

# TROY

TROY ENTERPRISE COMPANY LTD.

**Multi-Style Gearbox Design  
for Various Application**



Gearbox **減速機** 型錄

Ver.  
**1**

# About

## 品質・技術・服務一體的泰映

Quality, Technology, Service all-in-one

「泰映科技股份有限公司」，為精密馬達、馬達控制器及精密減速機，設計、製造一體的馬達專業製造商。  
TROY Enterprise Co., Ltd. specializes in the designing and manufacturing of Motors, Motor drivers, Controllers, and Gearboxes series.

為了建立「以客戶為中心、滿足客戶需求」的銷售、服務、信用體系，落實「提供好的產品與服務給客戶，協助客戶提升競爭力」的企業政策與承諾：

- 1996年公司成立即積極導入ISO9001、ISO14001之國際品質與環境保證體系，於1999年首次通過德國TÜV認證，且每年持續進行系統稽核至今。
- 產品安全規格認證方面：於2001年起陸續通過SGS-CE、TÜV-CE、CQC-CCC、cTÜVus、RoHS.....等產品安全相關認證及持續每年度稽核查驗。
- 企業財務信用認證方面：於2011年起每年接受Dun & Bradstreet, Inc.的D&B Credit 財務風險管理認證。

In order to establish a sales, service and credit system that is "Customer-centric and meet customer needs"; Implement corporate policies and commitments to provide customers with "Providing good products and services to customers and assisting customers to enhance their competitiveness".

- When TROY was founded in 1996, it actively introduced international quality and environmental assurance systems, ISO9001 and ISO14001. We passed the German TÜV certification in 1999 and continues to conduct systematic audits every year.
- Product safety specification certification: Since 2001, we have passed SGS-CE, TÜV-CE, CQC-CCC, cTÜVus, RoHS... and other product safety-related certifications and continuous annual inspections.
- Corporate financial credit certification: TROY got the D&B Credit financial risk management certification of Dun & Bradstreet, Inc. annually since 2011.

「泰映科技」是一家具備創新精神、設計理念、系統發展的公司。

以滿足顧客需求為中心，思考產品應具備的特性及功能；以色彩、造型、質感為研發設計訴求，顛覆傳統對工業產品的既有觀感；確立產品的自有特色與市場定位；將複雜的技術理論化身為簡單、易用、可靠的產品；徹底落實「品質」、「技術」、「服務」的經營理念。

TROY is a company with an innovative spirit, design concept, and system development.

We think about the features and functions of products focused on customer needs. Through the color, shape, texture for the R & D design appeal to establish the product's own characteristics and market positioning; to subvert the traditional impression of industrial products. Incorporate complex technical theories into simple, easy-to-use, and reliable products; to thoroughly implement the business philosophy of "Quality, Technology, Service all-in-one".

## 製造體系架構

### Manufacturing system architecture

馬達・減速機・驅動器・控制器

Motors・Gearboxes・Motor Drivers・Motor Controllers

可依客戶需求提供ODM及OEM的專業服務

ODM & OEM professional service by demand



# 直交型減速機

## RIGHT ANGLE GEARBOX

### 9V SERIES

- 直角安裝的設計 - 空間節省  
Right angle installation design - Save space
- 機型共用的設計 - 各軸型替換應用方便  
Common model design - Each output shaft can easy replacement and application
- 對稱結構的設計 - 水平 / 垂直載重強度提高  
Symmetrical structure design - Enhance horizontal / vertical load strength



# 直交型減速機 RIGHT ANGLE GEARBOX

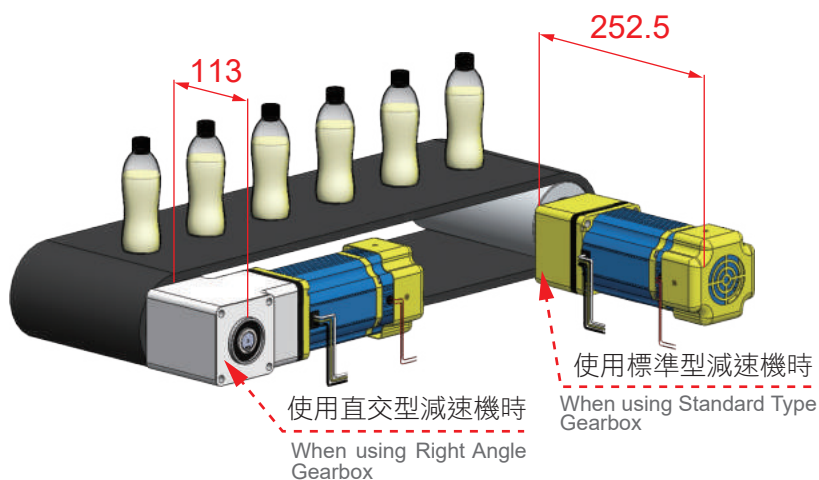


## ■ 應用特色 Application Features

**特色1** 直角安裝：節省空間  
Feature 1 Right angle installation: Save space.

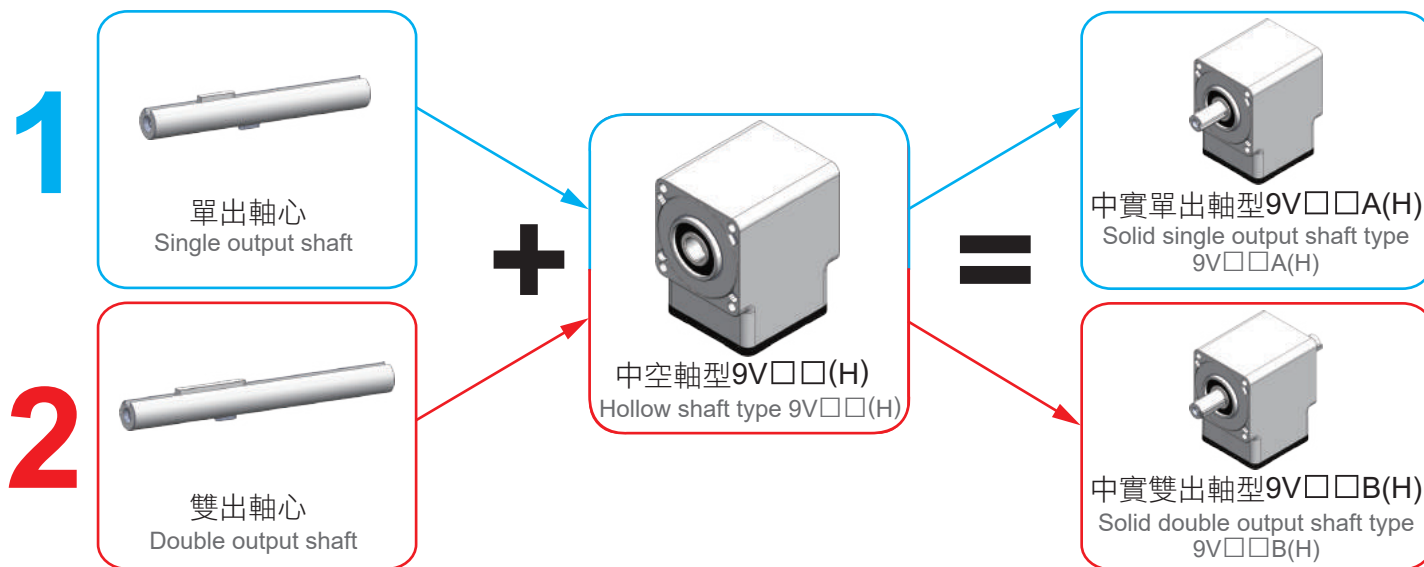
■ 節省**139.5mm**的空間!  
Save 139.5mm space!

※圖示為9R90P-□M搭360比減速機為例  
※The image is example for motor 9R90P-□M with gearbox ratio 1:360.



**特色2** 各軸型間採共用機型：替換搭配容易  
Feature 2 Each output shaft adopts common model: Can easy replacement.

■ 中空軸型與中實軸型(單出軸/雙出軸)採共用機型：安裝應用方便。  
Hollow shaft type and solid shaft type (Single output shaft / Double output shaft) adopt common model: Can easy installation and application.





**特色3** 軸心與減速機本體採鍵槽結合方式：強度大幅提升  
**Feature 3** Output shaft and gearbox body adopt keyway combination: Enhance strength.

- 新型的專利結構設計：強度較它牌螺栓結合方式提升!  
 Utility model patent structure design: The strength of keyway combination has been improved compared to the bolt bonding method of other brands!

**新型專利證書 Utility Model Patent Certificate**



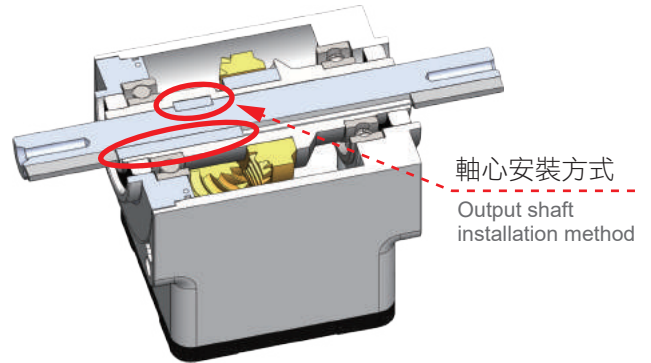
台灣  
Taiwan



中國  
China



日本  
Japan



**特色4** 對稱型結構設計：有效提高水平/垂直載重強度  
**Feature 4** Symmetrical structure design: Enhance horizontal / vertical load strength.

- 新式樣的專利結構設計：前後偏心率小，可使用相同載重，方便安裝應用於各場合。  
 New type patent structure design: Small amount of shaft eccentricity on both sides and it can hold up the same load, which is convenient for installation in various applications.

**新式樣專利證書 New Type Patent Certificate**



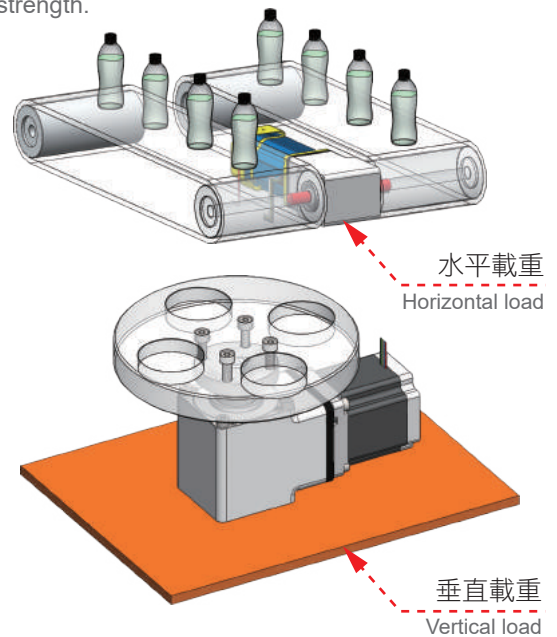
台灣  
Taiwan



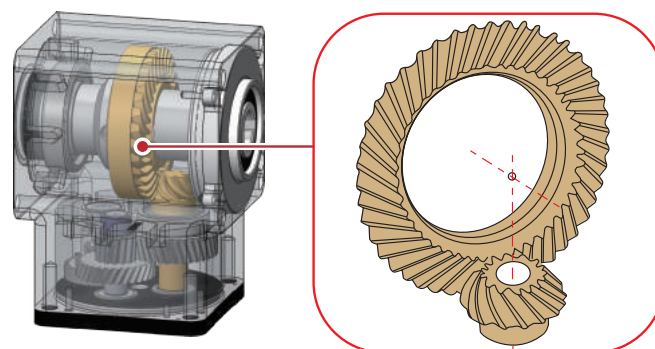
中國  
China



日本  
Japan



**特色5** 採螺旋傘型齒輪結構：可提高傳動效率  
**Feature 5** Adopt spiral bevel gear structure: Enhance transmission efficiency.



# Right angle Gearbox

## 直交型減速機

### ■ 品名看法 Model Name

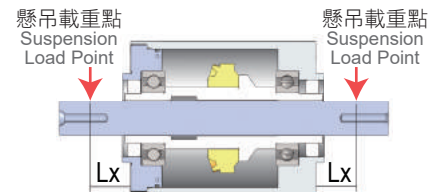
9	V	A	9	A	H			
安裝面尺寸 Installation Dimension	產品系列 Product Series	使用馬達類型 Using Motor Series	減速比 Gearbox Ratio		軸型式 Shaft Type	強度區分 Strength Distinction		
9 □90mm	直交型減速機 Right Angle Gearbox	TROY 馬達齒輪軸型 TROY Motor Pinion Shaft Type	7.2	1/7.2 <sup>※1</sup>	60	1/60	無 中空軸型 Hollow Shaft Type	無 標準型 Standard Type
		A AC感應馬達 AC Induction Motor	7.5	1/7.5	75	1/75	A 中實單出軸型 Solid Single Output Shaft Type	H 高強度型 High Strength Type
		D DC無刷馬達 DC Brushless Motor	9	1/9	90	1/90		
		H 步進馬達 Stepper Motor	10	1/10 <sup>※2</sup>	100	1/100	B 中實雙出軸型 Solid Double Output Shaft Type	
		12.5	1/12.5	120	1/120			
		15	1/15	150	1/150			
		18	1/18	180	1/180			
		20	1/20	200	1/200			
		25	1/25	250	1/250			
		30	1/30	300	1/300			
		36	1/36	360	1/360			
		50	1/50					

※減速比7.2為9VH系列限定，有9VH7.2 / 9VH7.2A / 9VH7.2B三種規格。  
Gearbox ratio 7.2 only for 9VH series, it has 9VH7.2 / 9VH7.2A / 9VH7.2B three specifications.

※減速比10為9VD系列限定，有9VD10H / 9VD10AH / 9VD10BH三種規格。  
Gearbox ratio 10 only for 9VD series, it has 9VD10H / 9VD10AH / 9VD10BH three specifications.

### ■ 規格 Specification

型式 Type	中空軸型9V□□(H) / 中實單出軸型9V□□A(H) / 中實雙出軸型9V□□B(H) Hollow Shaft Type 9V□□(H) / Solid Single Output Shaft Type 9V□□A(H) / Solid Double Output Shaft Type 9V□□B(H)																						
減速比數 Gearbox Ratio	7.2 <sup>※1</sup>	7.5	9	10 <sup>※2</sup>	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200	250	300	360
傳動效率 Transmission Efficiency	70%			75%			80%			85%			90%										
運轉方向 Rotation Direction	與馬達本體的軸心運轉方向相反 The gearbox and motor output shaft rotate in the opposite direction.															與馬達本體的軸心運轉方向相同 The gearbox and motor output shaft rotate in the same direction.							
容許轉矩 / 容許負載慣性 Allowable Torque / Allowable Inertia	與標準型減速機規格相同(因受限於馬達軸心強度，請參照各類型馬達型錄) The specification same as standard type gearbox. (Due to the limitation of motor shaft strength, please refer to each type of motor catalogues.)																						
容許徑向(懸吊)載重 Allowable Radial (Suspension) Load	凸緣安裝面到懸吊載重點的距離(Lx)為： Distance(Lx) between flange surface mounting and suspension load point is： 10 mm 時→1040N；20 mm 時→950N $Lx \text{ mm 時} \rightarrow \square N = \frac{97.8}{97.8+Lx} \times 1150N^*$ *1150N為凸緣安裝面位置的容許懸吊載重值 *1150N is the allowable suspension load value of flange surface mounting position.																						
容許軸向(推力)載重 Allowable Axial (Thrust) Load	700N																						



※1: 7.2比為9VH系列限定(9VH7.2 / 9VH7.2A / 9VH7.2B)  
Gearbox ratio 7.2 only for 9VH series (9VH7.2 / 9VH7.2A / 9VH7.2B).

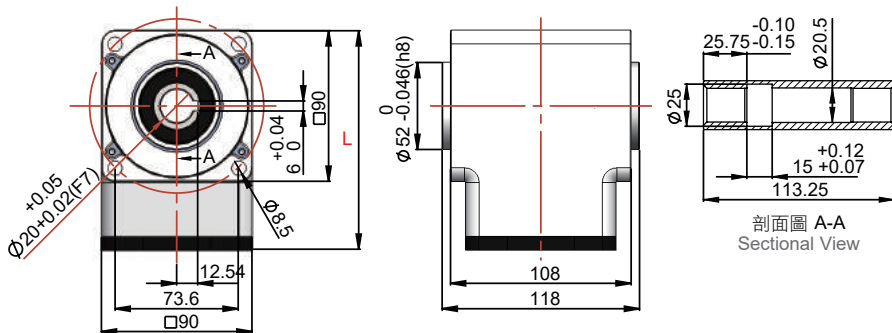
※2: 10比為9VD系列限定(9VD10H / 9VD10AH / 9VD10BH)  
Gearbox ratio 10 only for 9VD series (9VD10H / 9VD10AH / 9VD10BH).



## ■ 外形尺寸圖 Dimension

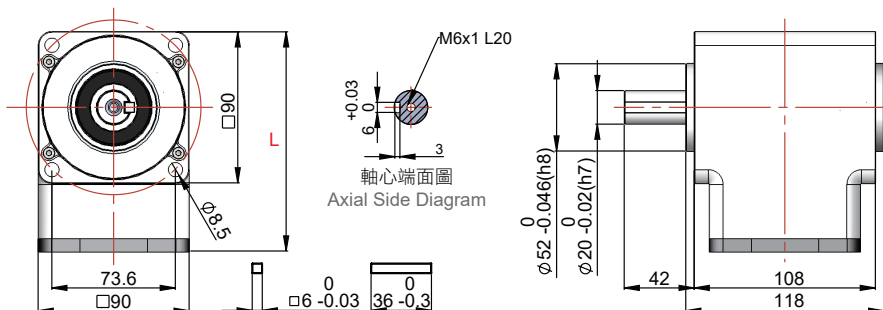
(單位Unit : mm)

### 中空軸型9V□□(H) Hollow Shaft Type 9V□□(H)



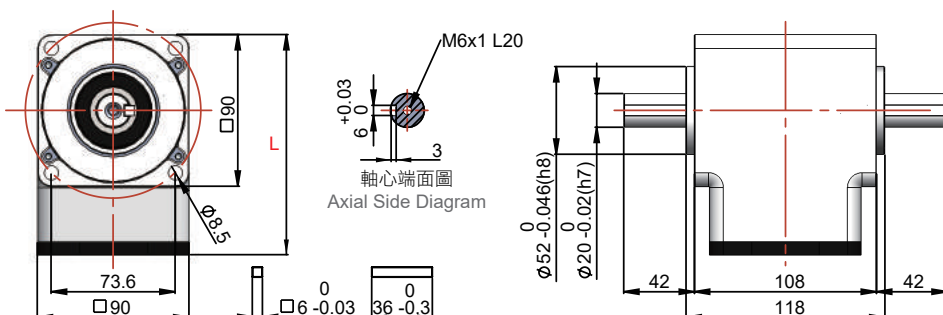
減速比 Gearbox Ratio	高度L(mm) Height L	重量(g) Weight
7.2~100	130.6	3000
120~360	143.6	3500

### 中實單出軸型9V□□A(H) Solid Single Output Shaft Type 9V□□A(H)



減速比 Gearbox Ratio	高度L(mm) Height L	重量(g) Weight
7.2~100	130.6	3370
120~360	143.6	3870

### 中實雙出軸型9V□□B(H) Solid Double Output Shaft Type 9V□□B(H)



減速比 Gearbox Ratio	高度L(mm) Height L	重量(g) Weight
7.2~100	130.6	3450
120~360	143.6	3950

# TROY



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Customer Service Center
-  物流中心  
Distribution Center
-  維修中心  
Repair Center
-  經銷商  
Distributor

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Taiwan Area General Agent  
中國區  
China Area

**厚利貿易股份有限公司**  
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厚利小幫手 應用程式  
Sunholy Helper Application





厚利小幫手 應用程式(中國)  
Sunholy Helper Application (China)





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