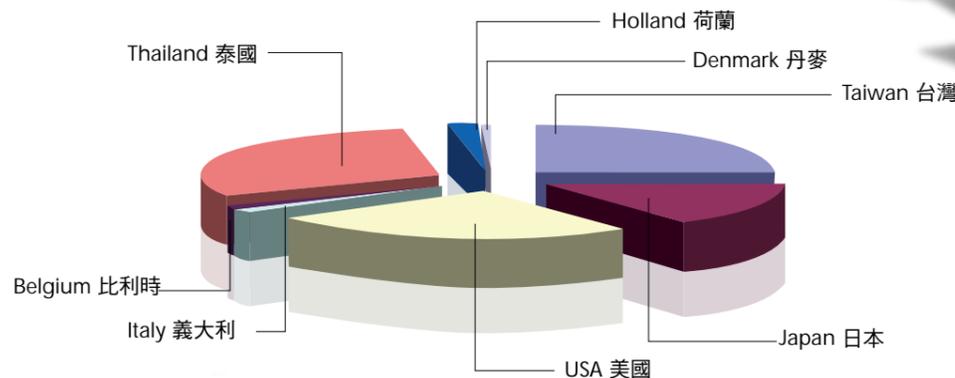




# ABOUT CASTOP

- 1976年在台灣成立「勤耕精鑄股份有限公司」，1993-1998年在中國投資，1999年在泰國擴廠。
- 專精於各種合金鋼、碳鋼、不鏽鋼、銅合金、鋁合金、鈦合金之精密零件鑄造、加工及各種表面處理。
- 我們的產品使用範圍包含汽車類、醫療類、建材類及各式零組件，且持續發展研究中。
- 銷售地區涵蓋歐美、日本、及東南亞。
- 產能 每月100噸、200員工、土地85000m<sup>2</sup>、廠房12000m<sup>2</sup>。
- 資本額 200萬美金。

- Established in 1976
- Castop Matrix Corporation specializes in all kind of alloy steel, carbon steel, stainless steel (especially non-magnet), bronze, aluminium, titanium and machine-, heat-, & surface treatments.
- Our company supplies high quality products for well-respected international brands in the automotive-, medical-, construction-, aircraft-, sanitary-, health care-, and chemical industry, and is expanding steadily.
- We ship our products to our honored clientele in the USA, Europe and Asia.
- Actual capacity 100 tons/month; 200 employees; 85,000 m<sup>2</sup> of land area; 12,000 m<sup>2</sup> of plant area
- Capital: two million USD.



## Measuring & Testing Equipment 測量與測試設備

- Spectrometer 金屬分光儀
- Universal testing machine 材料試驗機
- Hardness testing machine 硬度測試機
- Coordinate measuring machine 三次元量測儀
- Surface measuring machine 表面粗度儀
- Water pressure testing machine 測漏機



### 主要生產流程和程序時間

The main process and time for completing

蠟模製作	Molding process	1天 day
殼模製作	Ceramic process	6天 days
鑄造作業	Casting process	1天 day
後處理	post-treatment	1天 day
檢驗	Pre-inspection	1天 day
熱處理	Heat treatment	1天 day
機加工	Mechanical treatment	2天 days
表面處理	Surface treatment & final quality check	1天 day
包裝	Packing and shipping	1天 day
合計15天完成		15 days to complete



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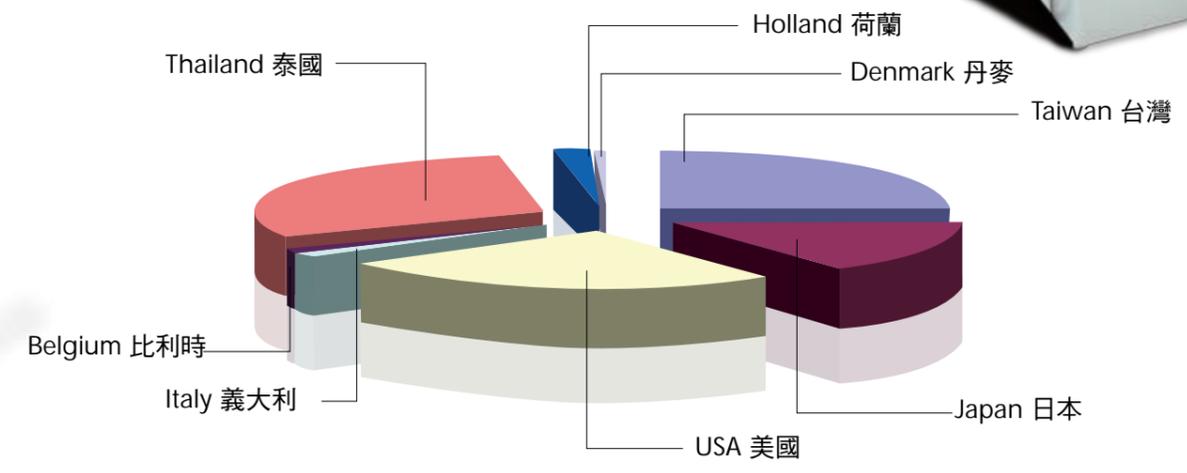


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# Our main productive equipment limitation 主要生產設備和承製能力



- 精密射蠟機 9台
- 高周波溶解爐 175kw 2套
- 熱處理爐 1套
- CNC車床 9台
- 加工中心 2台
- 線切割機 1台
- 放電加工機 1台
- 電解設備 1套
- 手拋光機 60台
- 表面噴砂機6套
- 摩擦焊接機 2套

- Wax injection machines: 9
- Induction melting sets 175KW: 2
- Heat ovens 300 kg: 1
- CNC lathe machine: 9
- CNC machine centers: 2
- CNC wire-cutter: 1
- CNC EDM machine: 1
- Electrolysis (polishing) equipment: 1
- Polishing machines: 60
- Sand blasting machines: 6
- Hi-speed friction welding machines: 2

重量：3 g-15 kg  
體積：400 mm x400 mm x300 mm  
最薄：0.5 mm  
最少訂貨：50 kg/lot

Weight: 3 g-15 kg  
Max. size: 400 mm x400 mm x300 mm  
Min. thickness: 0.5 mm  
Minimum quantity: 50 kg/lot  
Tolerance : casting 0.1 - 1 mm or 2%; CNC ± 0.05 mm  
Roughness : casting 118 - 25 Rmax; CNC 1.6 - 6.3 Rmax

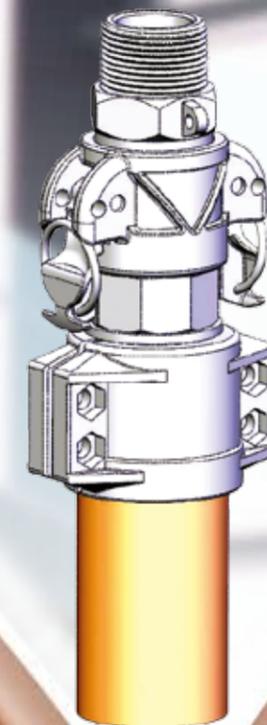
鑄件公差：casting 0.1 - 1 mm or 2%; CNC ± 0.05 mm  
表面粗度：118 - 25 Rmax; CNC 1.6 - 6.3 Rmax



## 建議公差 Recommendable tolerance in Lost wax casting

長度 Linear Tolerance

	Dimension	Class A	Class B	Class C
1	0-10mm	±0.10	±0.25	±0.40
2	11-25mm	±0.20	±0.30	±0.60
3	26-50mm	±0.30	±0.40	±0.80
4	51-75mm	±0.40	±0.50	±1.0
5	76-100mm	±0.50	±0.75	±1.25
6	100+	±0.5%	±1.0%	±1.5%



常用材質成分參考 Material code and chemical composition reference

W.N.	ASTM	JIS	AISI	C	SI	S	P	Mn	Ni	Cr	Mo	V	Cu
-	201	SUS201	201	≤0.15	≤1.0	≤0.03	≤0.06	5.5-7.5	3.5-5.5	16-18	-	-	-
1.4371	202	SUS202	202	≤0.15	≤1.0	≤0.03	≤0.06	7.5-1.0	4-6	17-19	-	-	-
1.4305	303	SUS303	303	≤0.15	≤1.0	≤0.15	≤0.2	≤2.0	8-10	17-19	≤0.06	-	-
1.4301	304	SUS304	304	≤0.08	≤1.0	≤0.03	≤0.045	≤2.0	8-10.5	18-20	-	-	-
1.4306	304L	SUS304L	304L	≤0.03	≤1.0	≤0.03	≤0.045	≤2.0	8-Dec	18-20	-	-	-
1.4312	CF8	SCS13A	CF8	≤0.08	≤2.0	≤0.04	≤0.04	≤1.5	8-11	18-21	-	-	-
1.4845	310	SUH310	310	≤0.25	≤1.5	≤0.03	≤0.040	≤2.0	19-22	24-26	-	-	-
1.4401	316	SUS316	316	≤0.08	≤1.0	≤0.03	≤0.045	≤2.0	10-14	16-18	2-3	-	-
1.4404	316L	SUS316L	316L	≤0.03	≤1.0	≤0.03	≤0.045	≤2.0	10-14	16-18	2-3	-	-
1.4410	CF8M	SCS14A	CF8M	≤0.08	≤2.0	≤0.04	≤0.04	≤1.5	9-12	18-21	2-3	-	-
1.4460	329	SUS329J1	329J1	≤0.08	≤1.0	≤0.03	≤0.04	≤1.5	3-6	23-28	1-3	-	-
1.4000	403	SCS1403	403	≤0.15	≤0.5	-	-	≤1.0	-	11-13	-	-	-
1.4006	410	SUS410	410	≤0.15	≤1.0	≤0.03	≤0.04	≤1.0	-	11.5-13.5	-	-	-
1.4016	430	SUS430	430	≤0.12	≤1.0	≤0.03	≤0.040	≤1.0	-	16-18	-	-	-
1.1121	1010	S10C	1010	0.08-0.13	0.15-0.35	≤0.05	≤0.04	0.3-0.6	≤0.2	≤0.2	-	-	≤0.03
1.1193	1045	S45C	1045	0.42-0.48	0.15-0.35	≤0.04	≤0.035	0.6-0.9	≤0.2	≤2.0	-	-	-
1.7225	4140	SCM440	4140	0.38-0.43	0.15-0.35	≤0.04	≤0.035	0.75-1.0	-	0.8-1.1	0.15-0.25	-	-
-	4320	SNCM420	4320	0.17-0.23	0.15-0.35	≤0.03	≤0.03	0.4-0.7	1.6-2	0.4-0.65	0.15-0.3	-	-
1.6523	8620	SNCM220	8620	0.18-0.23	0.15-0.3	≤0.03	≤0.04	0.7-0.9	0.4-0.7	0.4-0.6	0.15-0.25	-	-
1.4542	17400	SUS630	S17400	≤0.07	≤1.0	≤0.03	≤0.04	≤1.0	3-5	15.5	-	-	-
1.7264*	-	SCM421	SCM21	0.17-0.23	0.15-0.35	≤0.03	≤0.03	0.7-1.0	≤0.25	0.9-1.2	0.15-0.3	-	-
1.4031	-	SUS420J2	420	0.26-0.4	≤1.5	≤0.15	≤0.045	≤1.25	-	15	-	-	-
-	-	S18C	-	0.18-0.23	0.15-0.35	≤0.035	≤0.030	0.30-0.60	-	-	-	-	-
-	17400	-	17-4	≤0.07	≤1.0	≤0.03	≤0.04	≤1.0	3-5	15-17.5	-	-	3-5
-	420F	SUS420	420F	0.26-0.4	≤1.0	≤0.15	≤0.06	≤1.25	-	12-14	≤0.06	0.5-0.6	-
1.4125	440C	SUS440C	440C	0.95-1.2	≤1.0	≤0.03	≤0.04	≤1.0	-	16-18	≤0.75	-	-
0.6655	A436	-	A436	2.7-3.0	1-2.80	≤0.12	≤0.04	0.5-1.5	13.5-17.5	1.5-2.5	-	-	5.5-7.5
1.4848	HK	SCH22	HK40	0.35-0.45	≤1.75	≤0.04	≤0.04	≤1.50	19-22	23-27	≤0.05	-	-
-	-	SCW42	WCB	≤0.03	≤0.06	≤0.045	≤0.035	≤1.0	≤0.5	≤0.5	≤0.2	-	≤0.3
-	-	-	A36	≤0.26	≤0.4	≤0.05	≤0.04	-	-	-	-	-	-

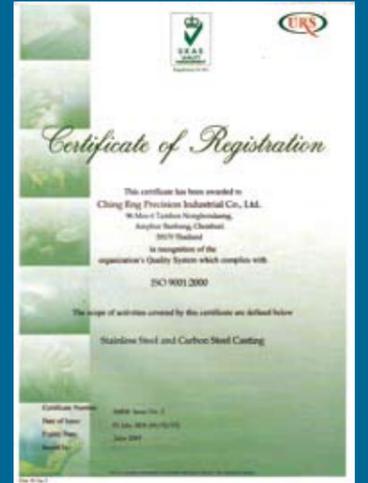
## Certification joint venture company 品質認證與協力廠合作

本公司於2000年通過ISO 9001:2008認證  
始終位居領導地位  
海外投資保稅工廠

本公司與KMF公司投資合作，供應汽、機車零件鑄造和加工給泰國Mitsubishi、Isuzu、Trihum...  
聯合完成PPAP,...等TS16949必要文件。(文件副本及工廠、加工、檢測照片)

ISO 9002 and 9001:2008 have approved  
The powerful and consistent  
Adopted B.O.I.

Castop Matrix corp. has jointed venture with Kamon Manufacturing Co., to provide auto parts for those companies of Tai Mistubishi, Isuzu, and Trihum. As for the documertation process of PPAP, ... like TS16949 had completed.



- 1.我們有優秀的技術團隊，數千種產品生產經驗，並榮獲世界知名的廠牌、大型建築商的信賴，如Goodyears, Matthew, Bangkok international Airport & BTS Airport link...
- 2.我們有模具設計、製造、鑄造、精密加工、電解、拋光、熱處理、嚴格品管到出貨，全方位服務，滿足客戶需求、節省客人時間。
- 3.我們有在泰國生產的快速和穩定、台灣服務的認真和負責..優勢，現在就與我們聯繫：

e-mail: [info@www.castop.co.th](mailto:info@www.castop.co.th)

- In more than two decades we have produced over 3,000 different casting products.
- One stop service: all of necessary form molding designing CAE, CAD/CAM, molding, casting, CNC, CMC, to heat- and surface treatment, polishing, packing and shipping.
- Our products are made in Thailand, and tech are developed in Taiwan that made us with no competition at all. Any OEM manufacturers' orders or designs are negotiable.

