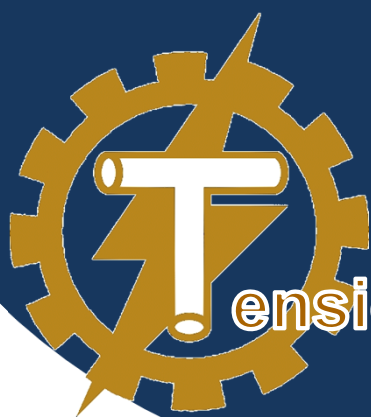


天聲工業

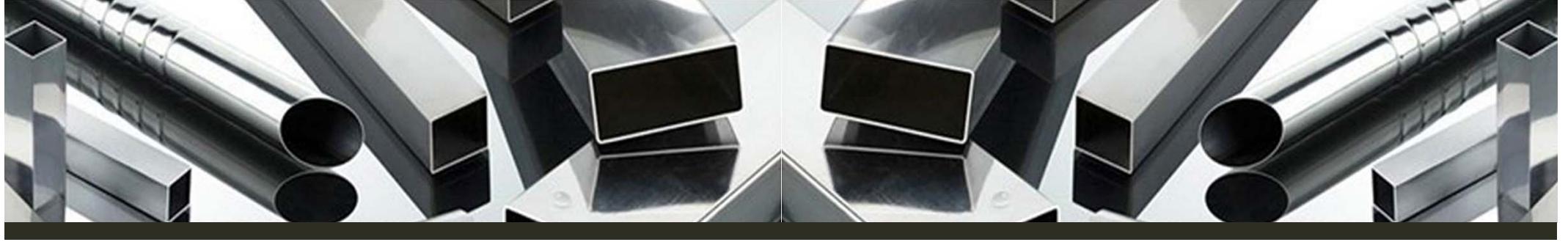
股份有限公司



Tension Steel Industries Co., Ltd.

STEEL TUBE  
PROFESSIONALS

[www.tensionx.com.tw](http://www.tensionx.com.tw)



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## 石油用鋼管產品 Oil Country Tubular Goods/Line Pipe

- API 5L 22
- API 5CT 25

## 一般鋼管 Ordinary Pipe

- BSA/BSB 27
- JIS G 3452 · CNS 6445 / JIS G 3454 · CNS 4626 28
- BS 1387 29
- BS EN 10255 30

## 電線用鋼管 Conduit Pipe

- CNS 2606 31
- ANSI C80.1 / UL6 32

## 標準鋼管 Standard Pipe

- ASTM A252 33
- AS1074 34
- ASTM A53 35

## 結構用鋼管 Structure Pipe

- AS/NZS 1163 37
- CSA G40.20 & G40.21 / ASTM A500 39
- JIS G 3444 · CNS 4435 43
- JIS G 3445 · CNS 4437 44
- JIS G 3466 · CNS 7141 45

## 其他產品 Others

- 鋼捲 · 鋼帶 · 鋼板 Coil, Strip, Sheet and Plate 46

STEEL TUBE PROFESSIONALS  
專業鋼管製造廠

# 經營者的話

## Message from the Chairman



董事長 Chairman

張水圳 CHANG, SHUI-CHUN



## 經營理念 Management Concept



天聲自1973年創業以來，專業經營各式鋼管、鋼捲、鋼板、鋼帶產品，以「優良的品質」、「實惠的價格」、「準確的交期」、以及「良好的售後服務」逐漸贏取客戶的信賴，擴大在國內外市場中的地位。為了確保產品的品質，天聲取得ISO 9001等品質證書，並建構了一套完整的環境、品質管理流程。另外，迄今也獲得許多國際機構認證，如JIS、API、CNS 認證等等。

為滿足時代的需求及變遷，天聲專注於技術的革新及新產品的開發，秉持著「專注求精」的理念，不管是遇到多麼困難的事情，即便要花無數的時間與精力，也要製作出能夠使客戶安心的優質產品。而我們的全體同仁也都為了這個經營理念努力奮鬥著，對我們來說，滿足客戶並為了社會繁榮貢獻一份心力是最有成就感的事情，希望今後也能夠得到您的支持，有機會與您合作。

Tension Steel has been specializing in steel pipes, coils, sheets, plates and strips since its founding in 1973. Over the years we have earned the trust of our customers with high-quality products, reasonable prices, accurate shipment and best after-sales service. To ensure consistent quality of our products, Tension Steel acquired ISO 9001 certification and built a complete system for environment and quality management. Furthermore, we have been certified by JIS, API, CNS, and many other international organizations as well.

Tension Steel has been focusing on technological innovation and product development within our company's philosophy "Focus on refinement". Our core company value lies in achieving customer satisfaction as well as contributing to the prosperity of our society. We are looking forward to have an opportunity to work with you in the near future.



# 公司指南 Company Profile

- \* 負責人：董事長 張水圳 / Chairman : CHANG, SHUI-CHUN
- \* 成立時間：1973年6月 / Founded : June, 1973
- \* 資本額：12億元 / Capital : NT\$1,200,000,000
- \* 月生產數量：約1.7萬噸 / Production Capacity : Approx. 17,000 metric tons/month
- \* 年營業額：45.6億 (2018年度) / Annual Revenue : NT\$4,560,000,000 (YEAR 2018)
- \* 員工人數：200名 / Number of employees : >200

## 2018年營業額 2018 ANNUAL REVENUE

鋼捲、鋼板、鋼帶和其他  
COIL, SHEET, PLATE, STRIP and  
OTHERS

鋼管  
PIPES

36%

64%



### 總公司 Headquarters

地址：104083台北市建國北路二段127號9樓  
Add : 9F, No. 127, Sec 2, Chien-Kuo North Road, Taipei, 104083, Taiwan  
電話 Tel : +886-2-25006206  
傳真 Fax : +886-2-25080398  
外銷業務部 Overseas Sales Dept. : export\_sales@tensionx.com.tw  
Website : <http://www.tensionx.com.tw>



### 新竹倉庫 HsinChu Warehouse

地址：300104新竹市南港街23號  
Add : No. 23, Nangang Street, Xiangshan Dist.,  
Hsinchu City, 300104, Taiwan  
電話 Tel : +886-3-5372167  
傳真 Fax : +886-3-5374165  
土地面積 Site Area : 18,259m<sup>2</sup>  
廠房面積 Floor Space : 11,238m<sup>2</sup>



### 岡山工廠 GangShan Mill

地址：820110高雄市岡山區本工西路23號  
Add : No. 23, Bengong West Road, Gangshan  
Dist., Kaohsiung City, 820110, Taiwan  
電話 Tel : +886-7-6242831  
傳真 Fax : +886-7-6242836  
土地面積 Site Area : 13,168m<sup>2</sup>  
廠房面積 Floor Space : 7,953m<sup>2</sup>



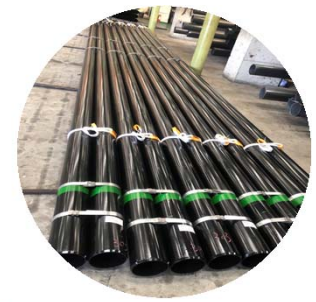
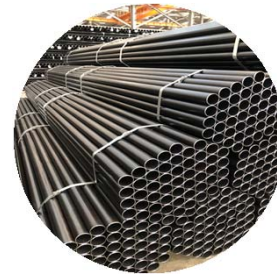
### 路竹工廠 LuZhu Mill

地址：821002高雄市路竹區環球路18號  
Add : No.18, Huanciou Road, Luzhu Dist., Kaohsiung City, 821002, Taiwan  
電話 Tel : +886-7-2621968  
傳真 Fax : +886-7-6951528  
土地面積 Site Area : 94,300m<sup>2</sup>  
廠房面積 Floor Space : 41,388m<sup>2</sup>





# 歷史沿革 Company History



“Tension Electronics Co., Ltd.” founded in Taipei, factory built in Guishan, and Taoyuan.

Hsinchu mill expanded, and HDG production line installed.

New mill built in Gangshan, Kaohsiung and started to develop export business.

Obtained UL6 RMC Certification.

Company's Chinese name modified.

Luzhu mill expanded. Promotes API products for more sizes. All pipe production lines integrated.

A new HDG production line was installed at Gangshan mill and started to develop the market.

成立「天聲電子股份有限公司」於台北，並設立工廠於桃園龜山工業區

建廠於新竹市香山工業區，增設熱浸鍍鋅產線

於高雄市岡山本洲工業區建廠，開始規劃及拓展外銷業務

取得美國 UL6 RMC證書

變更公司名稱為「天聲工業股份有限公司」

於高雄市路竹區建置路竹廠，拓展API產品尺寸並整合所有鋼管產線

於岡山廠增設熱浸鍍鋅產線，規劃外銷至全球



1973

1980

1990

1996

2004

2005

2007

2009

2010

2014

2019

2020

2021

更名為「天聲鋼鐵工業股份有限公司」



取得ISO9001證書及 CNS國家標準證書

取得美國General Motors USA車廠及日本Toyota車廠合格供應商證書



取得美國石油協會認證，並開始外銷API相關產品。



取得日本JIS證書

路竹廠增設新管線、擴增產品尺寸，建置智慧工廠，優化產線製程

“Tension Electronics Co., Ltd.” renamed to “Tension Steel Industries Co., Ltd.”

Obtained ISO 9001 and CNS certifications.

Approved as a qualified supplier by General Motor USA and Toyota Motor Corporation.

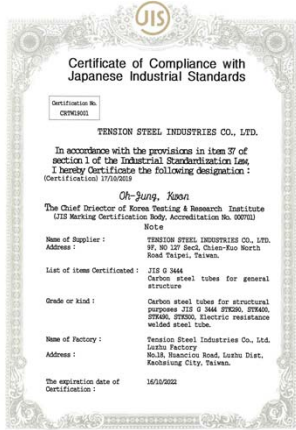
Obtained API Certification and started to provide SCT and 5L products.

Obtained JIS Certification.

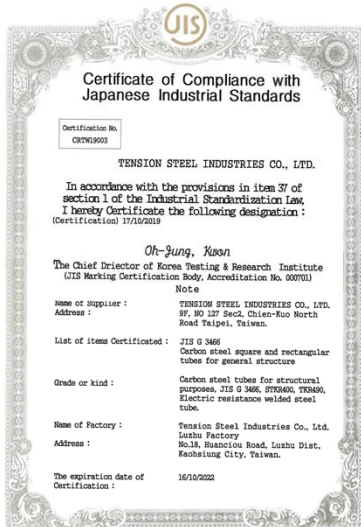
New production line installed at Luzhu mill. Product size range expanded. Smart manufacturing implementation starts.



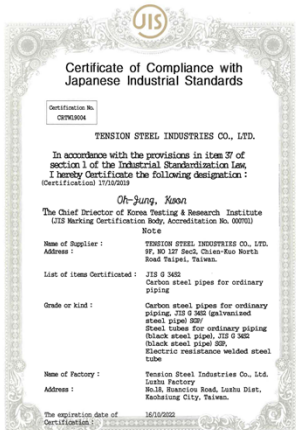
國際認證  
Certification



JIS G 3444



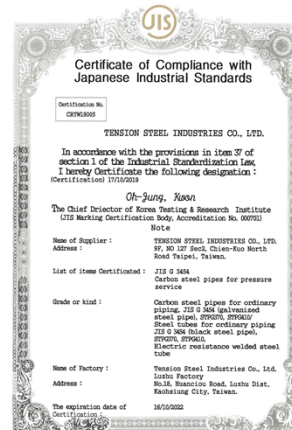
JIS G 3466



JIS G 3452



JIS G 3445



JIS G 3454



API 5CT



API 5L

Certificate of Registration

This is to certify that the  
QUALITY MANAGEMENT SYSTEM

of

Tension Steel Industries Co., Ltd.

No. 16, Huanqui Rd., Luzhu Dist., Kaohsiung City, TAIWAN, R.O.C.

for

Manufacture of Galvanized Steel Pipe Conduit for Electric Wire and Cable, Carbon Steel for General Structures, Carbon Steel for Machine Structures, Carbon Steel for Pressure Service, Carbon Steel for Ordinary Piping and Carbon Steel Square and Rectangular Tubes for General Structures

has been assessed and registered against the provisions of

ISO 9001:2015  
International Standard with

Registration Number: 16QMS8864  
Registration Date: 08 Dec., 2016  
Issue Date: 19 Nov., 2019  
Expiration Date: 07 Dec., 2022  
Cycle Start Date: 08 Dec., 2019  
Certification Approval:



1. This certificate is the property of Universal Certification Service Co., Ltd., 4F, No. 21, Sec. 4, Heping E. Rd., Dajugan District, Taipei City, Taiwan, R.O.C.  
2. The registration information and authenticity of the certificate can be confirmed on our website: www.ucs.com.tw  
3. Registration is subject to the management system being continually maintained to the standard and/or regular surveillance audit. Should surveillance audit find non-conformance requires improvement to be corrected.

登錄證書

此證書授予

天聲工業股份有限公司  
高雄市路竹區環球路18號

其規格如下

電線電纜用鍍鋅鋼管、一般結構用、機械結構用、電力配管用、配管用及一般結構用正方形及矩形之鍍鋅鋼管之製造

之品質管理系統符合以下標準

ISO 9001:2015

驗證稽核已通過並予以登錄

登錄號碼: 16QMS8864  
登錄日期: 2016年12月08日  
發證日期: 2019年11月19日  
失效日期: 2022年12月07日  
驗證稽核日期: 2019年12月08日  
註: 1.



環球國際認證股份有限公司  
UNIVERSAL CERTIFICATION SERVICE CO., LTD.  
1. 此證書為環球國際認證股份有限公司所有，未經本公司同意不得轉讓或複製。  
2. 本證書之登錄資訊及真實性可於本公司網站查詢。  
3. 登錄資訊須維持有效，並接受定期稽核，若未接受稽核或稽核不通過，本證書將失效。





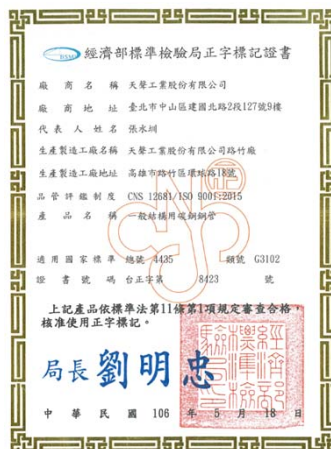
國內認證  
Certification



品質管理  
Quality Assurance



CNS 2606



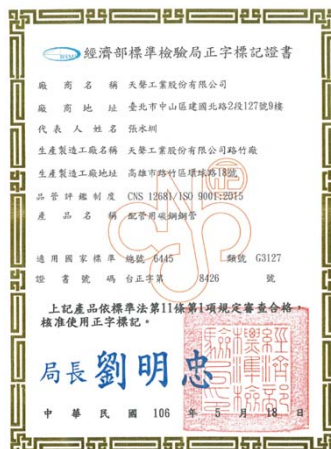
CNS 4435



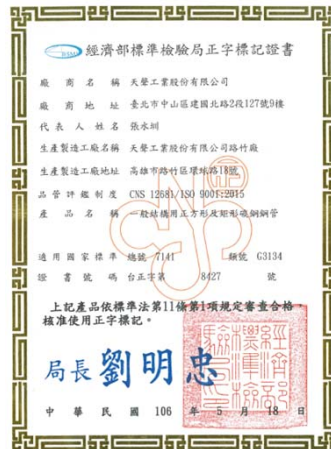
CNS 4626



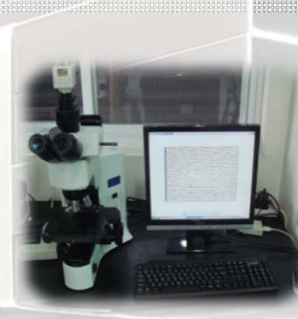
CNS 4437



CNS 6445



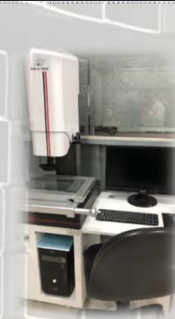
CNS 7141



金屬顯微鏡  
Metallographic  
Microscope



光譜分析儀  
Optical Emission  
Spectrometer



三次元量測儀  
Coordinate-measuring  
Machine



硬度機  
Rockwell Hardness  
Machine



精密砥石切斷機  
Precision Cutting  
Machine



萬能試驗機  
Universal Material  
Tester



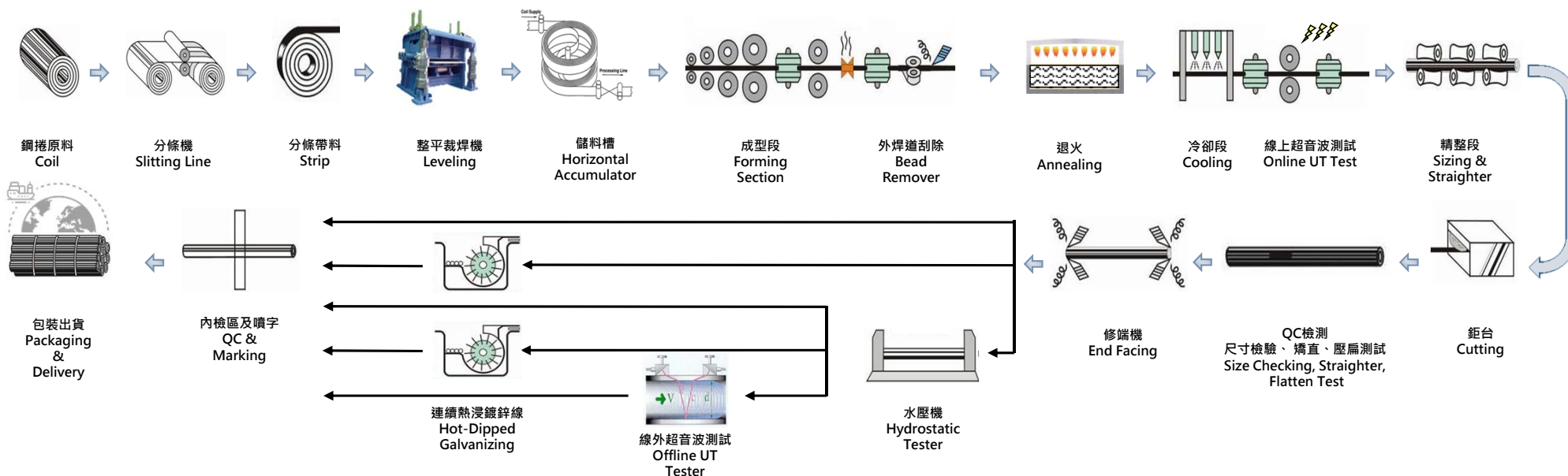
研削研磨機  
Grinding & Polishing  
Machine

藉由原料驗收、製造過程中的各式檢驗以及裝運前的最終檢查來全面管控並確保品質。

Quality assurance consists of raw material inspection, various examinations during manufacturing process and final inspection before delivery.

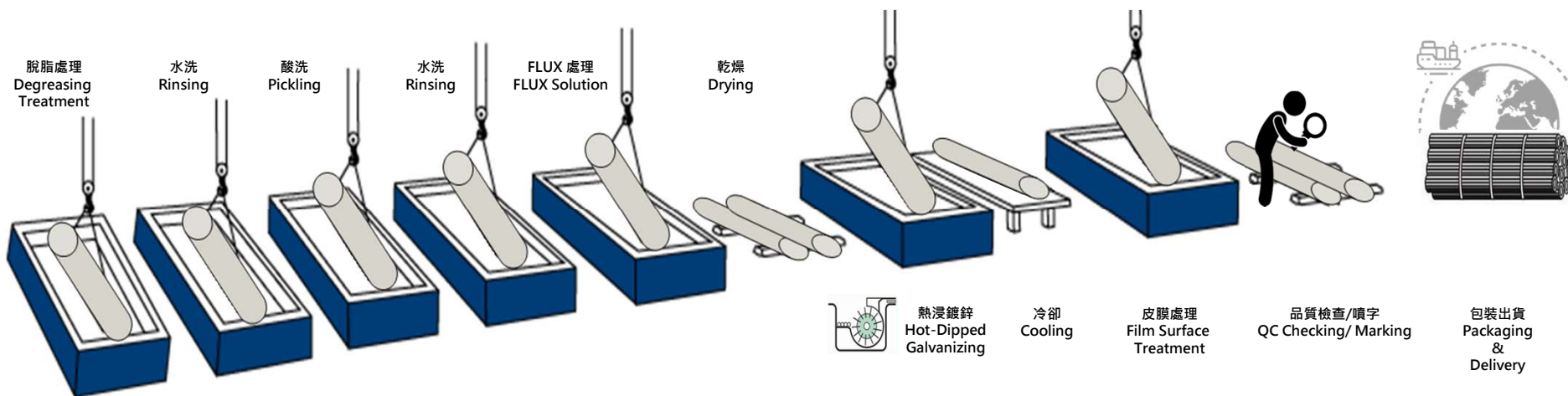


# 生產流程 Manufacturing Flow Process



## 熱浸鍍鋅製程 HOT-DIPPED GALVANIZED PROCESS

\* 實際的生產流程根據產品規範及客戶要求有所變動。  
The actual manufacturing process might differ according to product specifications and customer's special requests.  
\* 退火及線上超音波測試依規範及需求進行實施。  
Annealing and online UT test are conducted according to the required specifications and requirements.



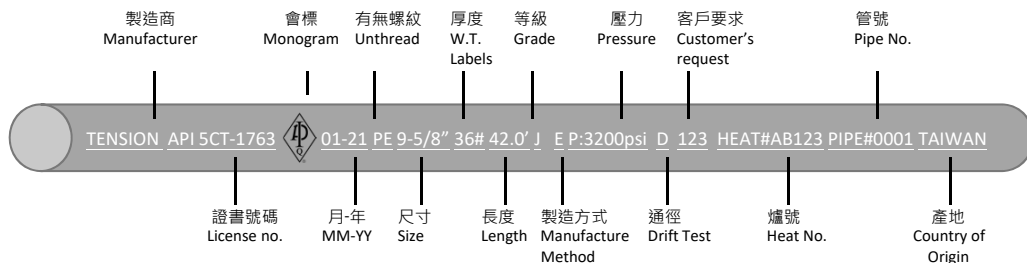




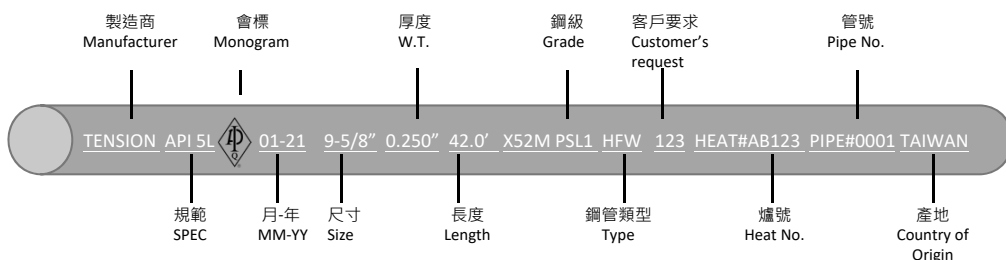
# 標示及包裝方式

## Marking and Packaging

### API 5CT

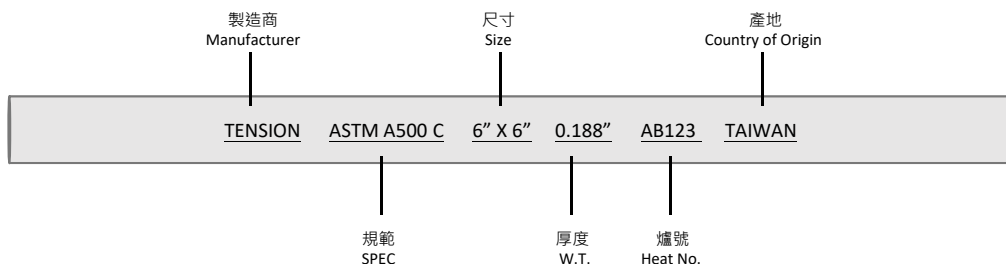


### API 5L



\*API石油用管標記方式根據最新規範所規定。  
API pipe marked according to the latest specification.

### STEEL PIPE



### 標準包裝 Standard Packaging

### 包裝外觀 Appearance of Packaging

六角形 / 圓形  
Hexagonal / Round Form



外徑 19.10mm ~ 254.00mm  
O.D. 3/4 inch ~ 12 inch

長度 ≤ 7M : 至少4條打包帶 Length ≤ 7M : min. 4 Steel Straps  
長度 ≤ 13M : 至少6條打包帶 Length ≤ 13M : min. 6 Steel Straps

鋼帶  
Steel Strap

Ex.



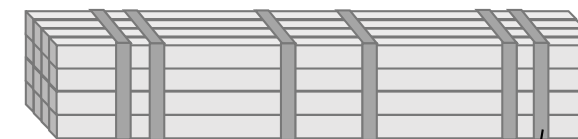
散把裸裝  
Bare in Loose



外徑 > 254.00mm  
O.D. > 10 inch

長度 > 13M Length > 13M

方形/矩形  
Square / Rectangular Form

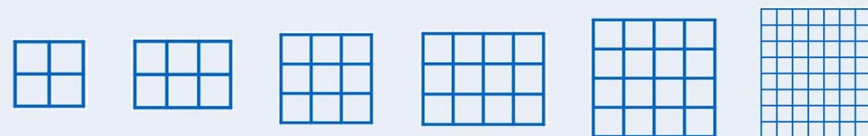


外徑 19.00mm ~ 254.00mm  
O.D. 3/4 inch ~ 10 inch

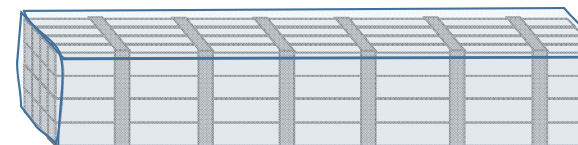
長度 ≤ 7M : 至少4條打包帶 Length ≤ 7M : min. 4 Steel Straps  
長度 ≤ 13M : 至少6條打包帶 Length ≤ 13M : min. 6 Steel Straps

鋼帶  
Steel Strap

Ex.



外包裝  
Wrapping





# 可生產規格及產品用途

## Pipe Specification



種類 Type	規範 Specification	名稱 Description	用途 Application
石油用管 PIPE FOR O&G INDUSTRY	API 5CT	石油用 ( 油井套管和抽油管 ) 焊接 碳鋼鋼管 ERW Carbon Steel Pipe for OCTG, Casing & Tubing	廣泛用於石油和天然氣勘探、開發和生產 Widely used in oil and natural gas exploration, development and production
	API 5L	流氣體輸送用焊接碳鋼鋼管 ERW Carbon Steel Pipe for Line Pipe	可輸送天然氣、水、石油 Natural gas, water and oil transportation
標準管 STANDARD PIPE	ASTM A53/ A53M	配管/結構用碳鋼鋼管 Carbon Steel Pipes for Ordinary Piping and Structure	一般用於輸送蒸汽、水、天然氣和空氣之管 線，另外也可用於結構和壓力用途 Steam, water, gas, air transportation and also can be used in structures and pressure applications
	ASTM A252/ A252M	有縫及無縫打樁管 Welded and Seamless Steel Pipe Piles	適用於承載構件的管樁，或用來形成混凝土 樁的基礎 Pipe piles with steel cylinder as a permanent load-carrying member, or as a shell, to form cast-in-place concrete piles
	ASTM A513/ A513M	電阻焊碳鋼及合金機械用管 Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing	機械用管 Mechanical tubing
	ASTM A1085/ A1085M	冷成型焊接碳鋼中空管 ( HSS ) Cold-Formed Welded Carbon Steel Hollow Structural Sections (HSS)	可應用於焊接或螺栓結構，且不侷限應用在 建築物、橋梁、塔樓、起重機、標誌支撐 桿、離岸生產和鑽井平臺、傾翻防護結構 (ROPS)、墜物保護裝置(FOPS)和遊樂設施等 Mainly used for welded or bolted construction and also utilized in but not limited to the following applications: buildings, bridges, towers, cranes, sign supports and poles, off-shore production and drilling platforms, roll-over protective structures (ROPS), falling object protective structures (FOPS), and amusement rides
	AS 1074	碳鋼鋼管 Carbon Steel Tubes and Tubulars	一般用途 Used in ordinary service
電線用管 CONDUIT	CNS 2606	鋼製電線管 Rigid Steel Conduits	在電力配線中為保護電線而使用的電線管 Protection of electric wires in power distribution
	JIS C 8305		
	ANSI C80.1	電線用鋼管 Electric Rigid Steel Conduits	作為電氣系統中保護電線或電纜所用鋼管 Raceway for wires or cables of an electrical system
	UL 6	電線用鋼管 Electrical Rigid Steel Conduits	作為安裝電線和電纜的金屬管道 Metal raceway for installation of wires and cables

種類 Type	規範 Specification	名稱 Description	用途 Application
壓力配管 PRESSURE USE	BSA / BSB	低壓有縫鋼管 Weld Steel Pipes For Low Pressure Use	應用於低壓環境輸送蒸汽、水、氣體、及液 體等管線配管 Steam, water, gas, air, and liquid transportation in low pressure environments
	JIS 3452	配管用碳鋼鋼管 Carbon Steel Pipes for Ordinary Piping	在低壓下輸送蒸汽、水 ( 公共供水服務設施 除外 )、油、天然氣體、空氣等配管 Steam, water (except public water supply service), oil, gas, air transportation in low pressure environments
	CNS 6445 G3127	壓力配管用碳鋼鋼管 Carbon Steel Pipes for Pressure Service	在溫度350°C以下使用的壓力配管 Transportation at temperatures under 350°C
	JIS 3454		
	CNS 4626 G3111	配管用碳鋼鋼管 Carbon Steel Pipes for Ordinary Piping	在低壓下輸送蒸汽、水、天然氣體、空氣等 配管 Steam, water, gas, air transportation in low pressure environments
	BS 1387		
BS EN 10255			
結構用管 STRUCTURE PIPE	JIS 3444	一般結構用碳鋼鋼管 Carbon Steel Pipes for General Structure	可應用於鋼塔、鷹架、基樁、支柱、防滑坡 鋼樁等土木、建築的結構物 Providing to civil engineering and structure usage, e.g. steel towers, scaffoldings, footing piles, foundation piles, piles for landslide suppression
	CNS 4435 G3102		
	JIS 3445	機械構造用碳鋼鋼管 Carbon Steel Tubes for Machine Structure	應用於機械、汽車、自行車、傢俱、家用電 器和其它機械零件等 Machinery, automobiles, bicycles, furniture, appliances and other machine parts
	CNS 4437 G3103		
	JIS 3466	一般結構用矩形碳鋼鋼管 Carbon Steel Square and Rectangular Pipe for General Structure	土木工程、建築及其他結構用途 Civil engineering, construction, structure use
	CNS 7141 G3134		
	ASTM A500/A500M	一般結構用碳鋼鋼管 Carbon Steel Pipes for General Structure	應用於橋梁和建築物以及一般結構用途 Construction, e.g. bridges
CSA G40.20/G40.21			
AS/NZS 1163	冷彎結構鋼空心型材 Cold-formed structural steel hollow sections	一般結構和工程應用 General structural and engineering applications	

\*規格表外的產品也歡迎向我們公司人員諮詢。

If required specification is absent from the table, please contact us for further assistance.







# API 5L ERW Line Pipe

流氣體輸送用焊接碳鋼鋼管



NPS 英制代號	O.D. 外徑 inch	O.D. 外徑 mm	W.T. 厚度 inch	W.T. 厚度 mm	PE Weight 英制單重 lb/ft	PE Weight 公制單重 kg/m	Identification* 尺寸識別*	Sch. No. 管厚號	DN 公制代號				
8	8.625	219.1	0.188	4.78	16.96	25.26	...	...	200				
			0.203	5.16	18.28	27.22	...	...					
			0.219	5.56	19.68	29.28	...	...					
			0.250	6.35	22.38	33.32	...	20					
			0.277	7.04	24.72	36.82	...	30					
			0.312	7.92	27.73	41.25	...	...					
			0.322	8.18	28.58	42.55	STD	40					
			0.344	8.74	30.45	45.34	...	...					
			0.375	9.53	33.07	49.25	...	...					
			0.406	10.31	35.67	53.08	...	60					
			0.438	11.13	38.33	57.08	...	...					
			0.500	12.70	43.43	64.64	XS	80					
			0.562	14.27	48.44	72.08	...	...					
			10	10.750	273.0	0.165	4.19	18.67		27.78	...	...	250
0.188	4.78	21.23				31.62	...	...					
0.203	5.16	22.89				34.08	...	...					
0.219	5.56	24.65				36.67	...	...					
0.250	6.35	28.06				41.76	...	20					
0.279	7.09	31.23				46.49	...	...					
0.307	7.80	34.27				51.01	...	30					
0.344	8.74	38.27				56.96	...	...					
0.365	9.27	40.52				60.29	STD	40					
0.438	11.13	48.28				71.87	...	...					
0.500	12.70	54.79				81.52	XS	60					
0.562	14.27	61.21				91.05	...	...					
12	12.750	323.8				0.203	5.16	27.23	40.55	...	...	300	
						0.219	5.56	29.34	43.63	...	...		
			0.250	6.35	33.41	49.71	...	20					
			0.281	7.14	37.46	55.76	...	...					
			0.312	7.92	41.48	61.69	...	...					
			0.330	8.38	43.81	65.18	...	30					
			0.344	8.74	45.62	67.90	...	...					
			0.375	9.53	49.61	73.86	STD	...					
			0.406	10.31	53.57	79.70	...	40					
			0.438	11.13	57.65	85.82	...	...					
			0.500	12.70	65.48	97.43	XS	...					
			0.562	14.27	73.22	108.92	...	60					
			0.625	15.88	81.01	120.58	...	...					
			14	14.000	355.6	0.203	5.16	29.94	44.59	...	...		350
0.210	5.33	30.96				46.04	...	...					
0.219	5.56	32.26				47.99	...	...					
0.250	6.35	36.75				54.69	...	10					
0.281	7.14	41.21				61.35	...	...					
0.312	7.92	45.65				67.90	...	20					
0.344	8.74	50.22				74.76	...	...					

\* STD- standard XS- extra-strong XSS- double extra strong

\*厚度公差 W.T. Tolerance :  $\leq 5\text{mm} \pm 0.5\text{mm}$  ;  $> 5 \sim 15\text{mm} \pm 0.1t$  ;  $\geq 15\text{mm} \pm 1.5\text{mm}$

\*外徑公差 O.D. Tolerance :  $\geq 2" \sim 6" \pm 0.75\%$  ;  $> 6" \sim 20" \pm 0.75\%$  with max.  $\pm 3.2\text{mm}$

\*重量公差 Mass Tolerance :  $+10\%$  /  $-3.5\%$

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。

If required size is absent from the table, please contact us for further assistance.

NPS 英制代號	O.D. 外徑 inch	O.D. 外徑 mm	W.T. 厚度 inch	W.T. 厚度 mm	PE Weight 英制單重 lb/ft	PE Weight 公制單重 kg/m	Identification* 尺寸識別*	Sch. No. 管厚號	DN 公制代號
14	14.000	355.6	0.375	9.53	54.62	81.33	STD	30	350
			0.406	10.31	59.00	87.79	...	...	
			0.438	11.13	63.50	94.55	...	40	
			0.469	11.91	67.84	100.94	...	...	
			0.500	12.70	72.16	107.39	XS	...	
			0.562	14.27	80.73	120.11	...	...	
			0.594	15.09	85.13	126.71	...	60	
			0.625	15.88	89.36	133.04	...	...	
			0.250	6.35	42.09	62.64	...	10	
			16	16.000	406.4	0.281	7.14	47.22	
0.312	7.92	52.32				77.83	...	20	
0.344	8.74	57.57				85.71	...	...	
0.375	9.53	62.64				93.27	STD	30	
0.406	10.31	67.68				100.70	...	...	
0.438	11.13	72.86				108.49	...	...	
0.469	11.91	77.87				115.86	...	...	
0.500	12.70	82.85				123.30	XS	40	
0.562	14.27	92.75				137.99	...	...	
0.625	15.88	102.72				152.93	...	...	
18	18.000	457.0	0.656	16.66	107.60	160.12	...	60	450
			0.250	6.35	47.44	70.57	...	10	
			0.281	7.14	53.23	79.21	...	...	
			0.312	7.92	58.99	87.71	...	20	
			0.344	8.74	64.93	96.61	...	...	
			0.375	9.53	70.65	105.16	STD	...	
			0.406	10.31	76.36	113.57	...	...	
			0.438	11.13	82.23	122.38	...	30	
			0.469	11.91	87.89	130.72	...	...	
			0.500	12.70	93.54	139.15	XS	...	
			0.562	14.27	104.76	155.80	...	40	
			0.625	15.88	116.09	172.74	...	...	
			0.688	17.48	127.32	189.46	...	...	
			0.750	19.05	138.30	205.74	...	60	
20	20.000	508.0	0.250	6.35	52.78	78.55	...	10	500
			0.281	7.14	59.23	88.19	...	...	
			0.312	7.92	65.66	97.67	...	...	
			0.344	8.74	72.28	107.61	...	...	
			0.375	9.53	78.67	117.15	STD	20	
			0.406	10.31	85.04	126.54	...	...	
			0.438	11.13	91.59	136.37	...	...	
			0.469	11.91	97.92	145.70	...	...	
			0.500	12.70	104.23	155.12	XS	30	
			0.562	14.27	116.78	173.74	...	...	
			0.594	15.09	123.23	183.42	...	40	
			0.625	15.88	129.45	192.72	...	...	
			0.688	17.48	142.03	211.44	...	...	
			0.750	19.05	154.34	229.70	...	...	

\* STD- standard XS- extra-strong XSS- double extra strong

# API 5CT ERW Tubing

石油用 ( 油井用油管 ) 焊接碳鋼鋼管

外徑		厚度			單位重量	
O.D.		W.T.			Plain End Weight	
inch	mm	labels	inch	mm	lb/ft	kg/m
2-3/8	60.32	4.00	0.167	4.24	3.94	5.86
		4.60	0.190	4.83	4.44	6.61
		5.80	0.254	6.45	5.76	8.57
2-7/8	73.02	6.40	0.217	5.51	6.17	9.17
		7.80	0.276	7.01	7.67	11.41
		8.60	0.308	7.82	8.45	12.57
3-1/2	88.90	7.70	0.216	5.49	7.58	11.29
		9.20	0.254	6.45	8.81	13.12
		10.20	0.289	7.34	9.92	14.76
4-1/2	114.30	12.60	0.271	6.88	12.25	18.23
		15.20	0.337	8.56	15.00	22.32

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。  
If required size is absent from the table, please feel free to contact us for further assistance.



# API 5CT ERW Casing

石油用 ( 油井用套管 ) 焊接碳鋼鋼管

外徑		厚度			單位重量		外徑		厚度			單位重量	
O.D.		W.T.			PE Weight		O.D.		W.T.			PE Weight	
inch	mm	labels	inch	mm	lb/ft	kg/m	inch	mm	labels	inch	mm	lb/ft	kg/m
4-1/2	114.30	9.50	0.205	5.21	9.41	14.02	9-5/8	244.48	32.30	0.312	7.92	31.06	46.20
		10.50	0.224	5.69	10.24	15.24			36.00	0.352	8.94	34.89	51.93
		11.60	0.250	6.35	11.36	16.91			40.00	0.395	10.03	38.97	57.99
5-1/2	139.70	13.50	0.290	7.37	13.05	19.44	10-3/4	273.05	43.50	0.435	11.05	42.73	63.61
		15.10	0.337	8.56	15.00	22.32			47.00	0.472	11.99	46.18	68.75
		14.00	0.244	6.20	13.71	20.41			53.50	0.545	13.84	52.90	78.72
6-5/8	168.28	15.50	0.275	6.98	15.36	22.85	13-3/8	339.72	58.40	0.595	15.11	57.44	85.47
		17.00	0.304	7.72	16.89	25.13			32.75	0.279	7.09	31.23	46.50
		20.00	0.361	9.17	19.83	29.52			40.50	0.350	8.89	38.91	57.91
7	177.80	20.00	0.288	7.32	19.51	29.06	16	406.40	45.50	0.400	10.16	44.26	65.87
		24.00	0.352	8.94	23.60	35.13			51.00	0.450	11.43	49.55	73.75
		28.00	0.417	10.59	27.67	41.18			55.50	0.495	12.57	54.26	80.75
8-5/8	219.08	17.00	0.231	5.87	16.72	24.89	18-5/8	473.08	60.70	0.545	13.84	59.45	88.47
		20.00	0.272	6.91	19.56	29.12			48.00	0.330	8.38	46.02	68.48
		23.00	0.317	8.05	22.65	33.70			54.50	0.380	9.65	52.79	78.55
8-5/8	219.08	26.00	0.362	9.19	25.69	38.21	20	508.00	61.00	0.430	10.92	59.50	88.55
		29.00	0.408	10.36	28.75	42.78			68.00	0.480	12.19	66.17	98.46
		32.00	0.453	11.51	31.70	47.20			72.00	0.514	13.06	70.67	105.21
8-5/8	219.08	35.00	0.498	12.65	34.61	51.52	20	508.00	65.00	0.375	9.53	62.64	93.27
		24.00	0.264	6.71	23.60	35.14			75.00	0.438	11.13	72.86	108.49
		28.00	0.304	7.72	27.04	40.24			84.00	0.495	12.57	82.05	122.09
8-5/8	219.08	32.00	0.352	8.94	31.13	46.33	20	508.00	109.00	0.656	16.66	107.60	160.13
		36.00	0.400	10.16	35.17	52.35			87.50	0.435	11.05	84.59	125.91
		40.00	0.450	11.43	39.33	58.53			94.00	0.438	11.13	91.59	136.37
8-5/8	219.08	44.00	0.500	12.70	43.43	64.64	20	508.00	106.50	0.500	12.70	104.23	155.13
		49.00	0.557	14.15	48.04	71.51			133.00	0.635	16.13	131.45	195.66

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。  
If required size is absent from the table, please contact us for further assistance.



# BSA & BSB

Welded Steel Pipes for Low Pressure Use  
(Hot-Rolled Steel & Hot-Dipped Galvanized Steel Pipe)

BSA 黑鋼管及熱浸鍍鋅鋼管 (台灣區鋼鐵工業公會鋼管小組規範)

標稱尺寸 Nominal Size	外徑 O.D.			厚度 W.T.
	最大值 Max.	標準值 Standard	最小值 Min.	
inch	mm	mm	mm	mm
1/2	21.40	21.20	21.00	1.90
3/4	26.90	26.60	26.40	2.10
1	33.80	33.50	33.20	2.45
1 1/4	42.50	42.20	41.90	2.45
1 1/2	48.40	48.10	47.80	2.60
2	60.20	59.90	59.60	2.60
2 1/2	76.00	75.60	75.20	3.00
3	88.70	88.30	87.90	3.00
3 1/2	101.20	100.70	100.30	3.25
4	113.90	113.40	113.00	3.25
5	140.10	139.50	138.90	3.60
6	165.50	164.90	164.40	3.60
8	217.00	216.10	215.30	4.50

BSB 黑鋼管及熱浸鍍鋅鋼管 (台灣區鋼鐵工業公會鋼管小組規範)

標稱尺寸 Nominal Size	外徑 O.D.			厚度 W.T.
	最大值 Max.	標準值 Standard	最小值 Min.	
inch	mm	mm	mm	mm
1/2	21.70	21.40	21.10	2.60
3/4	27.20	26.90	26.60	2.90
1	34.20	33.80	33.40	3.25
1 1/4	42.90	42.50	42.10	3.60
1 1/2	48.80	48.40	48.00	4.10
2	60.80	60.30	59.80	4.10
2 1/2	76.60	76.00	75.40	4.50
3	89.50	88.80	88.10	4.50
3 1/2	102.10	101.20	100.40	4.50
4	114.90	114.10	113.30	4.50
5	140.60	139.60	138.70	4.50
6	166.10	165.10	164.10	4.50
8	218.50	216.30	214.10	6.00

\*厚度公差 W.T. Tolerance : +10% / -8%

\*水壓試驗 Hydro Test : 鋼管經50kg/cm<sup>2</sup>之水壓試驗, 無洩漏或其他缺陷  
Hydrostatic test pressures 50kg/cm<sup>2</sup> without leakage or other defects

# JIS G 3452 / CNS 6445 G3127

Carbon Steel Pipes for Ordinary Piping

配管用碳鋼鋼管

可供應熱浸鍍鋅鋼管  
Hot-dipped galvanized is available

標稱尺寸 Nominal Size		外徑 O.D.			厚度 W.T.
A	B	最大值 Max. mm	標準值 Standard mm	最小值 Min. mm	
15	1/2	22.2	21.7	21.2	2.8
20	3/4	27.7	27.2	26.7	2.8
25	1	34.5	34.0	33.5	3.2
32	1 1/4	43.2	42.7	42.2	3.5
40	1 1/2	49.1	48.6	48.1	3.5
50	2	61.1	60.5	59.9	3.8
65	2 1/2	77.1	76.3	75.5	4.2
80	3	90.0	89.1	88.2	4.2
100	4	115.4	114.3	113.2	4.5
125	5	141.2	139.8	138.4	4.5
150	6	166.8	165.2	163.6	5.0
200	8	218.0	216.3	214.6	5.8
350	14	358.4	355.6	352.8	7.9
400	16	409.7	406.4	403.1	7.9
450	18	460.9	457.2	453.5	7.9
500	20	512.1	508.0	503.9	7.9

\*厚度公差 W.T. Tolerance : +未規定 Unspecified / -12.5%

\*水壓試驗 Hydro Test : 25kg/cm<sup>2</sup>

# JIS G 3454 / CNS 4626 G3111

Carbon Steel Pipes for Pressure Service

壓力配管用碳鋼鋼管

可供應熱浸鍍鋅鋼管  
Hot-dipped galvanized is available  
原料等級 STPG 370 / 410 皆可供應  
Material available for Grade STPG 370 / 410

標稱尺寸 Nominal Size		外徑 O.D. mm	標準厚度 Standard Wall Thickness					
A	B		Sch10 mm	Sch20 mm	Sch30 mm	Sch40 mm	Sch60 mm	Sch80 mm
15	1/2	21.7	-	-	-	2.8	3.2	3.7
20	3/4	27.2	-	-	-	2.9	3.4	3.9
25	1	34.0	-	-	-	3.4	3.9	4.5
32	1 1/4	42.7	-	-	-	3.6	4.5	4.9
40	1 1/2	48.6	-	-	-	3.7	4.5	5.1
50	2	60.5	-	3.2	-	3.9	4.9	5.5
65	2 1/2	76.3	-	4.5	-	5.2	6.0	7.0
80	3	89.1	-	4.5	-	5.5	6.6	7.6
100	4	114.3	-	4.9	-	6.0	7.1	8.6
125	5	139.8	-	5.1	-	6.6	8.1	9.5
150	6	165.2	-	5.5	-	7.1	9.3	11.0
200	8	216.3	-	6.4	7.0	8.2	10.3	12.7
350	14	355.6	6.4	7.9	9.5	11.1	15.1	19.0
400	16	406.4	6.4	7.9	9.5	12.7	16.7	21.4
450	18	457.2	6.4	7.9	11.1	14.3	19.0	23.8
500	20	508.0	6.4	9.5	12.7	15.1	20.6	26.2

\*外徑公差 O.D. Tolerance : ≤25A ±0.3mm ; ≥32A ±0.8%

\*厚度公差 W.T. Tolerance : <3mm ±0.3mm ; ≥3mm ±10%

# BS 1387 - Screwed and Socketed Steel Tubes and Tubulars and for Plain End Steel Tubes Suitable for Welding or Screwing to BS 21 Pipe Threads

焊接平口、絞牙鋼管

標稱尺寸		等級 Grade	外徑 O.D.		厚度 W.T.	黑管單位重量 Mass	
Nominal Size			最大值 Max.	最小值 Min.		平頭 Plain End	牙頭 Screwed
mm	inch		mm	mm		kg/m	kg/m
15	1/2	輕 Light	21.4	21.0	2.00	0.947	0.956
		中 Medium	21.7	21.1	2.60	1.210	1.220
		重 Heavy	21.7	21.1	3.20	1.440	1.450
20	3/4	輕 Light	26.9	26.4	2.30	1.380	1.390
		中 Medium	27.2	26.6	2.60	1.560	1.570
		重 Heavy	27.2	26.6	3.20	1.870	1.880
25	1	輕 Light	33.8	33.2	2.60	1.980	2.000
		中 Medium	34.2	33.4	3.20	2.410	2.430
		重 Heavy	34.2	33.4	4.00	2.940	2.960
32	1 1/4	輕 Light	42.5	41.9	2.60	2.540	2.570
		中 Medium	42.9	42.1	3.20	3.100	3.130
		重 Heavy	42.9	42.1	4.00	3.800	3.830
40	1 1/2	輕 Light	48.4	47.8	2.90	3.230	3.270
		中 Medium	48.8	48.0	3.20	3.570	3.610
		重 Heavy	48.8	48.0	4.00	4.380	4.420
50	2	輕 Light	60.2	59.6	2.90	4.080	4.150
		中 Medium	60.8	59.8	3.60	5.030	5.100
		重 Heavy	60.8	59.8	4.50	6.190	6.260
65	2 1/2	輕 Light	76.0	75.2	3.20	5.710	5.830
		中 Medium	76.6	75.4	3.60	6.430	6.550
		重 Heavy	76.6	75.4	4.50	7.930	8.050
80	3	輕 Light	88.7	87.9	3.20	6.720	6.890
		中 Medium	89.5	88.1	4.00	8.370	8.540
		重 Heavy	89.5	88.1	5.00	10.300	10.500
100	4	輕 Light	113.9	113.0	3.60	9.750	10.000
		中 Medium	114.9	113.3	4.50	12.200	12.500
		重 Heavy	114.9	113.3	5.40	14.500	14.800
125	5	中 Medium	140.6	138.7	5.00	16.600	17.100
		重 Heavy	140.6	138.7	5.40	17.900	18.400
150	6	中 Medium	166.1	164.1	5.00	19.700	20.300
		重 Heavy	166.1	164.1	5.40	21.300	21.900

\*厚度公差 W.T. Tolerance : 輕級 Light Grade -8% ; 中、重級 Medium and Heavy Grade -10%

\*重量公差 Weight Tolerance : 規範單位重量 +10% / -8%

\*長度公差 Length Tolerance : 標準長度 Mill Length [6.4M] +150mm / -0mm

# BS EN 10255 – Non-alloy Steel Tubes Suitable for Welding and Threading

非合金鋼焊接平口、絞牙鋼管

\*可供應熱浸鍍鋅鋼管  
Hot-dipped galvanized available

標稱尺寸		等級 Grade	外徑 O.D.		厚度 W.T.	單位重量 Mass	
Nominal Size			最小值 Min.	最大值 Max.		平頭 Plain End	牙頭 Screwed
mm	DN		mm	mm		kg/m	kg/m
21.3	15	L	21.0	21.7	2.3	1.08	1.09
		M	21.0	21.8	2.6	1.21	1.22
		H	21.0	21.8	3.2	1.44	1.45
26.9	20	L	26.4	27.1	2.3	1.40	1.41
		M	26.5	27.3	2.6	1.56	1.57
33.7	25	H	26.5	27.3	3.2	1.87	1.88
		L	33.2	34.0	2.9	2.20	2.22
42.4	32	M	33.3	34.2	3.2	2.41	2.43
		H	33.3	34.2	4.0	2.93	2.95
48.3	40	L	41.9	42.7	2.9	2.82	2.85
		M	42.0	42.9	3.2	3.10	3.13
60.3	50	H	42.0	42.9	4.0	3.79	3.82
		L	47.8	48.6	2.9	3.25	3.29
76.1	65	M	47.9	48.8	3.2	3.56	3.60
		H	47.9	48.8	4.0	4.37	4.41
88.9	80	L	59.6	60.7	3.2	4.51	4.58
		M	59.7	60.8	3.6	5.03	5.10
114.3	100	H	59.7	60.8	4.5	6.19	6.26
		L	75.2	76.0	3.2	5.75	5.87
139.7	125	M	75.3	76.6	3.6	6.42	6.54
		H	75.3	76.6	4.5	7.93	8.05
165.1	150	L	87.9	88.7	3.2	6.76	6.93
		M	88.0	89.5	4.0	8.36	8.53
		H	88.0	89.5	5.0	10.30	10.50
		L	113.0	113.9	3.6	9.83	10.10
		M	113.1	115.0	4.5	12.20	12.50
		H	113.1	115.0	5.4	14.50	14.80
		L	138.5	140.8	4.5	15.00	15.50
		M	138.5	140.8	5.0	16.60	17.10
		H	138.5	140.8	5.4	17.90	18.40
		L	163.9	166.5	4.5	17.80	18.40
		M	163.9	166.5	5.0	19.80	20.40
		H	163.9	166.5	5.4	21.30	21.90

\*厚度公差 W.T. Tolerance : ±10%

\*重量公差 Weight Tolerance : ±7.5%

\*若有L1&L2的等級要求，請向我們公司人員諮詢。 If L1 and L2 grade is required, please contact us for further assistance.

# CNS 2606 C4060 (與JIS C 8305同等)

## Rigid Steel Conduit

### 厚鋼電線管 Thick Rigid Steel Conduit Tubes

可供應熱浸鍍鋅鋼管  
Hot-dipped galvanized is available

標稱尺寸 Nominal Size	外徑 O.D.	外徑公差	厚度 W.T.	內徑 I.D.	單位重量 Plain End Weight
		O.D. Tolerance			
	mm	mm	Mm	mm	kg/m
G16	21.0	+/-0.3	2.3	16.4	1.1
G22	26.5	+/-0.3	2.3	21.9	1.4
G28	33.3	+/-0.3	2.5	28.3	1.9
G36	41.9	+/-0.3	2.5	36.9	2.4
G42	47.8	+/-0.3	2.5	42.8	2.8
G54	59.6	+/-0.3	2.8	54.0	3.9
G70	75.2	+/-0.3	2.8	69.6	5.0
G82	87.9	+/-0.3	2.8	82.3	5.9
G92	100.7	+/-0.4	3.5	93.7	8.4
G104	113.4	+/-0.4	3.5	106.4	9.5

\*重量公差 Mass Tolerance : +未規定 Unspecified / -7%

\*外徑25.4mm (含)以上一律採內焊道刮除 Remove inner weld bead for O.D. size above 1" (incl.)

### 無螺紋電線用鋼管：俗稱EMT電線管 Threadless Rigid Steel Conduit Tubes

標稱尺寸 Nominal Size	外徑 O.D.	外徑公差	厚度 W.T.	內徑 I.D.	單位重量 Plain End Weight
		O.D. Tolerance			
	mm	mm	mm	mm	kg/m
E19	19.1	+/-0.15	1.2	16.7	0.5
E25	25.4	+/-0.15	1.2	23.0	0.7
E31	31.8	+/-0.15	1.4	29.0	1.1
E39	38.1	+/-0.15	1.4	35.3	1.3
E51	50.8	+/-0.15	1.4	48.0	1.7
E63	63.5	+/-0.15	1.6	60.3	2.4
E75	76.2	+/-0.25	1.8	72.6	3.3

\*JIS C 8305 日本工業規格電線用鋼管與本規格近似 Similar with Japanese Industrial Standard JIS C 8305 Rigid steel conduits

\*重量公差 Mass Tolerance : +未規定 Unspecified / -7%

### 薄鋼電線用鋼管 Thin Rigid Steel Conduit Tubes

標稱尺寸 Nominal Size	外徑 O.D.	外徑公差	厚度 W.T.	內徑 I.D.	單位重量 Plain End Weight
		O.D. Tolerance			
	mm	mm	mm	mm	kg/m
C19	19.1	+/-0.2	1.6	15.9	0.7
C25	25.4	+/-0.2	1.6	22.2	0.9
C31	31.8	+/-0.2	1.6	28.6	1.2
C39	38.1	+/-0.2	1.6	34.9	1.4
C51	50.8	+/-0.2	1.6	47.6	1.9
C63	63.5	+/-0.35	2.0	59.5	3.0
C75	76.2	+/-0.35	2.0	72.2	3.7

\*重量公差 Mass Tolerance : +未規定 Unspecified / -7%

\*焊道公差 Bead Height Tolerance : <1mm

# ANSI C80.1

## Rigid Steel Conduit Tubes; Zinc Coated

### 電線用鋼管; 鍍鋅

標稱尺寸 Nominal Size		外徑 O.D.		壁厚 W.T.	
DN	NPS	inch	mm	inch	mm
16.0	1/2	0.8	21.3	0.1	2.6
21.0	3/4	1.1	26.7	0.1	2.7
27.0	1.0	1.3	33.4	0.1	3.2
35.0	1.3	1.7	42.2	0.1	3.4
41.0	1.5	1.9	48.3	0.1	3.5
53.0	2.0	2.4	60.3	0.1	3.7
63.0	2.5	2.9	73.0	0.2	4.9
78.0	3.0	3.5	88.9	0.2	5.2
103.0	4.0	4.5	114.3	0.2	5.7
129.0	5.0	5.6	141.3	0.2	6.2
155.0	6.0	6.6	168.3	0.3	6.8

\*厚度公差 W.T. Tolerance : +未規定 Unspecified / -12.5%

\*外徑公差 O.D. Tolerance : 1/2"~2" ±0.38mm ; 2-1/2"~4" ±0.64mm ; 5"~6" ±1%

\*長度公差 Length Tolerance : ±6.35mm

# UL6

## Electrical Rigid Metal Conduit-Steel

### 電線用鋼管

標稱尺寸		外徑 O.D.			厚度 W.T.	10支管附接頭之最小重量 Min. Weight of Ten Unit Lengths with Couplings Attached				直管長度					
Nominal Size	最大 Max.	標準值 Standard		最小 Min.		螺紋裸管 Bare Threaded		鍍鋅成品管 Finished Zinc Coated		Length of Straight Conduit					
		mm	inch		mm	inch	mm	inch	kg	lbs	kg	lbs	mm	ft. & inch	
16	1/2	21.72	0.855	21.34	0.840	20.96	0.825	2.64	0.104	34.2	75.4	35.8	79.0	3030	9 ~ 11-1/4
21	3/4	27.05	1.065	26.67	1.050	26.29	1.035	2.72	0.107	45.5	100.4	47.6	105.0	3030	9 ~ 11-1/4
27	1	33.78	1.330	33.40	1.315	33.02	1.300	3.20	0.126	66.8	147.2	69.4	153.0	3025	9 ~ 11
35	1 1/4	42.54	1.675	42.16	1.660	41.78	1.645	3.38	0.133	87.8	193.5	91.2	201.0	3025	9 ~ 11
41	1 1/2	48.64	1.915	48.26	1.900	47.88	1.885	3.51	0.138	109.0	240.4	112.9	249.0	3025	9 ~ 11
53	2	60.93	2.399	60.33	2.375	59.73	2.351	3.71	0.146	145.6	321.1	150.6	332.0	3025	9 ~ 11
63	2 1/2	73.76	2.904	73.03	2.875	72.30	2.846	4.90	0.193	233.1	513.9	239.0	527.0	3010	9 ~ 10-1/2
78	3	89.79	3.535	88.90	3.500	88.01	3.465	5.21	0.205	302.4	666.6	309.6	682.0	3010	9 ~ 10-1/2
91	3 1/2	102.62	4.040	101.60	4.000	100.58	3.960	5.46	0.215	368.6	812.6	376.9	831.0	3005	9 ~ 10-1/4
103	4	115.44	4.545	114.30	4.500	113.16	4.455	5.72	0.225	431.6	951.6	441.0	972.3	3005	9 ~ 10-1/4
129	5	142.71	5.619	141.30	5.563	139.89	5.507	6.22	0.245	584.2	1,288.0	595.8	1,313.6	2995	9 ~ 10
155	6	169.96	6.691	168.28	6.625	166.60	6.559	6.76	0.266	777.8	1,714.7	791.7	1,745.3	2995	9 ~ 10

\*外徑公差 O.D. Tolerance : 1/2"~1-1/2" ±0.38mm ; 2"~6" ±1%

\*長度公差 Length Tolerance : ±6.35mm

\*焊道公差 Bead Height Tolerance : 1/2"~2" <0.38mm ; 2-1/2"~6" <0.51mm



# ASTM A252 Welded Steel Pipe Piles

## 有縫打樁管

外徑 O.D.		厚度 W.T.		單位重量 Plain End Weight		外徑 O.D.		厚度 W.T.		單位重量 Plain End Weight	
inch	mm	inch	mm	lb/ft	kg/m	inch	mm	inch	mm	lb/ft	kg/m
8 5/8	219.1	0.172	4.37	15.54	23.14	14	355.6	0.203	5.16	29.94	44.59
		0.188	4.78	16.96	25.26			0.219	5.56	32.26	47.99
		0.203	5.16	18.28	27.22			0.230	5.84	33.86	50.37
		0.219	5.56	19.68	29.28			0.250	6.35	36.75	54.69
		0.250	6.35	22.38	33.32			0.281	7.14	41.21	61.35
		0.277	7.04	24.72	36.82			0.312	7.92	45.65	67.90
		0.312	7.92	27.73	41.25			0.344	8.74	50.22	74.76
		0.322	8.18	28.58	42.55			0.375	9.53	54.62	81.33
		0.344	8.74	30.45	45.34			0.438	11.13	63.50	94.55
		0.375	9.53	33.07	49.25			0.469	11.91	67.84	100.94
		0.438	11.13	38.33	57.08			0.500	12.70	72.16	107.39
		0.500	12.70	43.43	64.64			0.250	6.35	42.09	62.64
10 3/4	273.1	0.164	4.17	18.56	27.66	16	406.4	0.281	7.14	47.22	70.30
		0.172	4.37	19.45	28.96			0.312	7.92	52.32	77.83
		0.179	4.55	20.23	30.13			0.344	8.74	57.57	85.71
		0.188	4.78	21.23	31.63			0.375	9.53	62.64	93.27
		0.203	5.16	22.89	34.09			0.438	11.13	72.86	108.49
		0.219	5.56	24.65	36.68			0.469	11.91	77.87	115.86
		0.230	5.84	25.87	38.49			0.500	12.70	82.85	123.30
		0.250	6.35	28.06	41.77			0.250	6.35	47.44	70.60
		0.279	7.09	31.23	46.51			0.281	7.14	53.23	79.24
		0.307	7.80	34.27	51.03			0.312	7.92	58.99	87.75
		0.344	8.74	38.27	56.98			0.344	8.74	64.93	96.66
		0.365	9.27	40.52	60.31			0.375	9.53	70.65	105.21
0.438	11.13	48.28	71.90	0.438	11.13	82.23	122.43				
0.500	12.70	54.79	81.55	0.469	11.91	87.89	130.78				
12 3/4	323.9	0.203	5.16	27.23	40.56	18	457.2	0.500	12.70	93.54	139.21
		0.219	5.56	29.34	43.65			0.250	6.35	52.78	78.55
		0.230	5.84	30.78	45.81			0.281	7.14	59.23	88.19
		0.250	6.35	33.41	49.73			0.312	7.92	65.66	97.67
		0.281	7.14	37.46	55.77			0.344	8.74	72.28	107.61
		0.312	7.92	41.48	61.71			0.375	9.53	78.67	117.15
		0.330	8.38	43.81	65.20			0.438	11.13	91.59	136.37
		0.344	8.74	45.62	67.93			0.469	11.91	97.92	145.70
		0.375	9.53	49.61	73.88			0.500	12.70	104.23	155.12
		0.438	11.13	57.65	85.85						
		0.500	12.70	65.48	97.46						

\*厚度公差 W.T. Tolerance : +未規定 Unspecified / -12.5%

\*外徑公差 O.D. Tolerance : ±1%

\*重量公差 Mass Tolerance : +15% / -5%

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。

If required size is absent from the table, please contact us for further assistance.

# AS 1074 Carbon Steel Tubes and Tubulars

## 碳鋼鋼管

標稱尺寸 Nominal Size	等級 Grade	外徑 O.D.		厚度 W.T.	單位重量 Mass 平頭或牙頭 Plain or Screw End
		最小值 Min.	最大值 Max.		
DN		mm	mm	mm	kg/m
15	L	21.0	21.4	2.00	0.947
	M	21.1	21.7	2.60	1.210
	H	21.1	21.7	3.20	1.440
20	L	26.4	26.9	2.30	1.380
	M	26.6	27.2	2.60	1.560
25	H	26.6	27.2	3.20	1.870
	L	33.2	33.8	2.60	1.980
32	M	33.4	34.2	3.20	2.410
	H	33.4	34.2	4.00	2.940
40	L	41.9	42.5	2.60	2.540
	M	42.1	42.9	3.20	3.100
	H	42.1	42.9	4.00	3.800
50	L	47.8	48.4	2.90	3.230
	M	48.0	48.8	3.20	3.570
65	H	48.0	48.8	4.00	4.380
	L	59.6	60.2	2.90	4.080
80	M	59.8	60.8	3.60	5.030
	H	59.8	60.8	4.50	6.190
100	L	75.2	76.0	3.20	5.710
	M	75.4	76.6	3.60	6.430
	H	75.4	76.6	4.50	7.930
125	L	87.9	88.7	3.20	6.720
	M	88.1	89.5	4.00	8.370
	H	88.1	89.5	5.00	10.300
150	L	113.0	113.9	3.60	9.750
	M	113.3	114.9	4.50	12.200
	H	113.3	114.9	5.40	14.300
175	L	-	-	-	-
	M	138.7	140.6	5.00	16.600
	H	138.7	140.6	5.40	17.900
200	L	-	-	-	-
	M	164.1	166.0	5.00	19.700
	H	164.1	166.1	5.40	21.300

\*厚度公差 W.T. Tolerance : 輕級 L Grade +未規定 Unspecified / -8% ; 中、重級 M and H Grade +未規定 Unspecified / -10%

\*重量公差 Mass Tolerance : 單支管 Single Tube +10% / -8%

\*長度公差 Length Tolerance : 標準長度 Standard Length [6.5M] ±8mm

# ASTM A53

## Carbon Steel Pipes for Ordinary Piping and Structure

### 配管/結構用碳鋼鋼管

標稱尺寸		外徑		厚度		管厚號 Sch. No.	單重 Weight		水壓值 Hydro Test Pressure			
Nominal Size		Outside Diameter		Wall Thickness			Plain End		Grade A		Grade B	
NPS	DN	Inch	mm	Inch	mm	lb/ft	kg/m	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	
1/2	15	0.840	21.3	0.109	2.77	40	0.85	1.27	700	49.2	700	49.2
3/4	20	1.050	26.7	0.113	2.87	40	1.13	1.69	700	49.2	700	49.2
1	25	1.315	33.4	0.133	3.38	40	1.68	2.50	700	49.2	700	49.2
				0.179	4.55	80	2.17	3.24	850	59.8	850	59.8
1 1/4	32	1.660	42.2	0.140	3.56	40	2.27	3.39	1200	84.4	1300	91.4
				0.191	4.85	80	3.00	4.47	1800	126.6	1900	133.6
1 1/2	40	1.900	48.3	0.145	3.68	40	2.72	4.05	1200	84.4	1300	91.4
				0.200	5.08	80	3.63	5.41	1800	126.6	1900	133.6
2	50	2.375	60.3	0.154	3.91	40	3.66	5.44	2300	161.7	2500	175.8
				0.218	5.54	80	5.03	7.48	2500	175.8	2500	175.8
2 1/2	65	2.875	73.0	0.203	5.16	40	5.80	8.63	2500	175.8	2500	175.8
				0.276	7.01	80	7.67	11.41	2500	175.8	2500	175.8
				0.125	3.18	-	4.51	6.72	1290	90.7	1500	105.5
				0.156	3.96	-	5.58	8.30	1600	112.5	1870	131.5
				0.188	4.78	-	6.66	9.92	1930	135.7	2260	158.9
				0.216	5.49	40	7.58	11.29	2220	156.1	2500	175.8
				0.250	6.35	-	8.69	12.93	2500	175.8	2500	175.8
				0.125	3.18	-	4.51	6.72	1120	78.7	1310	92.1
				0.156	3.96	-	5.58	8.30	1400	98.4	1640	115.3
				0.188	4.78	-	6.66	9.92	1690	118.8	1970	138.5
				0.226	5.74	40	7.91	11.77	2030	142.7	2370	166.6
				0.125	3.18	-	5.58	8.30	1000	70.3	1170	82.3
				0.156	3.96	-	7.24	10.78	1250	87.9	1460	102.6
				0.188	4.78	-	8.67	12.91	1500	105.5	1750	123.0
				0.219	5.56	-	10.02	14.91	1750	123.0	2040	143.4
				0.237	6.02	40	10.80	16.08	1900	133.6	2210	155.4
				0.250	6.35	-	11.36	16.90	2000	140.6	2330	163.8
				0.281	7.14	-	12.67	18.87	2250	158.2	2620	184.2
				0.156	3.96	-	9.02	13.41	1010	71.0	1180	83.0
				0.188	4.78	-	10.80	16.09	1220	85.8	1420	99.8
				0.219	5.56	-	12.51	18.61	1420	99.8	1650	116.0
				0.258	6.55	40	14.63	21.77	1670	117.4	1950	137.1
				0.281	7.14	-	15.87	23.62	1820	128.0	2120	149.1
				0.312	7.92	-	17.51	26.05	2020	142.0	2360	165.9
				0.188	4.78	-	12.94	19.28	1020	71.7	1190	83.7
				0.219	5.56	-	15.00	22.31	1190	83.7	1390	97.7
				0.250	6.35	-	17.04	25.36	1360	95.6	1580	111.1
				0.280	7.11	40	18.99	28.26	1520	106.9	1780	125.1
				0.312	7.92	-	21.06	31.32	1700	119.5	1980	139.2
				0.344	8.74	-	23.10	34.39	1870	131.5	2180	153.3
				0.188	4.78	-	16.96	25.26	780	54.8	920	64.7
				0.203	5.16	-	18.28	27.22	850	59.8	1000	70.3
				0.219	5.56	-	19.68	29.28	910	64.0	1070	75.2
				0.250	6.35	20	22.38	33.32	1040	73.1	1220	85.8
				0.277	7.04	30	24.72	36.82	1160	81.6	1350	94.9
				0.312	7.92	-	27.73	41.25	1300	91.4	1520	106.9
				0.322	8.18	40	28.58	42.55	1340	94.2	1570	110.4
				0.344	8.74	-	30.45	45.34	1440	101.2	1680	118.1
				0.375	9.53	-	33.07	49.25	1570	110.4	1830	128.7
				0.406	10.31	60	35.67	53.08	1700	119.5	2000	140.6
				0.438	11.13	-	38.33	57.08	1830	128.7	2130	149.8
				0.500	12.70	80	43.43	64.64	2090	146.9	2430	170.8
				0.188	4.78	-	21.23	31.62	630	44.3	730	51.3
				0.203	5.16	-	22.89	34.08	680	47.8	800	56.2
				0.219	5.56	-	24.65	36.67	730	51.3	860	60.5
				0.250	6.35	20	28.06	41.76	840	59.1	980	68.9
				0.279	7.09	-	31.23	46.49	930	65.4	1090	76.6

\*厚度公差 W.T. Tolerance : +未規定 Unspecified / -12.5%

\*外徑公差 O.D. Tolerance : ≤48.3mm ±0.4mm / ≥60.3mm ±1%

\*重量公差 Mass Tolerance : ±10%

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。

If required size is absent from the table, please contact us for further assistance.



標稱尺寸		外徑		厚度		管厚號 Sch. No.	單重 Weight		水壓值 Hydro Test Pressure			
Nominal Size		Outside Diameter		Wall Thickness			Plain End		Grade A		Grade B	
NPS	DN	Inch	mm	Inch	mm	lb/ft	kg/m	psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>	
10	250	10.750	273.00	0.307	7.80	30	34.27	51.01	1030	72.4	1200	84.4
				0.344	8.74	-	38.27	56.96	1150	80.9	1340	94.2
				0.365	9.27	40	40.52	60.29	1220	85.8	1430	100.5
				0.438	11.13	-	48.28	71.87	1470	103.4	1710	120.2
				0.500	12.70	60	54.79	81.52	1670	117.4	1950	137.1
				0.203	5.16	-	27.23	40.55	570	40.1	670	47.1
				0.219	5.56	-	29.34	43.63	620	43.6	720	50.6
				0.250	6.35	20	33.41	49.71	710	49.9	820	57.7
				0.281	7.14	-	37.46	55.76	790	55.5	930	65.4
				0.312	7.92	-	41.48	61.69	880	61.9	1030	72.4
				0.330	8.38	30	43.81	65.18	930	65.4	1090	76.6
				0.344	8.74	-	45.62	67.90	970	68.2	1130	79.4
				0.375	9.53	-	49.61	73.86	1060	74.5	1240	87.2
				0.406	10.31	40	53.57	79.70	1150	80.9	1340	94.2
				0.438	11.13	-	57.65	85.82	1240	87.2	1440	101.2
				0.500	12.70	-	65.48	97.43	1410	99.1	1650	116.0
				0.562	14.27	60	73.22	108.92	1590	111.8	1850	130.1
				0.210	5.33	-	30.96	46.04	540	38.0	630	44.3
				0.219	5.56	-	32.26	47.99	560	39.4	660	46.4
				0.250	6.35	10	36.75	54.69	640	45.0	750	52.7
				0.281	7.14	-	41.21	61.35	720	50.6	840	59.1
				0.312	7.92	20	45.65	67.90	800	56.2	940	66.1
				0.344	8.74	-	50.22	74.76	880	61.9	1030	72.4
				0.375	9.53	30	54.62	81.33	960	67.5	1120	78.7
				0.438	11.13	40	63.50	94.55	1130	79.4	1310	92.1
				0.469	11.91	-	67.84	100.94	1210	85.1	1410	99.1
				0.500	12.70	-	72.16	107.39	1290	90.7	1500	105.5
				0.594	15.09	60	85.13	126.71	1530	107.6	1790	125.8
				0.219	5.56	-	36.95	54.96	490	34.5	570	40.1
				0.250	6.35	10	42.09	62.64	560	39.4	660	46.4
				0.281	7.14	-	47.22	70.30	630	44.3	740	52.0
				0.312	7.92	20	52.32	77.83	700	49.2	820	57.7
				0.344	8.74	-	57.57	85.71	770	54.1	900	63.3
				0.375	9.53	30	62.64	93.27	840	59.1	980	68.9
				0.438	11.13	-	72.86	108.49	990	69.6	1150	80.9
				0.469	11.91	-	77.87	115.86	1060	74.5	1230	86.5
				0.500	12.70	40	82.85	123.30	1120	78.7	1310	92.1
				0.656	16.66	60	107.60	160.12	1480	104.1	1720	120.9
				0.250	6.35	10	47.44	70.57	500	35.2	580	40.8
				0.281	7.14	-	53.23	79.21	560	39.4	660	46.4
				0.312	7.92	20	58.99	87.71	620	43.6	730	51.3
				0.344	8.74	-	64.93	96.61	690	48.5	800	56.2
				0.375	9.53	-	70.65	105.16	750	52.7	880	61.9
				0.406	10.31	-	76.36	113.57	810	56.9	950	66.8
				0.438	11.13	30	82.23	122.38	880	61.9	1020	71.7
				0.469	11.91	-	87.89	130.72	940	66.1	1090	76.6
				0.500	12.70	-	93.54	139.15	1000	70.3	1170	82.3
				0.562	14.27	40	104.76	155.80	1120	78.7	1310	92.1
				0.750	19.05	60	138.30	205.74	1500	105.5	1750	123.0
				0.250	6.35	10	52.78	78.55	450	31.6	520	36.6
				0.281	7.14	-	59.23	88.19	510	35.9	590	41.5
				0.312	7.92	-	65.66	97.67	560	39.4	660	46.4
				0.344	8.74	-	72.28	1				

# AS/NZS 1163

## General Structural and Engineering Applications

### 一般結構和工程應用鋼管



結構用管  
Structure

等級 Grade C350 / C350L0					
圓管 Round Section					
外徑 O.D.	厚度 W.T.	單位重量 Mass/Unit Length	外徑 O.D.	厚度 W.T.	單位重量 Mass/Unit Length
mm	mm	kg/m	mm	mm	kg/m
42.4	3.2	3.09	139.7	5.0	16.61
	4.0	3.79		5.4	17.88
48.3	3.2	3.56	165.1	3.0	11.99
	4.0	4.37		3.5	13.95
60.3	3.6	5.03		5.0	19.74
	4.5	6.19	5.4	21.27	
	5.4	7.31	4.8	19.35	
76.1	2.3	4.19	168.3	6.4	25.55
	3.2	5.75		7.1	28.22
	3.6	6.44	219.1	4.8	25.37
	4.5	7.95		6.4	33.57
88.9	2.6	5.53	273.1	8.2	42.65
	3.2	6.76		4.8	31.76
	4.0	8.38		6.4	42.09
	4.8	9.96	323.9	9.3	60.50
	5.0	10.35		6.4	50.11
	5.5	11.31		9.5	73.65
	5.9	12.08		12.7	97.46
101.6	2.6	6.35	355.6	6.4	55.11
	3.2	7.76		9.5	81.08
	4.0	9.63		12.7	107.39
	5.0	11.91	6.4	63.13	
114.3	3.2	8.77	406.4	9.5	92.98
	3.6	9.83		12.7	123.30
	4.5	12.19		6.4	71.12
	4.8	12.96	457.0	9.5	104.84
	5.4	14.50		12.7	139.15
139.7	6.0	16.02	508.0	6.4	79.17
	3.0	10.11		9.5	116.78
	3.5	11.76		12.7	155.12



等級 Grade C350 / C350L0					
方管 Square Section			扁管 Rectangular Section		
外徑 O.D.	厚度 W.T.	單位重量 Mass/Unit Length	外徑 O.D.	厚度 W.T.	單位重量 Mass/Unit Length
mm	mm	kg/m	mm	mm	kg/m
20 X 20	1.6	0.87	20 X 50	1.6	1.63
	1.6	1.12		2.0	1.99
25 X 25	2.0	1.36	25 X 50	1.6	1.75
	2.5	1.64		2.0	2.15
	3.0	1.89		2.5	2.62
3.0	1.38	3.0		3.07	
30 X 30	1.6	1.38	25 X 75	1.6	2.38
	2.0	1.68		2.0	2.93
40 X 40	1.6	1.88	25 X 75	2.5	3.60
	2.0	2.31		2.0	3.72
	2.5	2.82	50 X 75	2.0	3.72
1.6	2.38	2.5		4.58	
2.0	2.93	3.0		5.42	
2.5	3.60	4.0		7.02	
50 X 50	3.0	4.25	50 X 100	2.0	4.50
	4.0	5.45		2.5	5.57
	2.5	5.57		3.5	7.61
	3.0	6.60	4.0	8.59	
75 X 75	3.5	7.61	50 X 100	5.0	10.49
	4.0	8.59		6.0	12.27
	5.0	10.49		3.0	8.96
89 X 89	6.0	12.27	75 X 125	4.0	11.73
	3.5	9.15		5.0	14.41
	5.0	12.68	100 X 150	4.0	14.87
6.0	14.91	5.0		18.34	
3.0	8.96	6.0		21.69	
100 X 100	4.0	11.73	100 X 200	4.0	18.01
	5.0	14.41		5.0	22.26
	6.0	16.98		6.0	26.40
	4.0	14.87	150 X 250	9.0	38.21
5.0	18.34	5.0		30.11	
125 X 125	6.0	21.69	150 X 250	6.0	35.82
	5.0	22.26		9.0	52.34
150 X 150	6.0	26.40	200 X 200	5.0	30.11
	5.0	30.11		6.0	35.82
200 X 200	6.0	35.82		200 X 200	9.0
	9.0	52.34	6.0		45.24
250 X 250	6.0	45.24	250 X 250	9.0	66.47
	9.0	66.47			

\*厚度公差 W.T. Tolerance : ±10%

\*重量公差 Mass Tolerance : +未規定 Unspecified / -4%

\*外徑公差 O.D. Tolerance : ±1%,

最小公差值 with a min. of ±0.5mm

# CSA G40.20/G40.21 & ASTM A500

## Carbon Steel Pipes for General Structure

### 一般結構用碳鋼鋼管

#### 圓管 Round Section

規範外徑 Specified Outside Diameter		規範厚度 Specified Wall thickness		單位重量 Mass Per Unit Length	
inch	mm	inch	mm	lb/ft	kg/m
1.050	26.7	0.100	2.54	1.02	1.51
1.315	33.4	0.100	2.54	1.30	1.93
		0.125	3.18	1.59	2.37
		0.133	3.38	1.68	2.50
1.660	42.2	0.100	2.54	1.67	2.48
		0.110	2.79	1.82	2.71
		0.125	3.18	2.05	3.06
		0.140	3.56	2.27	3.39
1.900	48.3	0.100	2.54	1.92	2.87
		0.110	2.79	2.10	3.13
		0.125	3.18	2.37	3.54
		0.145	3.68	2.72	4.05
		0.188	4.78	3.44	5.13
2.375	60.3	0.125	3.18	3.01	4.48
		0.154	3.91	3.66	5.44
		0.188	4.78	4.40	6.54
		0.190	4.83	4.44	6.61
		0.218	5.54	5.03	7.48
		0.125	3.18	3.17	4.73
2.500	63.5	0.188	4.78	4.65	6.92
		0.125	3.18	3.67	5.48
2.875	73.0	0.156	3.96	4.53	6.74
		0.188	4.78	5.40	8.04
		0.120	3.05	3.69	5.50
3.000	76.2	0.188	4.78	5.65	8.42
		0.100	2.54	4.17	6.20
		0.156	3.96	6.41	9.53
4.000	101.6	0.188	4.78	7.66	11.41
		0.226	5.74	9.12	13.57
		0.250	6.35	10.02	14.92
		0.125	3.18	4.51	6.72
		0.156	3.96	5.58	8.30
		0.188	4.78	6.66	9.92
3.500	88.9	0.216	5.49	7.58	11.29
		0.250	6.35	8.69	12.93
		0.125	3.18	5.85	8.71
		0.156	3.96	7.24	10.78
		0.188	4.78	8.67	12.91
4.500	114.3	0.237	6.02	10.80	16.08
		0.250	6.35	11.36	16.90
		0.125	3.18	6.51	9.71
		0.156	3.96	8.08	12.02
		0.188	4.78	9.67	14.41
5.000	127.0	0.216	5.49	11.05	16.45
		0.156	3.96	9.02	13.41
		0.188	4.78	10.80	16.09
		0.219	5.56	12.51	18.61
		0.250	6.35	14.20	21.13
5.563	141.3	0.281	7.14	15.87	23.62
		0.313	7.95	17.57	26.14

#### 圓管 Round Section :

\*厚度公差 W.T. Tolerance : CSA +10%/-5% ; ASTM ±10%

\*外徑公差 O.D. Tolerance :

- CSA ≤65mm ±0.5mm / >65~90mm ±0.8mm / >90~140mm ±1.0mm / >140mm ±1%

- ASTM ≤48.3mm ±0.50% / >48.3mm ±0.75%

#### 圓管 Round Section

規範外徑 Specified Outside Diameter		規範厚度 Specified Wall Thickness		單位重量 Mass Per Unit Length	
inch	mm	Inch	mm	lb/ft	kg/m
6.625	168.3	0.125	3.18	8.69	12.95
		0.188	4.78	12.94	19.28
		0.219	5.56	15.00	22.31
		0.250	6.35	17.04	25.36
		0.280	7.11	18.99	28.26
		0.313	7.95	21.12	31.44
8.625	219.1	0.375	9.53	25.05	37.31
		0.188	4.78	16.96	25.26
		0.219	5.56	19.68	29.28
		0.250	6.35	22.38	33.32
		0.322	8.18	28.58	42.55
		0.375	9.53	33.07	49.25
		0.406	10.31	35.67	53.08
		0.438	11.13	38.33	57.08
9.625	244.5	0.500	12.70	43.43	64.64
		0.188	4.78	18.97	28.26
		0.219	5.56	22.02	32.76
		0.250	6.35	25.05	37.29
		0.313	7.95	31.16	46.38
		0.375	9.53	37.08	55.22
		0.438	11.13	43.02	64.05
		0.500	12.70	48.77	72.60
		0.188	4.78	21.23	31.63
		0.250	6.35	28.06	41.77
10.750	273.1	0.313	7.95	34.92	51.98
		0.365	9.27	40.52	60.31
		0.375	9.53	41.59	61.94
		0.438	11.13	48.28	71.90
		0.500	12.70	54.79	81.55
		0.250	6.35	33.41	49.73
		0.313	7.95	41.61	61.94
		0.375	9.53	49.61	73.88
12.750	323.9	0.438	11.13	57.65	85.85
		0.500	12.70	65.48	97.46
		0.250	6.35	36.75	54.69
		0.313	7.95	45.80	68.16
		0.375	9.53	54.62	81.33
14.000	355.6	0.438	11.13	63.50	94.55
		0.500	12.70	72.16	107.39
		0.250	6.35	42.09	62.64
		0.313	7.95	52.49	78.12
		0.375	9.53	62.64	93.27
16.000	406.4	0.438	11.13	72.86	108.49
		0.500	12.70	82.85	123.30

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。

If required size is absent from the table, please contact us for further assistance.



# CSA G40.20/G40.21 & ASTM A500

## Carbon Steel Pipes for General Structure

### 一般結構用碳鋼鋼管



#### 方管 Square Section

規範外徑 Specified Outside Diameter		規範厚度 Specified Wall Thickness		單位重量 Mass Per Unit Length	
inch	mm	inch	mm	lb/ft	kg/m
1 X 1	25.4 X 25.4	0.065	1.65	0.79	1.18
		0.100	2.54	1.14	1.69
		0.125	3.18	1.35	2.01
1.25 X 1.25	31.8 X 31.8	0.100	2.54	1.48	2.20
		0.125	3.18	1.78	2.65
		0.100	2.54	1.82	2.71
1.5 X 1.5	38.1 X 38.1	0.125	3.18	2.21	3.28
		0.110	2.79	2.34	3.49
1.75 X 1.75	44.4 X 44.4	0.125	3.18	2.63	3.91
		0.125	3.18	3.06	4.55
2 X 2	50.8 X 50.8	0.188	4.78	4.33	6.45
		0.125	3.18	4.76	7.09
3 X 3	76.2 X 76.2	0.188	4.78	6.89	10.26
		0.250	6.35	8.81	13.11
		0.188	4.78	8.17	12.16
3.5 X 3.5	88.9 X 88.9	0.250	6.35	10.51	15.65
		0.125	3.18	6.47	9.62
		0.188	4.78	9.45	14.07
4 X 4	101.6 X 101.6	0.250	6.35	12.21	18.18
		0.125	3.18	8.17	12.16
		0.188	4.78	12.02	17.88
5 X 5	127.0 X 127.0	0.250	6.35	15.62	23.24
		0.125	3.18	9.88	14.70
		0.188	4.78	14.58	21.70
6 X 6	152.4 X 152.4	0.250	6.35	19.02	28.31
		0.313	7.95	23.37	34.78
		0.375	9.53	27.50	40.92
7 X 7	177.8 X 177.8	0.500	12.70	35.25	52.45
		0.188	4.78	17.14	25.51
		0.250	6.35	22.42	33.37
8 X 8	203.2 X 203.2	0.313	7.95	27.63	41.12
		0.375	9.53	32.60	48.52
		0.500	12.70	42.05	62.58
10 X 10	254.0 X 254.0	0.188	4.78	19.70	29.32
		0.250	6.35	25.83	38.44
		0.313	7.95	31.89	47.46
12 X 12	304.8 X 304.8	0.375	9.53	37.71	56.12
		0.500	12.70	48.86	72.71
		0.313	7.95	40.41	60.14
14 X 14	355.6 X 355.6	0.375	9.53	47.93	71.32
		0.500	12.70	62.47	92.97
		0.375	9.53	58.14	86.52
16 X 16	406.4 X 406.4	0.500	12.70	76.08	113.23
		0.625	15.88	93.38	138.97
		0.750	19.05	109.93	163.59
		0.375	9.53	68.36	101.72
		0.500	12.70	89.70	133.48
		0.625	15.88	110.40	164.30
		0.750	19.05	130.35	193.98
		0.500	12.70	103.31	153.74
		0.625	15.88	127.43	189.63
		0.750	19.05	150.77	224.37

#### 方 / 扁管 Square / Rectangular Section :

\*厚度公差 W.T. Tolerance : CSA +10%/-5% ; ASTM ±10%

\*外徑公差 O.D. Tolerance :

- CSA ≤65mm ±0.5mm / >65~90mm ±0.8mm / >90~140mm ±1.0mm / >140mm ±1%

- ASTM ≤65mm ±0.5mm / >65~90mm ±0.6mm / >90~140mm ±0.8mm / >140mm 1%\*長邊尺寸 large flat dimension

#### 扁管 Rectangular Section

規範外徑 Specified Outside Diameter		規範厚度 Specified Wall Thickness		單位重量 Mass Per Unit Length	
inch	mm	inch	mm	lb/ft	kg/m
1 X 2	25.4 X 50.8	0.100	2.54	1.82	2.71
		0.125	3.18	2.21	3.28
1 X 3	25.4 X 76.2	0.100	2.54	2.50	3.72
		0.125	3.18	3.06	4.55
1.5 X 2.0	38.1 X 50.8	0.100	2.54	2.16	3.21
		0.125	3.18	2.63	3.92
1.5 X 3.0	38.1 X 76.2	0.125	3.18	3.91	5.82
		0.188	4.78	5.61	8.35
2 X 3	50.8 X 76.2	0.125	3.18	4.34	6.45
		0.188	4.78	6.25	9.31
2 X 4	50.8 X 101.6	0.125	3.18	4.76	7.09
		0.188	4.78	6.89	10.26
3 X 5	76.2 X 127.0	0.250	6.35	8.81	13.11
		0.125	3.18	6.47	9.62
		0.188	4.78	9.45	14.07
3 X 6	76.2 X 152.4	0.250	6.35	12.21	18.18
		0.125	3.18	8.17	12.16
		0.188	4.78	12.02	17.88
4 X 6	101.6 X 152.4	0.250	6.35	15.62	23.24
		0.125	3.18	9.88	14.70
		0.188	4.78	14.58	21.70
4 X 8	101.6 X 203.2	0.250	6.35	19.02	28.31
		0.313	7.95	23.35	34.74
		0.375	9.53	27.50	40.92
4 X 10	101.6 X 254.0	0.500	12.70	35.25	52.45
		0.250	6.35	22.42	33.37
		0.313	7.95	27.60	41.08
4 X 12	101.6 X 304.8	0.375	9.53	32.60	48.52
		0.500	12.70	42.05	62.58
		0.250	6.35	25.83	38.44
5 X 7	127.0 X 177.8	0.313	7.95	31.86	47.41
		0.375	9.53	37.71	56.12
		0.500	12.70	48.86	72.71
6 X 8	152.4 X 203.2	0.188	4.78	14.58	21.70
		0.250	6.35	19.02	28.31
		0.313	7.95	23.35	34.74
6 X 10	152.4 X 254.0	0.375	9.53	27.50	40.92
		0.500	12.70	35.25	52.45
		0.250	6.35	22.42	33.37
8 X 12	203.2 X 304.8	0.313	7.95	27.60	41.08
		0.375	9.53	32.60	48.52
		0.500	12.70	42.05	62.58
		0.250	6.35	25.83	38.44
		0.313	7.95	31.86	47.41
		0.375	9.53	37.71	56.12
		0.500	12.70	48.86	72.71
		0.313	7.95	40.37	60.07
		0.375	9.53	47.93	71.32
		0.500	12.70	62.47	92.97

# JIS G 3444 / CNS 4435 G3102

## Carbon Steel Pipes for General Structure

### 一般結構用碳鋼鋼管

可供應鋼管等級：STKR 30 / 41 / 50 / 51 / 55  
Available Pipe Grade：STKR 30 / 41 / 50 / 51 / 55

外徑 O.D. mm	厚度 W.T. mm	外徑 O.D. mm	厚度 W.T. mm	外徑 O.D. mm	厚度 W.T. mm	外徑 O.D. mm	厚度 W.T. mm
21.7	2.0	101.6	3.2	216.3	4.5	406.4	12.7
27.2	2.0		4.0		5.8		16.0
	2.3		5.0		6.0		19.0
34.0	2.3		89.1		2.8		355.6
42.7	2.3	3.2		8.0	9.5		
	2.5	3.2	8.2	12.0			
48.6	2.3	114.3	3.5	355.6	6.4	457.2	
	2.5		4.5		7.9		16.0
	2.8	3.6	9.0		19.0		
	3.2	4.0	9.5		7.9		
60.5	2.3	139.8	4.5	355.6	12.0	457.2	9.0
	3.2		6.0		12.7		9.5
	4.0	4.5	7.9		12.0		
	2.8	5.0	9.0		12.7		
76.3	3.2	165.2	6.0	406.4	9.5	508.0	14.0
	4.0		7.1		12.0		16.0
	2.8	5.0	9.0		12.7		
	3.2	6.0	12.0		19.0		

### 公差 Tolerance

類別 Class NO.	外徑 O.D.		類別 Class NO.	厚度 W.T.	
1	< 50mm	± 0.5mm	1	< 4mm	+0.6 / -0.5mm
	≥ 50mm	± 1%		≥ 4mm~12mm	+15% / -12.5%
2	< 50mm	± 0.25mm		≥ 12mm	+15% / -1.5mm
	≥ 50mm	± 0.5%	2	< 3mm	± 0.3mm
≥ 50mm	± 0.5%	≥ 3mm~12mm		± 10%	
≥ 12mm	+10% / -1.2mm				

\*如無特別指定時通用類別1  
General applicable for Cass No.1, if not specified

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。  
If required size is absent from the table, please contact us for further assistance.

# JIS G 3445 / CNS 4437 G3103

## Carbon Steel Tubes for Machine Structure

結構用管  
Structure

### 機械構造用碳鋼鋼管

等級 Grade	級別符號 Symbol of Grade	化學成分 Chemical Composition %						機械性質 Mechanical Property			
		C	Si	Mn	P	S	Nb/V	抗拉 T.S. MPa	降伏 Y.S. MPa	伸長 E.L. %	
11級	A	STKM 11A	0.12max	0.35 max	0.60 max	0.04 max	0.04 max	-	290 min	-	35 min
	A	STKM 12A							340 min	175 min	35 min
12級	B	STKM 12B	0.20 max	0.35 max	0.60 max	0.04 max	0.04 max	-	390 min	275 min	25 min
	C	STKM 12C							470 min	355 min	20 min
	A	STKM 13A							370 min	215 min	30 min
13級	B	STKM 13B	0.25 max	0.35 max	0.30~0.90	0.04 max	0.04 max	-	440 min	305 min	20 min
	C	STKM 13C							510 min	380 min	15 min
	A	STKM 14A							410 min	245 min	25 min
14級	B	STKM 14B	0.30 max	0.35 max	0.30~1.00	0.04 max	0.04 max	-	500 min	355 min	15 min
	C	STKM 14C							550 min	410 min	15 min
	A	STKM 15A							470 min	275 min	22 min
15級	C	STKM 15C	0.25~0.35	0.35 max	0.30~1.00	0.04 max	0.04 max	-	580 min	430 min	12 min
	A	STKM 16A							510 min	325 min	20 min
16級	C	STKM 16C	0.35~0.45	0.40 max	0.40~1.00	0.04 max	0.04 max	-	620 min	460 min	12 min
	A	STKM 17A							550 min	345 min	20 min
17級	C	STKM 17C	0.45~0.55	0.40 max	0.40~1.00	0.04 max	0.04 max	-	650 min	480 min	10 min
	A	STKM 18A							440 min	275 min	25 min
18級	B	STKM 18B	0.18 max	0.55 max	1.50 max	0.04 max	0.04 max	-	490 min	315 min	23 min
	C	STKM 18C							510 min	380 min	15 min
	A	STKM 19A							490 min	315 min	23 min
19級	C	STKM 19C	0.25 max	0.55 max	1.50 max	0.04 max	0.04 max	-	550 min	410 min	15 min
	A	STKM 20A	0.25 max	0.55 max	1.60 max	0.04 max	0.04 max	0.15 max	540 min	390 min	23 min

### 公差 Tolerance

類別 Division No.	外徑 O.D.		類別 Division No.	厚度 W.T.	
1	<50mm	±0.5mm	1	<4mm	+0.6mm / -0.5mm
	≥50mm	±1.0%		≥4mm	+15.0% / -12.5%
2	<50mm	±0.25mm		2	<3mm
	≥50mm	±0.50%	≥3mm		±10%
3	<25mm	±0.12mm	3		<2mm
	≥25mm~<40mm	±0.15mm		≥2mm	±8%
	≥40mm~<50mm	±0.18mm			
	≥50mm~<60mm	±0.20mm			
	≥60mm~<70mm	±0.23mm			
	≥70mm~<80mm	±0.25mm			
	≥80mm~<90mm	±0.30mm			
≥90mm~<100mm	±0.40mm				
≥100mm	±0.50%				

# JIS G 3466 / CNS 7141 G3134

## Carbon Steel Square and Rectangular Pipe for General Structure

### 一般結構用矩形碳鋼鋼管

方管 Square Section				扁管 Rectangular Section			
外徑 O.D.	厚度 W.T.	外徑 O.D.	厚度 W.T.	外徑 O.D.	厚度 W.T.	外徑 O.D.	厚度 W.T.
mm	mm	mm	mm	mm	mm	mm	mm
40 X 40	1.6	125 X 125	3.2	20 X 50	1.6	100 X 150	3.2
	2.3		4.5		2.3		4.5
50 X 50	1.6		5.0	30 X 60	1.6		6.0
	2.3		6.0		2.3		4.5
	3.2	4.5	3.2		6.0		
60 X 60	1.6	150 X 150	5.0	40 X 80	1.6	150 X 200	9.0
	2.3		6.0		2.3		4.5
	3.2		9.0		3.2		6.0
75 X 75	1.6	175 X 175	4.5	50 X 100	1.6	150 X 250	9.0
	2.3		5.0		2.3		6.0
	3.2		6.0		3.2		9.0
	4.5		6.0		4.5		12.0
80 X 80	2.3	200 X 200	8.0	75 X 125	2.3	200 X 300	9.0
	3.2		9.0		3.2		12.0
	4.5		12.0		4.0		9.0
90 X 90	2.3	250 X 250	8.0	75 X 150	4.5	150 X 350	12.0
	3.2		9.0		6.0		9.0
100 X 100	2.3		12.0	300 X 300	3.2	200 X 400	12.0
	3.2		9.0		3.2		12.0
	4.0	12.0	350 X 350	4.5	9.0		
	4.5	9.0		6.0	12.0		
	6.0	12.0					



\*厚度公差 W.T. Tolerance : <3mm ±0.3mm / ≥3mm ±10%  
 \*外徑公差 O.D. Tolerance : ≤100mm ±1.5mm / >100mm ±1.5%  
 \*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。  
 If required size is absent from the table, please contact us for further assistance.



其他  
Others

## Coil, Strip, Sheet and Plate

### 產品應用 Application

產品廣泛用於建築、橋梁、工業機械、農業機械等領域。  
 Used in wide range of industries such as construction, industrial machinery, agricultural machinery, etc.

### 產品種類 Material

熱軋、冷軋、鍍鋅、花板、酸洗  
 Hot-Rolled, Cold-Rolled, Galvanized, Checkered, Pickled and Oiled

### 可承製尺寸範圍 Size Range

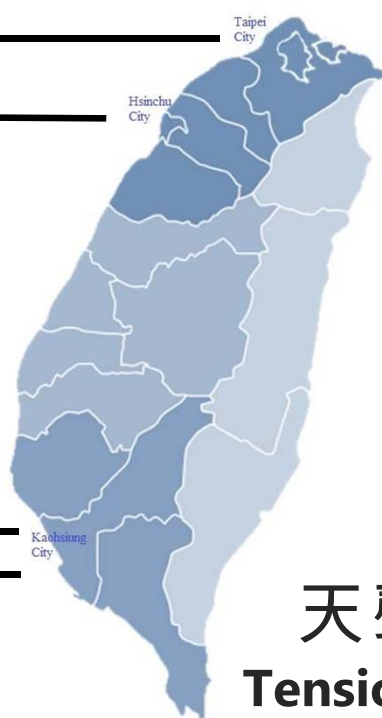
**鋼帶 Strip :**  
 厚度 Thickness 1.0 mm - 20.0 mm  
 寬度 Width Within 1650 mm 以內

**鋼板 Sheet & Plate :**  
 厚度 Thickness 1.0 mm - 16.0 mm  
 寬度 Width Within 1550 mm 以內

\*尺寸範圍表外的產品也歡迎向我們公司人員諮詢。  
 If required size is absent from the table, please contact us for further assistance.



總公司  
Headquarters  
新竹倉庫  
HsinChu Warehouse



路竹工廠 LuZhu Mill  
岡山工廠 GangShan Mill

## 天聲工業股份有限公司 Tension Steel Industries Co., Ltd.

總公司/ 9F, No. 127, Sec 2, Chien-Kuo North Road, Taipei, Taiwan  
Headquarters TEL:+886-2-25006206 FAX:+886-2-25080398

新竹倉庫/ No. 23, Nangang Street, Xiangshan Dist., Hsinchu City, Taiwan  
HsinChu TEL:+886-3-5372167 FAX:+886-3-5374165

岡山工廠/ No. 23, Bengong West Road, Gangshan Dist., Kaohsiung City, Taiwan  
GangShan TEL:+886-7-6242831 FAX:+886-7-6242836

路竹工廠/ No. 18, Huanciou Road, Luzhu Dist., Kaohsiung City, Taiwan  
LuZhu TEL:+886-7-2621968 FAX:+886-7-6951528

