

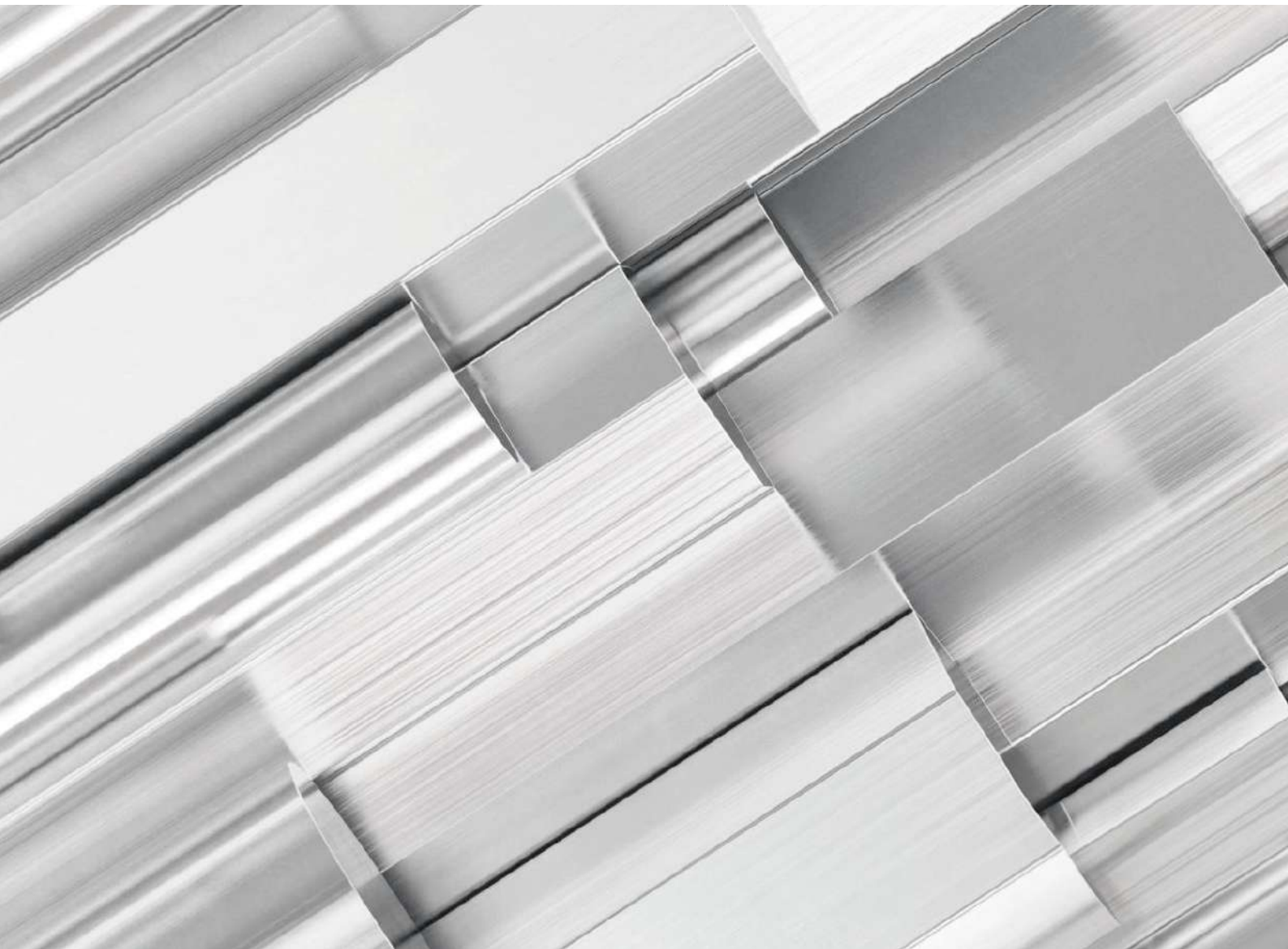
Ty 同洋鋼鐵有限公司

誠信 積極 務實

專業金屬材料供應商

PROFESSIONAL SUPPLIER OF METAL MATERIALS

低碳鋼、中碳鋼、合金鋼、工具鋼、軸承鋼、快削鋼





目錄

CONTENTS

1.	關於同洋 Company Profile	01
2.	服務與作業流程 Service and Operating Procedure	03
3.	鋼材買賣及裁切加工 Metal Materials Wholesale, Retail and Cutting Processing	05
4.	產品介紹 Our Products	07
5.	品質管理 Quality Management	13
6.	參考資料 Reference	15



關於同洋

COMPANY PROFILE

同洋鋼鐵創立於1975年，專營各類工業用碳鋼、合金鋼、特殊鋼等買賣，並提供定尺裁切加工服務。提供最優良的產品與服務，是我們不變的堅持。追求品質卓越、客戶滿意共創利潤以及企業永續經營，是同洋鋼鐵長期的經營理念。本公司擁有優秀的經營團隊，秉持著誠信、積極、務實經營理念，追求企業永續經營成長。

Tong Yang Metals, founded in 1975, specializing in the wholesale and retail of various industrial steel materials, including carbon steel, alloy steel, and different kinds of special steel, and we also provide the customized cutting service for our client. Offering the finest products and service is our unwavering commitment. The pursuit of excellent quality, customer satisfaction for mutual profitability, and the sustainable operation of the business are our long-term principles. Our company is supported by an outstanding management team, upholding the principles of integrity, positivity, and pragmatic operations, striving for sustainable business growth.



公司沿革 MILESTONE

- 1975** (民國64年)
東洋鋼鐵材行於台中市南區成立。
Established in South District, Taichung City.
- 1987** (民國76年)
改組並更名同洋鋼鐵有限公司
Reorganized and renamed Tong Yang Metals Co., Ltd.
- 1997** (民國86年)
遷廠至台中市大里工業區。
Moved to Dali Industrial Park, Taichung City.
- 2008** (民國97年)
通過ISO: 9001認證。
Passed ISO: 9001 certification.

服務與作業流程

SERVICE AND OPERATING PROCEDURE



Step 1

了解客戶需求

Understand
Customer Needs

與業務人員洽談後，深入了解客戶需要之產品特性、表面要求、公差等級等相關資訊。

Salesperson has an in-depth understanding of customers' product characteristics and other related information.



Step 2

確認材質、規格尺寸

Confirm Material,
Specifications, and
Dimensions

根據各式材料的特性，如：鋼種、硬度、抗拉強度、化學成分等，向客戶推薦並確認所需之規格尺寸。

According to client's need, provide the suggestion and confirm the specifications with the client.



Step 3

提供報價

Provide Quotation

在客戶需求的基礎上，同洋鋼鐵幫助客戶在成本範圍內，獲得最佳的金屬材料解決方案。

Based on the requirement of the client, we provide the best material solution within the cost range.



Step 4

生產及加工

Produce and
Process

同洋鋼鐵提供定尺裁切服務，另外也提供客戶多元化的附加服務，例如：鑽孔、熱處理等加工服務，為客戶提供最佳的生產加工解決方案。

In addition to offering the customized cutting services, we also provide our client with diversified service, such as drilling, heat treatment, and other processing service, to offer the best solutions for our client.



Step 5

質量檢驗

Quality Control

遵循嚴格的流程和標準，每個階段都進行質量檢驗，包含尺寸、重量檢驗及外觀和包裝檢查等，讓客戶信任及滿意。

We follow a strict standard and conduct quality inspection at every stage of our procedure, from purchase, process to shipment, aiming to build trust and satisfaction among our client.



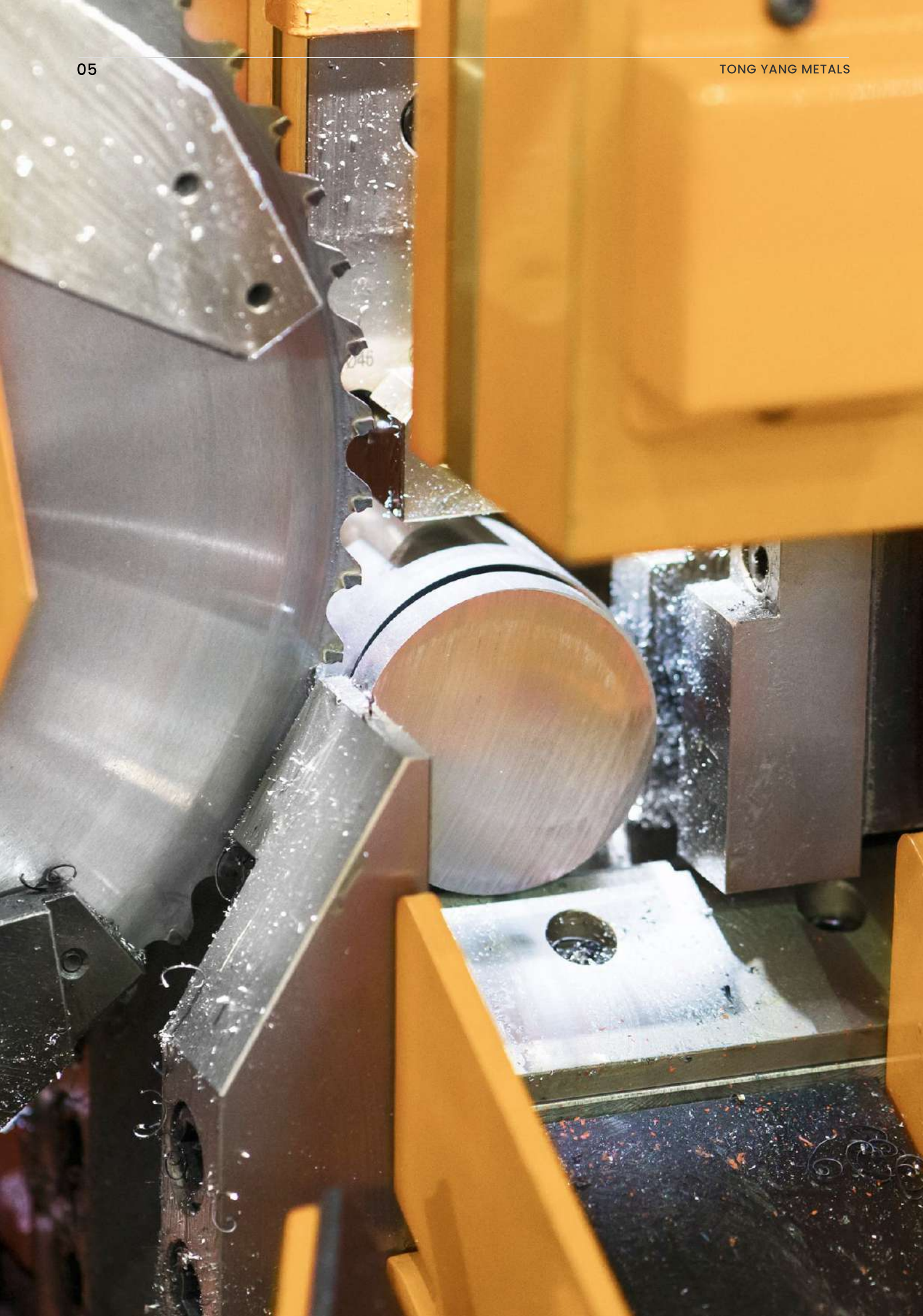
Step 6

產品配送

Product Delivery

每日自有物流專車配送產品，交貨迅速且彈性，讓客戶方便掌握製程排程。

Our logistics vehicles deliver the products with fast and flexible shipment, allowing our client to easily manage their processing schedule.



鋼材買賣及裁切加工

METAL MATERIALS WHOLESALE, RETAIL AND CUTTING PROCESSING

本公司專營各類工業用鋼材買賣，包含低碳鋼、中碳鋼、合金鋼、工具鋼、軸承鋼、快削鋼等。

Specializing in the wholesale and retail of various industrial steel materials, including low-carbon steel, medium-carbon steel, alloy steel, alloy tool steel, bearing steel, and free cutting steel.

同洋提供各類鋼品定尺裁切的服務，廠內設有全自動化高速圓鋸機以及CNC帶鋸機，可應對各類鋼棒、鋼管、鋼板之切割需求。

We provide customized cutting services for various steel products. Our facility is equipped with fully automated high-speed circular saws and CNC band saws, capable of cutting steel bars, pipes, and plates.



產品介紹

OUR PRODUCTS

碳鋼 | Carbon Steel

廣泛應用於各式工業用零件及建築構件中，例如：螺栓、螺絲螺帽、軸類、曲軸等。依據碳含量的不同，可區分為低碳鋼、中碳鋼、高碳鋼。

同洋鋼鐵提供之現貨尺寸：黑皮鋼棒：13-800mm；光面鋼棒：4-100mm。

Carbon steel is widely used in various industrial components and construction elements, such as bolts, screws, nuts, shafts, and crankshafts. Depending on the carbon content, it can be classified into low carbon steel, medium carbon steel, and high carbon steel.

Tong Yang provides both black steel bars ranging from 13 to 800mm and polished steel bars ranging from 4 to 100mm.

鋼種 Grand	碳(C)%	矽(Si)%	錳(Mn)%	磷(P)%	硫(S)%	鉻(Cr)%	鎳(Ni)%	銅(Cu)%
1008	0≤0.1	--	0.3-0.5	0≤0.04	0≤0.05	--	0≤0.2	0≤0.25
S15C(1015)	0.13-0.18	0.15-0.35	0.3-0.6	0≤0.03	0≤0.035	0≤0.2	0≤0.25	0≤0.25
S17C(1017)	0.15-0.2	0.15-0.35	0.3-0.6	0≤0.03	0≤0.035	0≤0.2	0≤0.2	0≤0.3
S20C(1020)	0.18-0.23	0.15-0.35	0.3-0.6	0≤0.03	0≤0.035	0≤0.2	0≤0.2	--
S35C(1035)	0.32-0.38	0.15-0.35	0.6-0.9	0≤0.03	0≤0.035	0≤0.2	0≤0.2	0≤0.3
S45C(1045)	0.42-0.48	0.15-0.35	0.6-0.9	0≤0.03	0≤0.035	0≤0.2	0≤0.2	0≤0.3
S50C(1050)	0.47-0.53	0.15-0.35	0.6-0.9	0≤0.03	0≤0.035	0≤0.2	0≤0.2	0≤0.3

鉻鉬合金鋼 | Chrome Molybdenum Alloy Steel

鉻鉬合金鋼應用於機械結構和工程應用中需要承受高負荷和耐磨損的零件，例如：主軸、軸心、齒輪等。

同洋鋼鐵提供之現貨尺寸：黑皮鋼棒：13-700mm；光面鋼棒：6-100mm

Chromium-molybdenum alloy steel is applied in mechanical structures and engineering applications where the components need to withstand high loads and exhibit resistance, such as spindles, axles, gears.

Tong Yang provides both black steel bars ranging from 13 to 700mm and polished steel bars ranging from 6 to 100mm.

鋼種 Grand	碳(C)%	矽(Si)%	錳(Mn)%	磷(P)%	硫(S)%	鉻(Cr)%	鉬(Mo)%	鎳(Ni)%	銅(Cu)%
SCM415	0.13-0.18	0.15-0.35	0.6-0.85	0≤0.03	0≤0.03	0.9-1.2	0.15-0.3	0≤0.25	0≤0.3
SCM420	0.18-0.23	0.15-0.35	0.6-0.85	0≤0.03	0≤0.03	0.9-1.2	0.15-0.3	0≤0.25	0≤0.3
SCM435 (4135)	0.15-0.2	0.15-0.35	0.6-0.85	0≤0.03	0≤0.03	0.9-1.2	0.15-0.3	--	0≤0.3
SCM440 (4140)	0.38-0.43	0.15-0.35	0.6-0.85	0≤0.03	0≤0.03	0.9-1.2	0.15-0.3	0≤0.25	0≤0.3

鎳鉻鉬合金鋼 | Nickel Chromium Molybdenum Alloy Steel

鎳鉻鉬合金鋼應用於需要應對高溫、高壓、腐蝕性環境下的各種機械結構零件當中。例如：齒輪、活塞、傳動軸。

同洋鋼鐵提供之現貨尺寸：13-500mm

Nickel-chromium-molybdenum alloy steel is applied to various mechanical structural components that need to withstand high temperatures, high pressure, and corrosive environments. Such as gears, pistons, and transmission shafts.

Tong Yang provides steel bars ranging from 13 to 500mm.

鋼種 Grand	碳(C)%	矽(Si)%	錳(Mn)%	磷(P)%	硫(S)%	鉻(Cr)%	鉬(Mo)%	鎳(Ni)%	銅(Cu)%
SNM220 (8620)	0.17-0.23	0.15-0.35	0.6-0.9	0≤0.03	0≤0.03	0.4-0.65	0.15-0.3	0.4-0.7	0≤0.3
SNM420 (4320)	0.17-0.23	0.15-0.35	0.4-0.7	0≤0.03	0≤0.03	0.4-0.65	0.15-0.3	1.6-2	0≤0.3
SNM439 (4340)	0.36-0.43	0.15-0.35	0.6-0.9	0≤0.03	0≤0.03	0.6-1	0.15-0.3	1.6-2	0≤0.3
SNM616	0.13-0.2	0.15-0.35	0.8-1.2	0≤0.03	0≤0.03	1.4-1.8	0.4-0.6	2.8-3.2	0≤0.3

合金工具鋼 | Alloy Tool Steel

合金工具鋼應用於製造工具、模具，具有高強度、耐磨和抗腐蝕之特性。應用於冷/熱做模具、切削刀具、模具等。

同洋鋼鐵提供之現貨尺寸：13-400mm

Alloy tool steel is used in the manufacturing of tools and molds, possessing characteristics of high strength, wear resistance, and corrosion resistance. It is applied in cold/hot working dies, cutting tools and molds.

Tong Yang provides steel bars ranging from 13 to 400mm.

鋼種 Grand	碳(C)%	矽(Si)%	錳(Mn)%	磷(P)%	硫(S)%	鉻(Cr)%	鉬(Mo)%	鎳(Ni)%	銅(Cu)%	鈮(V)%
SKD11	1.4-1.6	0≤0.4	0≤0.6	0≤0.03	0≤0.03	11.0-13.0	0.8-1.2	0≤0.25	0≤0.25	0.2-0.5
SKD61	0.32-0.42	0.8-1.2	0≤0.5	0≤0.03	0≤0.03	4.5-5.5	1-1.5	0≤0.25	0≤0.25	0.8-1.15

軸承鋼 | Bearing Steel

軸承鋼專門用於製造軸承和相關機械零件，具備良好的耐磨性、高強度和優異的硬度。

同洋鋼鐵提供之現貨尺寸：6-200mm。

Bearing steel is specifically used in the manufacturing of bearings and related mechanical components, offering excellent wear resistance, high strength, and superior hardness.

Tong Yang provides steel bars ranging from 6 to 200mm.

鋼種 Grand	碳(C)%	矽(Si)%	錳(Mn)%	磷(P)%	硫(S)%	鉻(Cr)%	鎳(Ni)%	鉻(Cr)%	鉻(Cr)%
SUJ2	0.95-1.1	0.15-0.35	0≤0.5	0≤0.025	0≤0.025	1.3-1.6	0≤0.08	0≤0.25	0≤0.25

快削鋼 | Free Cutting Steel

快削鋼是在碳鋼中加入特定元素以提升其切削性，可應用於高速切削的加工環境中，製造如螺栓、螺母等零件。

同洋鋼鐵提供之現貨尺寸：光面鋼棒尺寸：6-60mm。

Free cutting steel is a type of carbon steel with specific elements added to enhance its cutting properties. It can be applied in high-speed cutting environments, manufacturing components such as bolts and nuts.

Tong Yang provides stock sizes of polished steel bars ranging from 6 to 60mm.

鋼種 Grand	碳(C)%	矽(Si)%	錳(Mn)%	磷(P)%	硫(S)%	鉛(Pb)%
1144	0.4-0.48	--	1.35-1.65	0≤0.04	0.24-0.33	--
12L14	0≤0.15	0≤0.05	1-1.5	0≤0.11	0.3-0.4	0.1-0.35
SUM23 (1215)	0≤0.09	--	0.75-1.05	0.04-0.09	0.26-0.35	--
1215MS	0≤0.09	--	1.0-1.6	0.04-0.09	0.33-0.42	--

公差等級

TOLERANCE GRADE

直徑許可差 | Permissible Variation in Diameter

單位:公釐 Unit: mm (millimeter)

規格 Spec	直徑 Diameter	許可差 Diameter Tolerance	真圓度 Out of round
CNS 8279 JIS G3191	D<16	+/- 0.40	0.56 max
	16≤D<28	+/- 0.50	0.70 max
JIS G4051 JIS G4053	28≤D	+/- D*1.8%	D*2.52% max
	D≤26	+/- 0.40	0.56 max
	26<D	+/- D*1.5%	D*2.1% max

長度許可差 | Permissible Variation in Length

單位:公釐 Unit: mm (millimeter)

規格 Spec	長度 Length	許可差 Length Tolerance
CNS 8279 JIS G3191 JIS G4051 JIS G4053	L≤7000	+40mm ~ 0mm
	7000<L	每增加一米，容許差上限增加5mm

直度許可差 | Permissible Variation in Straightness

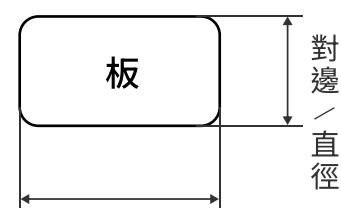
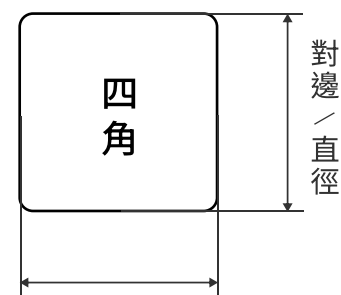
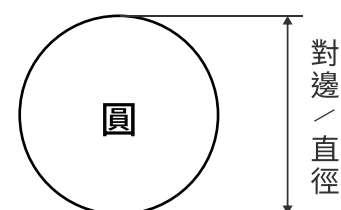
單位:公釐 Unit: mm (millimeter)

規格 Spec	許可差 Tolerance
JIS G4051 JIS G40533	每 1m 最大直度許可差為 3mm，全長最大直度許可差量 = 3mm × 長度(m) / 1m

重量計算公式

WEIGHT FORMULA

*1米重量，單位為Kg



鋼種 Grand	形狀 Shape	重量計算公式 Weight Formula
碳鋼 合金鋼 特殊鋼 快削鋼等	圓形	直徑 x 直徑 x 0.00617
	四角形	對邊 x 對邊 x 0.00785
	六角形	對邊 x 對邊 x 0.00679
	板	寬 x 厚 x 0.00785
不鏽鋼	圓形	直徑 x 直徑 x 0.006225
	四角形	對邊 x 對邊 x 0.00793
	六角形	對邊 x 對邊 x 0.00686
	板	寬 x 厚 x 0.00785

Ty 同洋鋼鐵有限公司

地址：台中市太平區工業十五路48號(大里工業區)

電話：886-4-2271 5188

傳真：886-4-2271 1137

信箱：tyoung.metal@msa.hinet.net

統編：22380861

No.48, Gongye 15th Rd., Taiping Dist.,
Taichung City, 411014 Taiwan

TEL : 886-4-2271 5188

FAX : 886-4-2271 1137

MAIL : tyoung.metal@msa.hinet.net

GUI Number : 22380861

<http://www.tymetals.com.tw/>

