

Excellent Alloy Solutions & Innovation



### 公司簡介

## Company Profile

我們的團隊負責螺桿與套筒的研究、開發和製造,並提供諮詢服務。

We started with a team of professional managers and a group of experienced engineers with 25 years of experience.

鼎烽精密工業股份有限公司為橡、塑膠機械料管、 螺桿品牌製造商,創立於2014年,由一群高階專 業經理人和經驗豐富的工程師所組成的專業團隊, 擁有25年的專業經驗,能客製化協助客戶研發設 計螺桿、料管及提供客戶即時性的生產服務。

鼎烽專業團隊生產品項為: 塑膠射出成型機、橡膠 射出機、押出成型機、吹袋、吹瓶機專用之螺桿、 料管及其他相關配件。

能協助客戶因應市面上日新月異的橡、塑膠機,給 予不同原料及素材特性最專業的解決方案,並針對 客製化機台,設計專屬螺桿、料管,確保機械運作 發揮最佳效能,具體提升生產製程及產品穩定度, 達到良率極大化。

公司經營理念:誠信、專業、品質、服務

Top Screw Precision Industry Co. Ltd. was established in 2014. We started with a team of professional managers and a group of experienced engineers with 25 years of experience. Our team does the research, development and manufacture of screws and barrels, also provide consultation service. The professional products of Top Screw team are: injection molding machine, rubber injection machine, extruders and extrusion lines, screw for blow molding machines, material pipe and other related accessories. To help customers respond to the ever-changing market and help them customize design for its best performance of the screws and barrels. So the customers can have the most efficiency product and the best product quality.

Top Screw Precision Industry Co. Ltd. is a fast moving company with slow thought ideals built of strong metal-just like our products. Our employees know this is a place to build a career. Our clients know Top Screw Precision Industry is a company to put faith and stock in.

Business Concept : Integrity-Professional-Sustainable development



## 公司經營理念與服務優勢

## Company Business Philosophy and Service Advantage



#### 

信守承諾,準確交期 Commitment to Promises, Accurate and on Time Delivery.



#### **■** 事業 / Professionalism

專業設計,解決問題 Professional Design, Problem Solving.



#### 

客戶至上,服務及時 Customer First, on Time Servic.



#### ✓ 品質 / Quality Assurance

鋼材製程,品質第一 Quality Comes First on Steel Processing.

## 檢驗及加工設備

## Inspection and Processing Equipment

產品經由相關檢測設備的使用來追蹤並管控,對客戶所需之產品品質做最嚴格的把關。

The products are tracked and controlled through the use of related testing equipment, and the most stringent requirements are placed on the quality of products required by customers.

#### │ 檢驗設備 / Quality Control & Inspection Equipment

- 1. 表面粗度測定儀
- 2. 洛氏硬度計
- 3. 三點式量表
- 4. 缸徑規
- 5. 外徑分厘卡
- 6. 游標卡尺
- 7. 膜厚計
- 1. Surface indicator
- 2. Rockwell hardness
- 3. Three point holtest
- 4. Bore gages
- 5. Micrometer
- 6. Caliper
- 7. Thickness gauge







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- 1. CNC車床 6. 搪磨機
- 2. CNC銑床 7. 精密傳統銑床
- 3. 懸臂鑽床 8. 螺桿銑牙機
- 4. 深孔機 9. 螺桿拋光機
- 5. 高速車床 10. CNC螺桿銑牙機
- 1. CNC turning lathe
- 2. CNC milling machine
- 3. Radial drilling machine
- 4. B.T.A
- 5. Turning high speed lathe
- 6. Honing machine
- 7. Precision milling machine
- 8. Screw milling machine
- 9. Screw polishing machines
- 10. CNC screw milling machine







## 特殊產品挑戰極限

## Special Products Challenge The Limits

#### ■ 雙合金押出料管組 / Bi-Metallic Barrel and Screw Series

挑戰極限 最小的鎳基雙合金押出料管組

● 螺桿材質:高鎳合金鋼

● 孔徑: Ø12mm ● 長度: 300mm

● 使用塑料: 鐵佛龍

Challenge the Limits, Smallest Ni Base Bi-Metallic Extrusion
 Barrel and Screw Series

Screw Processing Material : Ni Base

Aperture : Ø12mmLength : 300mm

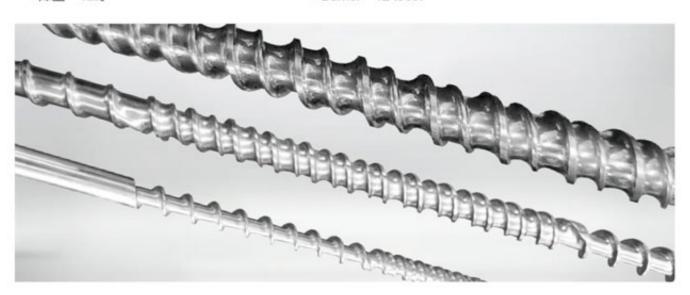
Plastic Raw Materials Adaptive : Teflon



#### ■ 特殊加工押出障壁螺桿 / Special Process Extrusion Barrier Screw

最多的壁障壁牙外徑:Ø16mm障壁:12牙

The Most Barrel Teeth
Pore Size : Ø16mm
Barrier : 12 teeth



## 射出成型系列

## Injection Molding Series

料管、螺桿為射出成型機之核心組件,為因應不同原料的使用,鼎烽精密提供各級鋼材之料管。 The feed tube screw is the core component of the injection molding machine. In response to the use of different raw materials, Top Screw Precision provides material tubes for all levels of steel.

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一般氮化料管 Nitrided Barrel	內徑Ø12~Ø200mm,長度: 6000mm
雙合金料管 Bi-Metallic Barrel	內徑Ø12~Ø150mm,長度: 4000mm

#### ■ 料管加工鋼材 / Barrel Processing Material

等級 / Grade	材質 / Materials	應用 / Application
氮化料管	SACM645	樹酯混合玻璃纖維<5%
Nitrided Barrel	ACM2	Resin with Glass-fiber<5%
C級雙合金	碳化鎢>15%	樹酯混合玻璃纖維10-20%
Bi-Metallic Barrel	HRC 50-55	Resin with Glass-fiber 10-20%
B級雙合金	碳化鎢>25%	樹酯混合玻璃纖維20-30%
Bi-Metallic Barrel	HRC 55-60	Resin with Glass-fiber 20-30%
A級雙合金	碳化鵭>40%	樹酯混合玻璃纖維30-50%
Bi-Metallic Barrel	HRC 60-65	Resin with Glass-fiber 30-50%



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內徑Ø12~Ø200mm,長度: 6000mm

#### ✓ 螺桿加工鋼材 / Screw Processing Material

SCM440(1.7225 / 4140)	SACM645(1.8509 / 7140)	SKD-61(1.2344 / H13)
SKD-11(1.2379 / D2)	ACM2(1.8550 / 38CrAlNi7)	粉末合金鋼、粉末高速鋼

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電鍍 Electroplating	真空 Vacuum Hardening	氮化 Nitrided
氮化鋁鈦 TIAIN PVD Coating	噴焊 / 溶射 PTA Welding Screw / HVOF Spray Coating Screw	

因客戶不同的原料使用,鼎烽螺桿的設計有更快的螺桿回料時間,以及更好的溫度控制。

Due to the different raw materials used by customers, the design of our screw has faster screw feed back time and better temperature control.



離心鑄造合金料管 Centrifugal Casting Furnace



高速高壓熔射合金螺桿 HVOF Spray Coating Screw



合金噴焊螺桿 PTA Welding Screw

#### 橡膠機系列

## Rubber Molding Series

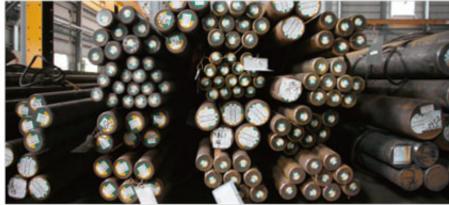
針對橡膠原料具有彈性特色,鼎烽精密在螺桿、料管的材質選用、設計、加工,都針對橡膠 原料不同之特性來做調整、調校,有效提升改善客戶橡膠射出成品之品質。

To the elastic properties of rubber raw materials, we have selected, designed, and processed the material for the screw feed pipe, and has adjusted and regulated the efficiency according to the relevant characteristics, effectively improving the quality of the customer's rubber injection product.

#### ✓ 料管加工範圍 / Barrel Processing Dimension

一般氮化料管 Nitrided Barrel

內徑Ø25~Ø200mm,長度: 4000mm







#### ✓ 螺桿加工範圍 / Screw Processing Dimension

外徑Ø25mm~Ø200mm,長度: 4000mm

#### ✓ 螺桿加工鋼材 / Screw Processing Material

SCM440(1.7225 / 4140)	SACM645(1.8509 / 7140)	SKD-61(1.2344 / H13)
SKD-11(1.2379 / D2)	ACM2(1.8550 / 38CrAlNi7)	粉末合金鋼、粉末高速鋼

#### ■ 螺桿加工方法 / Screw Processing Methods

氮化鋁鈦 TiAIN	氮化 Nitrided
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### 最大橡膠擠出機螺桿料管系列

## The Largest Rubber Extruder Screw and Barrel Series

專業生產橡膠熱喂料、冷喂料及銷釘冷喂料擠出機螺杆和料管,生產最大直徑的橡膠機螺桿。 公司可設計製造變距、變深,以及各種類型的非標螺桿、料管。此外還可以依據客戶需求對 螺桿工作表面進行噴塗硬質合金和鍍鉻等修復技術,以延長螺桿使用壽命。

Is the largest diameter of the rubber screw • spocialed in producing rubber hot and cold feed and pin cold feed extruder screw. The company can design and manufacture of pitch, variable depth, and non-standard screw, various types of machine barrel with our experience. In addition, in order to extend the service life of the screw, we can repair the screw working surface coating hard alloy and chrome according to the customer demand.



























### 押出機系列

## **Extrusion Molding Series**

押出機使用之料管、螺桿,為因應不同原料的使用,以及提升熔化效果並改善客戶製程的穩定性, 開烽精密提供客製化之料管、螺桿設計,如杜爾麥基式螺桿頭、障壁型螺桿等。

The extruder screw used in the extruder is designed to meet the needs of different raw materials, as well as to enhance the melting effect and improve the stability of the customer's production. We provides customized design, such as the Dulmage Mixer type screw head, barrier type screw and so on.

#### / 料管加工範圍 / Barrel Processing Dimension

一般氮化料管
Nitrided Barrel

內徑Ø12~Ø200mm,長度: 6000mm

#### ■ 螺桿 / Screw

一般氮化螺桿
Nitrided Screw

外徑Ø12~Ø200mm,長度: 6000mm

關烽精密設計之障壁型螺桿設計,在主螺牙間加一副牙,將固體與融膠分開,可避免未熔顆粒懸浮,有較好的熔化效果,製程穩定性及抗壓性高,有利於塑化。

The advantage of our design, as follows

- Increases melting efficiency due to elimination of premature solids bed break-up.
- · Increases melting rates and throughput.
- Improves melt temperature control due to lower, post melt shear stresses.





押出機料管 Extrusion Machine Barrel



押出機料管 Extrusion Machine Barrel



薩克斯頓式螺桿混練頭 Saxton Mixer



馬多克螺旋式螺桿混練頭 Spiral Maddock Mixer



發泡混練頭 Foaming Mixer Section

### 零配件

## Front - End Components

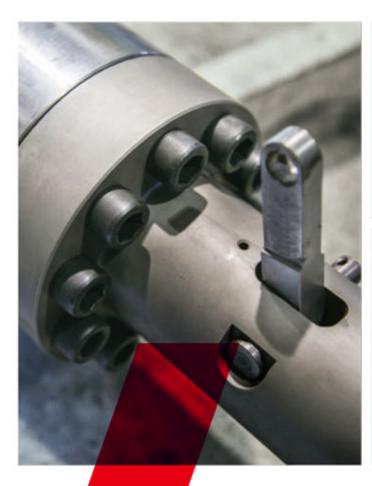
設計客製化的螺桿、料管零配件有助於提升客戶製程的效率及成品的質量、良率。鼎烽精密能協助客戶設計專屬螺桿、料管零配件。

Designing customized spiral tube parts helps to increase the efficiency of finished products and the quality of finished products. Top Screw Precision designs individual screw material parts for customers to meet the various needs of various materials and customers.

#### ■ 客製化零組件 / Customization Parts

- 客製化設計
- 前端組件:
  - 1. 射嘴(長、短、平)
  - 2. 射座
  - 3. 尖頭組(尖頭、過膠圈、過膠介子)

- Customize Design
- ETC. Front End Components :
  - 1. Nozzle (Long, Short, Flat)
  - 2. Barrel Head / End Cap
  - 3. Screw Head Set (Screw Head, Check Ring, Seat Ring)













品名 / Product	材質 / Materials	加工 / Processing
過膠頭 Screw Head / Distributer	不鏽鋼系 SACM645(1.8509 / 7140) SKD-61(1.2344 / H13)	電鍍 Electroplating 真空 Vacuum Hardening 氮化 Nitrided 鉛鈦 TiAIN Coating
過膠圈 Check Ring / Coller	粉末合金銅類 SKD-61(1.2344 / H13) SKD-11	電鍍 Electroplating 真空 Vacuum Hardening 氮化 Nitrided 鉛鈦 TIAIN Coating
過膠介子 Seat Ring / Washer	粉末合金鋼類 SKD-61(1.2344 / H13) SKD-11	電鍍 Electroplating 真空 Vacuum Hardening 氮化 Nitrided 鋁鈦 TiAIN Coating
射嘴 Nozzle	SACM645(1.8509 / 7140) SKD-61(1.2344 / H13)	電鍍 Electroplating 真空 Vacuum Hardening 氮化 Nitrided
射座 Barrel Head / End Cap	SACM645(1.8509 / 7140) SKD-61(1.2344 / H13)	電鍍 Electroplating 真空 Vacuum Hardening 氮化 Nitrided



## 鼎烽精密工業股份有限公司 Top Screw Precision Industry Co., Ltd.

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