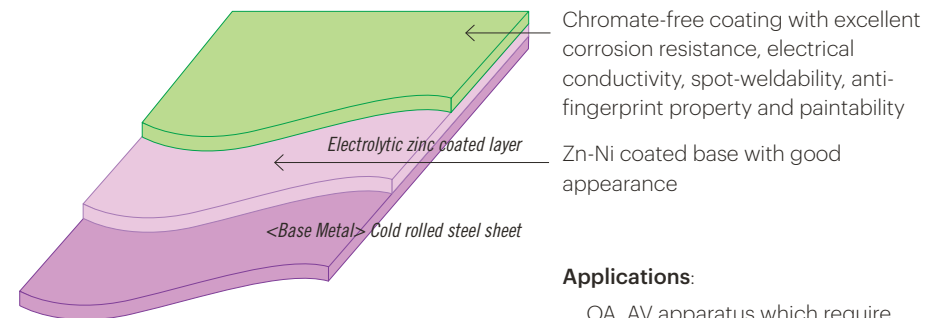
PHOSPHATE TREATMENT



Applications:

General usage with painting such as:
 Cash dispenser, office equipment, etc.
 Switch board, DVD casing, audio, etc.

ANTI-FINGERPRINT TREATMENT



Applications:

OA, AV apparatus which require electrical conductivity and shielding of electromagnetic wave use
 Electrical appliances which requires corrosion resistance

ALUZINC



HOT-DIP 55%AL-ZN COATED STEEL (GL) FOR STRUCTURE GRADE G300

Reference: AS 1397:2011 & AS 1365

Revision 1, March 2017. This literature supersedes all previous issues

1. TYPICAL APPLICATION

Roll formed usage, gutter, garden sheds, tubing, garage door

2. MECHANICAL PROPERTIES OF STEEL BASE

Yield Strength (YS)	340 MPa Min.
Tensile Strength (TS)	340 MPa Min.
Elongation on 50mm	20% Min.
180o Transverse Bend	1t (no cracking)

3. MAXIMUM CHEMICAL COMPOSITION OF BASE STEEL (WT%)

Carbon (C)	Manganese (Mn)	Phosphorous (P)	Sulphur (S)
0.30	1.60	0.100	0.035

4. COATING ADHESION-180° BEND TEST (NO PEEL OFF)

AZ150	1t
AZ200	1t

5. DIMENSION CAPABILITY AND TOLERANCE

Base steel thickness (mm)	Width (mm)
0.22≤t≤0.35	700-1220
0.35<t≤0.50	700-1300
0.5<t≤1.20	700-1550
1.2<t≤1.50	760-1550

6. DIMENSION TOLERANCE

Specified thickness (mm)	Thickness tolerance (mm)		Specified width (mm)	Width tolerance (mm)
	Specified width (mm)			
	w≤1200	1200<w≤1550		
0.20≤t≤0.30	±0.02	---	600<w≤750	-0/+3
0.30<t≤0.50	±0.03	±0.04	750<w≤1000	-0/+4
0.50<t≤0.80	±0.04	±0.05	1000<w≤1550	-0/+5
0.80<t≤1.20	±0.05	±0.06		
1.20<t≤2.00	±0.06	±0.07		

7. COATING FINISH AND SURFACE TREATMENT (AVAILABLE)

- (1) SKP (Skin-passed)
- (2) Anti-finger resin coating: Chromate & Chromate-Free
- (3) Passivated: Chromate & Chromate-Free
- (4) Oiled
- (5) Coating $\geq 200\text{g/m}^2$ need to accept Wrong side winding

8. TYPICAL MECHANICAL PROPERTIES RANGE (FOR NORMAL SUPPLY PRODUCT)

Thickness (mm)	Yield Strength and Tensile Strength (MPa)											
	300	320	340	360	380	400	420	440	460	480	500	520
0.3-0.4												
0.4-0.6												
0.6-0.8												
0.8-1.0												
1.0-1.2												
1.2-1.5												

Key:

- Yield Strength (YS)
- Tensile Strength (TS)

Thickness (mm)	Elongation (%) (Original gauge length is 50mm)																	
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
≤ 0.4																		
0.4-0.6																		
0.6-0.8																		
0.8-1.0																		
1.0-1.2																		
1.2-1.5																		

9. TYPICAL CHEMICAL COMPOSITION OF BASE STEEL (WT%)

- Carbon (C) 0.020 – 0.150
- Silicon (Si) 0.000 – 0.030
- Manganese (Mn) 0.150 – 0.800
- Phosphorous (P) 0.010 – 0.025
- Sulphur (S) 0.003 – 0.025

GALVANISED STEEL



HOT-DIP ZINC COATED STEEL (GI) FOR STRUCTURE GRADE G300

Reference: AS 1397:2011 & AS 1365

Revision 1, March 2017. This literature supersedes all previous issues

1. TYPICAL APPLICATION

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Elongation on 50mm	20% Min.
180o Transverse Bend	1t (no cracking)

3. MAXIMUM CHEMICAL COMPOSITION OF BASE STEEL (WT%)

Carbon (C)	Manganese (Mn)	Phosphorous (P)	Sulphur (S)
0.30	1.60	0.100	0.035

4. COATING ADHESION-180° BEND TEST (NO PEEL OFF)

Z100	0t
Z200	0t
Z275	1t
Z350	1t
Z450	1t
Z600	2t

5. DIMENSION CAPABILITY AND TOLERANCE

Base steel thickness (mm)	Width (mm)
0.22≤t≤0.35	700-1524
0.35<t<2.00	700-1524

6. DIMENSION TOLERANCE

Specified thickness (mm)	Thickness tolerance (mm)		Specified width (mm)	Width tolerance (mm)
	Specified width (mm)			
	w≤1200	1200<w≤1550		
0.20≤t≤0.30	±0.02	---	600<w≤750	-0/+3
0.30<t≤0.50	±0.03	±0.04	750<w≤1000	-0/+4
0.50<t≤0.80	±0.04	±0.05	1200<w≤1524	-0/+5
0.80<t≤1.20	±0.05	±0.06		
1.20<t≤2.00	±0.06	±0.07		

7. COATING FINISH AND SURFACE TREATMENT (AVAILABLE)

- (1) SKP (Skin-passed)
- (2) Anti-finger resin coating: Chromate & Chromate-Free
- (3) Passivated: Chromate & Chromate-Free
- (4) Oiled
- (5) Coating $\geq 350\text{g/m}^2$ need to accept spike spangles

8. TYPICAL MECHANICAL PROPERTIES RANGE (FOR NORMAL SUPPLY PRODUCT)

Thickness (mm)	Yield Strength and Tensile Strength (MPa)											
	300	320	340	360	380	400	420	440	460	480	500	520
0.3-0.4												
0.4-0.6												
0.6-0.8												
0.8-1.0												
1.0-1.2												
1.2-1.5												
1.5-2.0												

Key:

- Yield Strength (YS)
- Tensile Strength (TS)

Thickness (mm)	Elongation (%) (Original guage length is 50mm)																	
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
≤ 0.4																		
0.4-0.6																		
0.6-0.8																		
0.8-1.0																		
1.0-1.2																		
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9. TYPICAL CHEMICAL COMPOSITION OF BASE STEEL (WT%)

- Carbon (C) 0.020 0.150
- Silicon (Si) 0.000 0.030
- Manganese (Mn) 0.150 0.800
- Phosphorous (P) 0.010 0.025
- Sulfur (S) 0.003 0.025

LASER PLATE™ HA 300 - AS/NZS 1594:2002 (R1:2016)



GENERAL DESCRIPTION

HA300 graded Laser Plate™ is a structural steel with a guaranteed minimum yield strength of 300MPa with good ductility.

STANDARD PLATE SIZES

1,219 x 2,438mm
1,524 x 3,000mm
1,524 x 3,600mm

APPLICATIONS

Laser cutting
Structural members
General engineering

CHEMICAL COMPOSITION

	Maximum	Typical
Carbon (C)	0.20	0.06
Silicon (Si)	0.35	0.01
Manganese (Mn)	1.60	0.76
Sulphur (S)	0.030	0.005
Phosphorous (P)	0.040	0.013
Copper (Cu)	0.25	0.02
Chromium (Cr)	0.25	0.02
Nickel (Ni)	0.25	0.01
Carbon Equivalent (CEQ)	0.39	0.19

*CEQ = C + Mn/6 + (Ni + Cu)/15 + (Cr + Mo +V)/5

MECHANICAL PROPERTIES

	Minimum	Typical
Yield Strength (MPa)	300	350
Tensile Strength (MPa)	400	450
Elongation (%)	20	25
180° Bend (transverse)	1t<=3mm, 2t>3mm	

DIMENSIONAL PROPERTIES

Thickness	3.0 - 25.0mm
Width	1,219mm / 1,524mm / 1,820mm
Surface Finish	Hot Rolled
Edge Condition	Untrimmed (Mill Edge)