

熱軋酸洗塗油產品接單規範

Available Specification and Dimension for Hot Rolled Products, Pickled and Oiled

規格 Specification					
產品特性 Product Property	鋼種 \ 用途 Steel Grade \ Application				
	冷軋用途 Re-rolling Quality	一般成型 Forming	一般鋼管 Tube and Pipe	結構用鋼 Structure Quality	汽車用鋼 Automobile
300 N/mm ² 一般品級 Commercial Quality	SAE 1006	ASTM A1011 CS A	JIS G3132 SPHT1	—	—
	SAE 1008	ASTM A1011 CS B	—	—	—
	—	JIS G3131 SPHC	—	—	—
	—	EN 10111 DD11	—	—	—
300 N/mm ² 沖軋品級 Drawing Quality	CH 1002	—	—	—	—
	CH 1006B	JIS G3131 SPHD	—	—	—
300 N/mm ² 極低碳鋼 Extra Low Carbon Steel	CH 1001 (CH M1005)	—	—	—	—
350 N/mm ²	SAE 1010	—	JIS G3132 SPHT2	ASTM A1011 SS Gr.33	—
	SAE 1012	—	—	EN 10025 S235JR	—
	—	—	—	EN 10025 S235J0	—
400 N/mm ²	SAE 1017	—	JIS G3132 SPHT3	ASTM A36	—
	—	—	—	ASTM A1011 SS Gr.36	—
	—	—	—	ASTM A1011 SS Gr.40	—
	—	—	—	JIS G3101 SS400	—
	—	—	—	EN 10025 S275J0	—
	—	—	—	—	JIS G3113 SAPH400

訂單尺寸 Order Dimension			
產品特性 Product Property	寬度 (mm) \ 厚度 (mm) Width \ Thickness		
	870~969	970~1119	1120~1250
300 N/mm ² 一般品級 Commercial Quality	1.40~6.00		
	1.60~6.00		
300 N/mm ² 極低碳鋼 Extra Low Carbon Steel	2.00~6.00		2.50~6.00
350 N/mm ²	1.50~6.00		
400 N/mm ²	1.50~6.00		1.70~6.00
	1.60~6.00		

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	冷軋用途 Re-rolling Quality	一般成型 Forming	一般鋼管 Tube and Pipe	結構用鋼 Structure Quality	汽車用鋼 Automobile
450/500 N/mm ²	SAE 1019	JIS 4051 S20C	—	ASTM A1011 SS Gr.45	—
	SAE 1020	—	—	ASTM A1011 SS Gr.50	—
	SAE 1022	—	—	ASTM A1011 SS Gr.55	—
	—	—	—	JIS G3101 SS490	—
	—	—	—	EN 10025 S275JR	—
	—	—	—	—	IS G3113 SAPH440
450/500 N/mm ² 高強度低合金鋼 High Strength Low Alloy	—	—	—	ASTM A1011 HSLAS Gr.45 Class 1	—
	—	—	—	ASTM A1011 HSLAS Gr.50 Class 1	—
	—	—	—	ASTM A1011 HSLAS Gr.55 Class 1	—
	—	—	—	ASTM A572 Gr.50	—
	—	—	—	EN 10025 S350 JR	JIS G3134 SPFH490
	—	—	—	EN 10025 S350 J0	EN10149-2 S355MC
550/600 N/mm ² 高強度低合金鋼 High Strength Low Alloy	—	—	—	JIS G3101 SS540	—
	—	—	—	—	JIS G3134 SPFH590
	—	—	—	—	EN10149-2 S460MC
	—	—	—	—	SEW 092 QStE460 TM
600 N/mm ² 錳鉻合金鋼 Mn-Cr Alloy Steel	—	EN 10084 16MnCr5	—	—	—
600 N/mm ² 中碳鋼 Medium Carbon Steel	—	JIS 4051 S35C	—	—	—
	—	JIS 4051 S45C	—	—	—
	—	JIS 4051 S50C	—	—	—
	—	JIS 4051 S55C	—	—	—

訂單尺寸 Order Dimension			
產品特性 Product Property	寬度 (mm) \ 厚度 (mm) Width \ Thickness		
	870~969	970~1119	1120~1250
450/500 N/mm ²	1.58~6.00	1.75~6.00	1.60~6.00
			1.90~6.00
		2.00~6.00	2.00~6.00
550/600 N/mm ² 高強度低合金鋼 High Strength Low Alloy	—	2.00~6.00	2.45~6.00
		—	2.45~6.00
600 N/mm ² 錳鉻合金鋼 Mn-Cr Alloy Steel	—	3.00~6.00	—
600 N/mm ² 中碳鋼 Medium Carbon Steel	1.50~6.00	3.20~6.00	3.20~6.00
			3.20~6.00

熱浸鍍鋅產品接單規範

Available Specification and Dimension for Hot Dipped Galvanized Products

產品 Product	產品特性 Product Property	規格 Steel Grade			
		ASTM	JIS	AS	EN
冷軋鍍鋅 CGI	300 N/mm ² 一般品級 Commercial Quality	A653 CSA A653 CSB	G3302 SGCC	—	10327 DX51D 10142 DX51D 10346 DX51D
	350 N/mm ²	A653 SS Gr.33	G3302 SGC340	—	—
	400 N/mm ²	A653 SS Gr.40	G3302 SGC400	—	10147 S280GD 10326 S280GD 10346 S280GD
	450 N/mm ²	A653 SS Gr.45 A653 SS Gr.50	G3302 SGC440	—	10147 S350GD 10326 S350GD 10346 S350GD
	500 N/mm ²	A653 SS Gr.55	G3302 SGC490	—	—
	450 N/mm ² 硬板 Hard Class	—	G3302 SGCH	1397 G450	—
	500 N/mm ² 硬板 Hard Class	—	—	1397 G500	—
	550 N/mm ² 硬板 Hard Class	A653 SS Gr.80	—	1397 G550	10147 S550GD 10346 S550GD
熱軋鍍鋅 HGI	300 N/mm ² 一般品級 Commercial Quality	A653 CSA A653 CSB	G3302 SGHC	1397 G2	10327 DX51D 10142 DX51D 10346 DX51D
	350 N/mm ²	A653 SS Gr.33	G3302 SGH340	1397 G250	—
	400 N/mm ²	A653 SS Gr.40	G3302 SGH400	1397 G300	10147 S280GD 10326 S280GD 10346 S280GD
	450 N/mm ²	A653 SS Gr.45 A653 SS Gr.50	G3302 SGH440	1397 G350	10147 S350GD 10326 S350GD 10346 S350GD
	500 N/mm ²	A653 SS Gr.55	G3302 SGH490	—	—
	550 N/mm ²	—	G3302 SGH540	—	—

產品 Product	產品特性 Product Property	訂單尺寸 (厚度 / 寬度) mm Order Dimension (Thickness/Width)				
		900~1119	1120~1237	1238~1250	1251~1300	1301~1524
冷軋鍍鋅 CGI	300 N/mm ² 一般品級 Commercial Quality	0.70~1.44			—	
	350 N/mm ²	0.70~1.44			—	
	400 N/mm ²	0.70~1.69			—	
	450 N/mm ²	0.70~1.74			—	
	500 N/mm ²	0.70~1.74			—	
	450 N/mm ² 硬板 Hard Class	1.20~3.00			—	
	500 N/mm ² 硬板 Hard Class	1.20~3.00			—	
	550 N/mm ² 硬板 Hard Class	1.40~2.70			—	
熱軋鍍鋅 HGI	300 N/mm ² 一般品級 Commercial Quality	1.20~4.50		1.50~4.50	1.80~3.75	
	350 N/mm ²	1.45~4.50		1.70~4.50	1.80~3.75	
	400 N/mm ²	1.50~4.50	1.70~4.00		2.50~3.00	
	450 N/mm ²	1.58~4.50	1.75~4.00	—	—	
	500 N/mm ²	1.58~4.00	1.75~4.00	—	—	
	550 N/mm ²	2.00~3.00		—	—	

精衝成形產品接單規範

Available Specification and Dimension for Fine Blanking and Formability Products

產品特性 Product Property	規格 Steel Grade	訂單尺寸 Order Dimension		機械性質 Mechanical Property				球化率 (%) Spheroidization Rating
		厚度 (mm) Thickness	寬度 (mm) Width	降伏強度 Yield Strength (N/mm ²)	抗拉強度 Tensile Strength (N/mm ²)	伸長率 (%) Elongation	硬度 (HRB) Hardness	
高強度 低合金鋼 High Strength Low Alloy	SEW 092 QStE380TM Q/BQB 310 QStE380TM	2.00~2.99	900~1250	≥ 380	450~590	≥ 19	—	—
		3.00~6.00				≥ 25		
High Strength Low Alloy	SEW 092 QStE460TM Q/BQB 310 QStE460TM	2.00~2.99	900~1250	≥ 460	520~670	≥ 14	—	—
		3.00~6.00				≥ 19		
低碳鋼 Low Carbon Steel	JIS G3131 SPHD	2.50~4.50	900~1219	≤ 260	≤ 360	≥ 38	43~51	—
	SAE 1010	2.50~5.09	900~1219	≤ 300	≤ 380	≥ 35	55 ± 5	—
		5.10~6.00		≤ 280	≤ 370	≥ 35	55 ± 5	
	SAE 1015	2.50~5.09	900~1219	≤ 300	≤ 440	≥ 35	68 ± 5	≥ 90
		5.10~6.00		≤ 280	≤ 430	≥ 35	68 ± 5	
	SAE 1020	2.50~5.09	900~1219	≤ 320	≤ 470	≥ 35	70 ± 5	≥ 90
		5.10~6.00		≤ 300	≤ 460	≥ 35	70 ± 5	
	中高碳鋼 High and Medium Carbon Steel	JIS 4051 S35C	2.50~5.09	900~1219	≤ 360	≤ 530	≥ 27	76 ± 5
5.10~6.00			≤ 330		≤ 520	≥ 30	76 ± 5	
JIS 4051 S45C		2.50~5.09	900~1219	≤ 440	≤ 580	≥ 27	≤ 86	≥ 90
		5.10~6.00		≤ 400	≤ 570	≥ 27	≤ 85	
JIS 4051 S50C		2.00~5.09	900~1050	≤ 450	≤ 595	≥ 27	≤ 86	≥ 90
		5.10~6.00		≤ 410	≤ 585	≥ 27	≤ 85	
JIS 4051 S55C		2.00~5.09	900~1050	≤ 460	≤ 600	≥ 27	≤ 86	≥ 90
		5.10~6.00		≤ 425	≤ 590	≥ 27	≤ 85	
SAE 1060 JIS G4802 S60C-CSP A		2.00~5.09	900~1050	≤ 485	≤ 620	≥ 25	≤ 87	≥ 90
		5.10~6.00		≤ 435	≤ 610	≥ 27	≤ 87	
高錳合金鋼 High Mn Alloy Steel	SAE 1536	2.50~5.09	900~1219	≤ 450	≤ 580	≥ 23	≤ 85	≥ 90
		5.10~6.00		≤ 400	≤ 570	≥ 27	≤ 85	
錳鉻合金鋼 Mn-Cr Alloy Steel	EN 10132 16MnCr5	2.50~5.09	900~1219	≤ 360	≤ 500	≥ 30	77 ± 5	≥ 90
		5.10~6.00		≤ 325	≤ 500	≥ 30	77 ± 5	
鉻鉬合金鋼 Cr-Mo Alloy Steel	SAE 4130	2.50~5.09	900~1050	≤ 460	≤ 595	≥ 23	≤ 85	≥ 90
		5.10~6.00		≤ 410	≤ 585	≥ 27	≤ 85	
	JIS G4053 SCM415	2.50~5.09	900~1219	≤ 400	≤ 520	≥ 28	75 ± 5	≥ 90
		5.10~6.00		≤ 350	≤ 500	≥ 30	75 ± 5	
	JIS G4053 SCM435	2.70~5.09	900~1050	≤ 435	≤ 580	≥ 27	≤ 85	≥ 90
		5.10~6.00		≤ 425	≤ 570	≥ 27	≤ 85	

產品特性 Product Property	規格 Steel Grade	化學成份 (%) Chemical Composition (%)														
		C	Mn	Si	P	S	Cr	Mo	Ni	Cu	Al	Nb	Ti	V		
高強度 低合金鋼 High Strength Low Alloy	SEW 092 QStE380TM Q/BQB 310 QStE380TM	0.12 max.	0.14 max.	0.50 max.	0.030 max.	0.02 max.	—	—	—	—	0.015 min.	0.09 max.	0.15 max.	0.20 max.		
	SEW 092 QStE460TM Q/BQB 310 QStE460TM	0.12 max.	0.16 max.	0.50 max.	0.030 max.	0.025 max.	—	—	—	—	0.015 min.	0.09 max.	0.15 max.	0.20 max.		
低碳鋼 Low Carbon Steel	JIS G3131 SPHD	0.10 max.	0.50 max.	0.030 max.	0.025 max.	0.025 max.	—	—	—	—	—	—	—	—		
	SAE 1010	0.08 ~ 0.13	0.30 ~ 0.60	0.030 max.	0.025 max.	0.025 max.	—	—	—	—	—	—	—	—		
		SAE 1015	0.13 ~ 0.18	0.30 ~ 0.60	0.030 max.	0.025 max.	0.025 max.	—	—	—	—	—	—	—		
	SAE 1020	0.18 ~ 0.23	0.30 ~ 0.60	0.030 max.	0.025 max.	0.025 max.	—	—	—	—	—	—	—	—		
中高碳鋼 High and Medium Carbon Steel	JIS 4051 S35C	0.32 ~ 0.38	0.60 ~ 0.90	0.15 ~ 0.35	0.030 max.	0.035	—	—	—	—	—	—	—	—		
	JIS 4051 S45C	0.42 ~ 0.48	0.60 ~ 0.90	0.15 ~ 0.35	0.030 max.	0.030 max.	—	—	—	—	—	—	—	—		
	JIS 4051 S50C	0.47 ~ 0.53	0.60 ~ 0.90	0.15 ~ 0.35	0.030 max.	0.035 max.	—	—	—	—	—	—	—	—		
	JIS 4051 S55C	0.52 ~ 0.58	0.60 ~ 0.90	0.15 ~ 0.35	0.030 max.	0.035 max.	—	—	—	—	—	—	—	—		
	SAE 1060 JIS G4802 S60C-CSP A	0.55 ~ 0.65	0.60 ~ 0.90	0.15 ~ 0.35	0.030 max.	0.035 max.	0.030 max.	—	0.20 max.	0.20 max.	—	—	—	—		
	SAE 1536	0.30 ~ 0.37	1.20 ~ 1.50	—	0.04 max.	0.05 max.	—	—	—	—	—	—	—	—		
錳鉻合金鋼 Mn-Cr Alloy Steel	EN 10132 16MnCr5	0.14 ~ 0.19	1.00 ~ 1.30	0.04 max.	0.035	0.035	0.80 ~ 1.10	—	—	—	—	—	—	—		
鉻鉬合金鋼 Cr-Mo Alloy Steel	SAE 4130	0.28 ~ 0.33	0.40 ~ 0.60	0.15 ~ 0.35	0.035	0.040	0.80 ~ 1.10	0.15 ~ 0.25	—	—	—	—	—	—		
	JIS G4053 SCM415	0.13 ~ 0.18	0.60 ~ 0.85	0.15 ~ 0.35	0.030 max.	0.030 max.	0.90 ~ 1.20	0.15 ~ 0.30	0.025 max.	—	—	—	—	—		
	JIS G4053 SCM435	0.33 ~ 0.38	0.60 ~ 0.85	0.15 ~ 0.35	0.025 max.	0.025 max.	0.90 ~ 1.20	0.15 ~ 0.30	0.025 max.	—	—	—	—	—		