

VARITRON[®]
Take Control In Speed

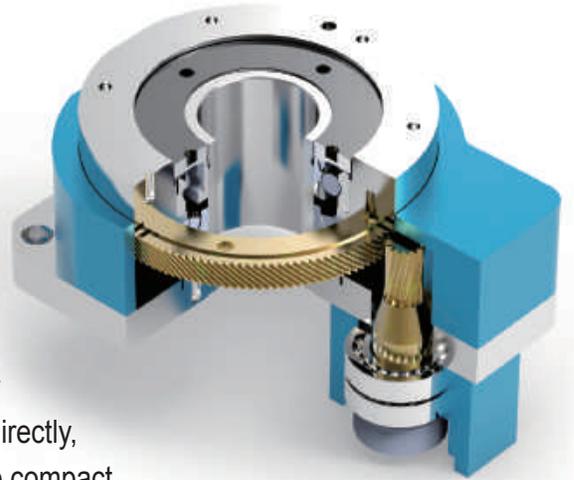
驅動科技系列產品
Power Transmission Technologies



Hollow Rotary Platform

中空旋轉平台

中空旋轉平台系列(Hollow Rotary Platform, HRP)採用中空式旋轉工作平台，大型圓盤設備或機械手臂可直接安裝於其旋轉盤面上，具有優異的精度，緊湊的結構設計使之可安裝於任何位置，此系列適用於製造、檢驗、定位、研究、追蹤及醫療應用上。依據應用需求可選擇搭配伺服馬達或步進馬達，可廣泛應用於滑台與有中空過管線需求之機構上。



Hollow Rotary Platform (actuator) , HRP series, features a hollow table that allows inertia-large discs or robot arms to be installed directly, offers optimized load capacity, torque, speed, and resolution. The compact mechanism can be mounted in any position which are suitable for use in manufacturing, inspection, positioning, research, tracking, and medical applications. It offers the easiest possible installation of rotary table applications. Depending on your application you can choose between servo and stepper motors.

High Accuracy 高精度定位

Repetitive positioning accuracy 重複定位精度 10~15 arcmin
Torsional backlash ≤ 1 arcmin 回程間隙 ≤ 1 弧分

High efficiency motor connection 高效率馬達連接設計

Input side design with coupling type locking mechanism to ensure concentricity and balance with no backlash during high speed transmission.
輸入端採夾筒式的鎖緊機構，以確保高輸入轉速下結合面的同心度與平衡度，及零背隙的動力傳遞。

Direct Mounting of Workpiece 工作平台可直接連接

Allows direct mounting of workpiece loading to rotating table, for convenience design
工作平台可直接與工件配合，提高便利性

Hollow Structure Design 中空結構

Convenient for wiring or piping work 配線、配管便利

Helical Gear Design 螺旋齒輪設計

Speed reduction mechanism employs helical gear, which provide double meshing rate of teeth compare to spur gear. Helical gear design provides extremely smooth operation, low noise, high torque and low backlash.
減速機機構採用螺旋齒輪設計，齒形嚙合率為一般正齒輪的兩倍以上，具運轉平順，低噪音，高輸出扭矩和低背隙特性。

High rigidity Bearing 高剛性軸承

Precision Tapered Roller Bearings employs, high axial and radian loading with small size and compact design.
採用精密圓錐滾子軸承，體積小、結構緊湊，可同時承受徑向基軸向負荷。



How to order 選型

HRP 100H - 3 - S - B - P - M - A - R

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①	Model 型式	HRP: Hollow Rotary Platform (actuators) 中空旋轉平台
②	Frame Size 型號	060, 060H, 100, 100H, 130, 130H, 200, 200H, 275, 275H Refer to Gearbox Quick Selection Table Page B37. 請參考快速選擇表第 B37 頁
③	Ratio 減速比	HRP: 5 / 8 / 10 HRP-H: 15 / 20 / 24 / 25 / 30 / 32 / 35 / 40 / 50 / 56 / 70 / 80 / 100 Refer to Specifications Table Page B37. 請參考規格表第 B37 頁
④	Motor Shaft Diameter 馬達軸心直徑(S)	Customized according to customer requirement. 依客戶需求訂製
⑤	Motor Pilot Diameter 馬達引導外徑(B)	Customized according to customer requirement. 依客戶需求訂製
⑥	Motor Guide Depth 馬達引導深度(P)	Customized according to customer requirement. 依客戶需求訂製
⑦	Installing Screw P.C.D 安裝螺絲孔直徑(M)	Customized according to customer requirement. 依客戶需求訂製
⑧	Installing Screw Size 安裝螺絲孔內徑(A)	Customized according to customer requirement. 依客戶需求訂製
⑨	Motor Shaft Length 馬達出力軸長度(R)	Customized according to customer requirement. 依客戶需求訂製

Model 型式 ①

HRP



HRP-H



HRP Hollow Rotary Platform 精密中空旋轉平台

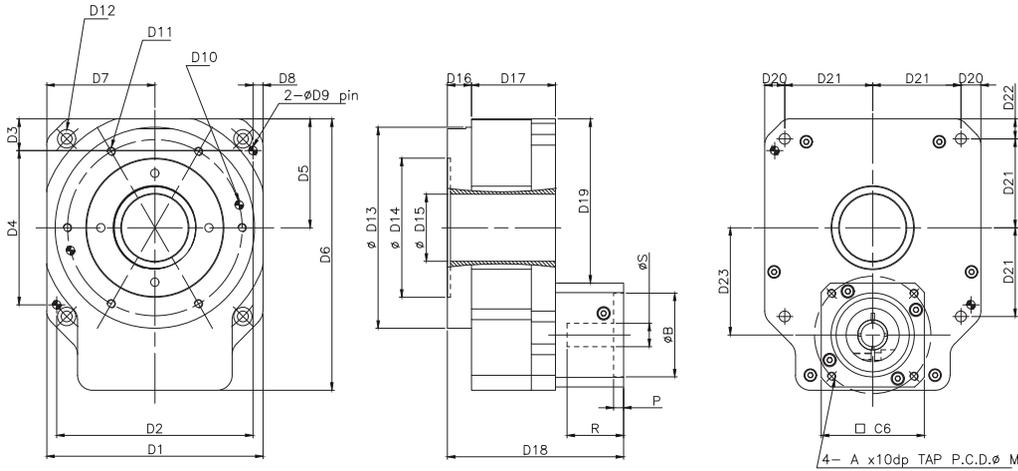
Series Specifications 規格表

Specification 規格	HRP060	HRP060-H	HRP100	HRP100-H	HRP130	HRP130-H	HRP200	HRP200-H	HRP275	HRP275-H
Platform Supporting Bearing 旋轉平台軸承	Ball Bearing 深溝滾珠軸承 & Tapered Roller Bearings 圓錐滾子軸承						Tapered Roller Bearings 圓錐滾子軸承			
Defined Output Torque 額定輸出扭矩 (Nm)	5	5	45	45	45	45	80	80	80	80
Instantaneous Max. Output Torque 瞬間最大輸出扭矩 (Nm)	10	10	90	90	90	90	160	160	160	160
Permissible Thrust Load 容許推力載重 (kgf)	20	20	200	200	200	200	500	500	500	500
Permissible Output Speed 容許輸出轉速 (rpm)	200	200	200	200	200	200	200	200	200	200
Accuracy Service Life 精度壽命	15000	15000	20000	20000	20000	20000	20000	20000	20000	20000
Reduction Ratio 減速比	5	15,20,25, 35,50	8	24,32,40, 56,80	10	30,40,50, 70,100	10	30,40,50, 70,100	10	30,40,50, 70,100
Repetitive Positioning Accuracy 重覆定位精度 (arcsec)	≤15	≤70	≤10	≤60	≤10	≤60	≤10	≤60	≤10	≤60
Torsional Backlash 定位精度 (arcsec)	≤1	≤1	≤1	≤1	≤1	≤2	≤1	≤2	≤1	≤2
Parallelism of Platform 旋轉平台平行度 (mm)	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02
Concentricity of Platform 旋轉平台同心度 (mm)	≤0.02	≤0.02	≤0.02	≤0.02	≤0.015	≤0.015	≤0.015	≤0.015	≤0.015	≤0.015
Protection Class 防護等級	IP40									
Weight 重量 (kgs)	1.1	1.5	3.1	4.5	5.8	7.1	17.3	20.8	20.8	24.5
Lubricating Oil 潤滑油	Synthetic Lubricant 合成潤滑油									

※ Continuous operating will reduce service life. 連續運轉將會減少減速機的使用壽命。

HRP Hollow Rotary Platform 精密中空旋轉平台

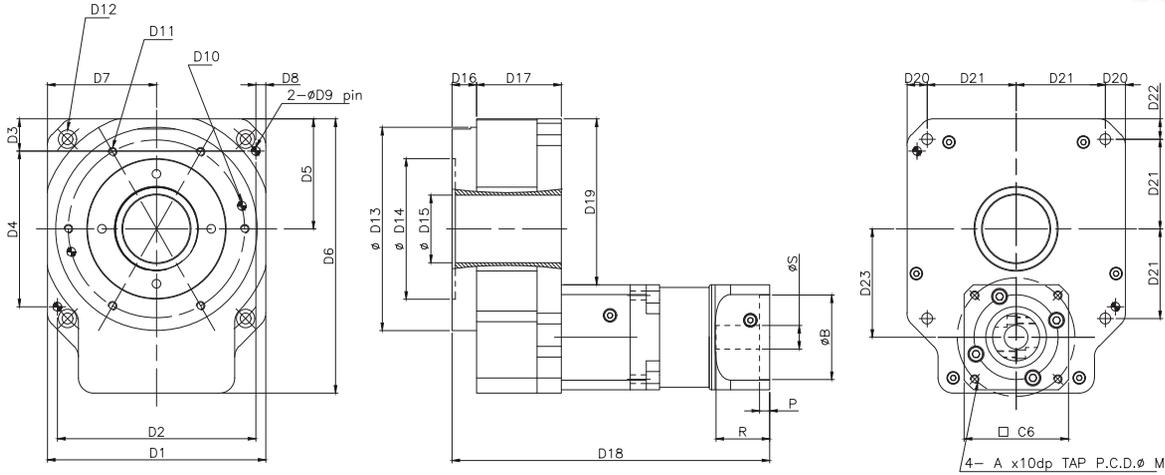
Dimensions 外型尺寸表



Dimensions 尺寸	HRP060	HRP100	HRP130	HRP200	HRP275
D1	60	100	130	200	200
D2	-	92	118	186	186
D3	-	18	19	30	30
D4	-	64	92	140	140
D5	31	50	65	100	100
D6	84	135	162	255	255
D7	30	50	65	100	100
D8	-	4	6	7	7
D9	-	4	5	8	8
D10	2-Ø4x10dp PCDØ27	2-Ø5x10dp PCDØ80	2-Ø5x10dp PCDØ105	2-Ø5x15dp PCDØ170	2-Ø5x15dp PCDØ170
D11	6-M4x8dp TAP PCDØ27	6-M5x10dp TAP PCDØ80	6-M5x10dp TAP PCDØ105	6-M6x15dp TAP PCDØ170	6-M8x15dp TAP PCDØ170
D12	4-Ø8x6dp xØ4.5	4-Ø9.5x7dp xØ5.5	4-Ø11x7dp xØ6.5	4-Ø18x10dp xØ10.5	4-Ø18x10dp xØ10.5
D13	35	95	120	190	190
D14	-	56	83	81	-
D15	20	29	40	40	75
D16	3	13	14.5	14	41
D17	34	38.5	50.5	51	51
D18	74	167	106	126.5	153.5
D19	41	72.4	98	157.5	157.5
D20	5	10	12	18	18
D21	25	40	53	82	82
D22	6	10	12	18	18
D23	31	52.4	64	102.5	102.5
C6	42	62	62	90	90
S	8	14	14	19	19
B	30	50	50	70	70
P	5	6	6	8	8
M	46	70	70	90	90
A	M4	M5	M5	M6	M6
R	30	32	34	50	50

HRP-H Hollow Rotary Platform 精密中空旋轉平台

Dimensions 外型尺寸表



Dimensions 尺寸	HRP060-H	HRP100-H	HRP130-H	HRP200-H	HRP275-H
D1	60	100	130	200	200
D2	-	92	118	186	186
D3	-	18	19	30	30
D4	-	64	92	140	140
D5	31	50	65	100	100
D6	84	135	162	255	255
D7	30	50	65	100	100
D8	-	4	6	7	7
D9	-	4	5	8	8
D10	2-04x10dp PCD027	2-05x10dp PCD080	2-05x10dp PCD0105	2-05x15dp PCD0170	2-05x15dp PCD0170
D11	6-M4x8dp TAP PCD027	6-M5x10dp TAP PCD080	6-M5x10dp TAP PCD0105	6-M6x15dp TAP PCD0170	6-M8x15dp TAP PCD0170
D12	4-08x6dp x04.5	4-09.5x7dp x05.5	4-011x7dp x06.5	4-018x10dp x010.5	4-018x10dp x010.5
D13	35	95	120	190	190
D14	-	56	83	81	-
D15	20	29	40	40	75
D16	3	13	14.5	14	41
D17	34	38.5	50.5	51	51
D18	144	167	189	244	271
D19	41	72.4	98	157.5	157.5
D20	5	10	12	18	18
D21	25	40	53	82	82
D22	6	10	12	18	18
D23	31	52.4	64	102.5	102.5
C6	42	62	62	95	95
S	≤ 8	≤ 14	≤ 14	≤ 24	≤ 24
B	22~30	30~50	30~50	50~80	50~80
P	5	6	6	8	8
M	≤ 46	≤ 70	≤ 70	≤ 90	≤ 90
A	M4	M5	M5	M6	M6
R	≤ 25	≤ 32	≤ 32	≤ 40	≤ 40

※ For 'S', 'B', 'M', 'A' & 'R' dimension, may array according to different servo motor. 「S」「B」「M」「A」 & 「R」會因不同伺服馬達而有所變動。

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遊星式減速機

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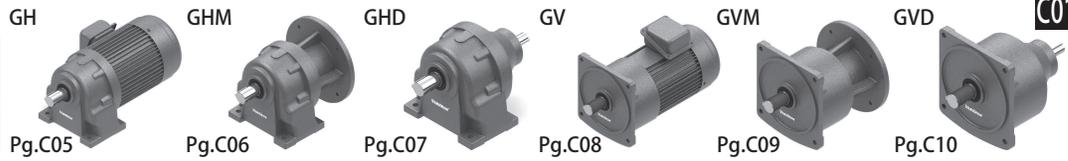
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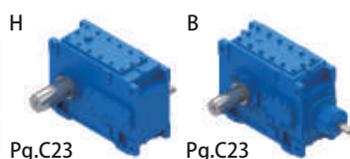
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Disco Speed Variator

無段變速機



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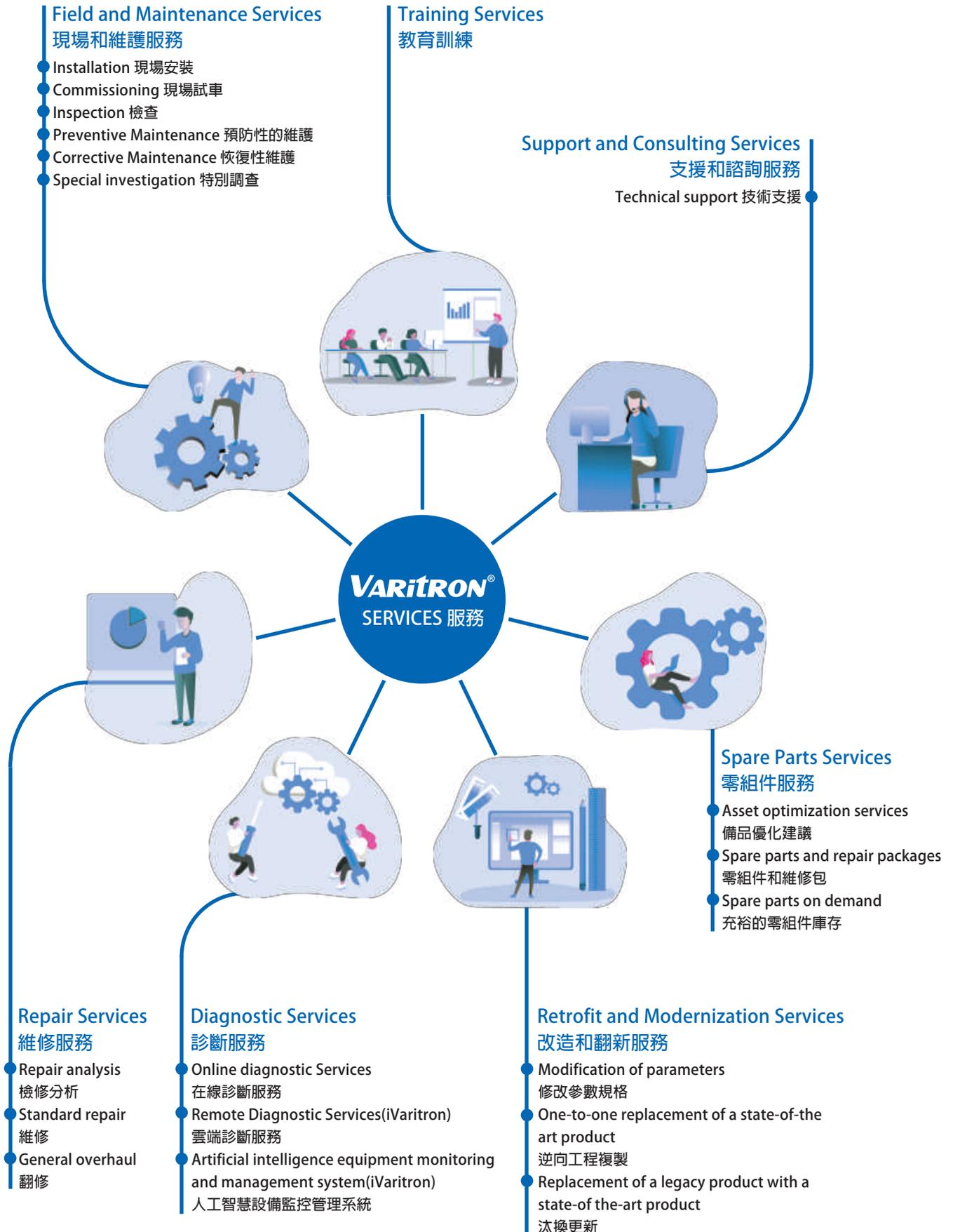
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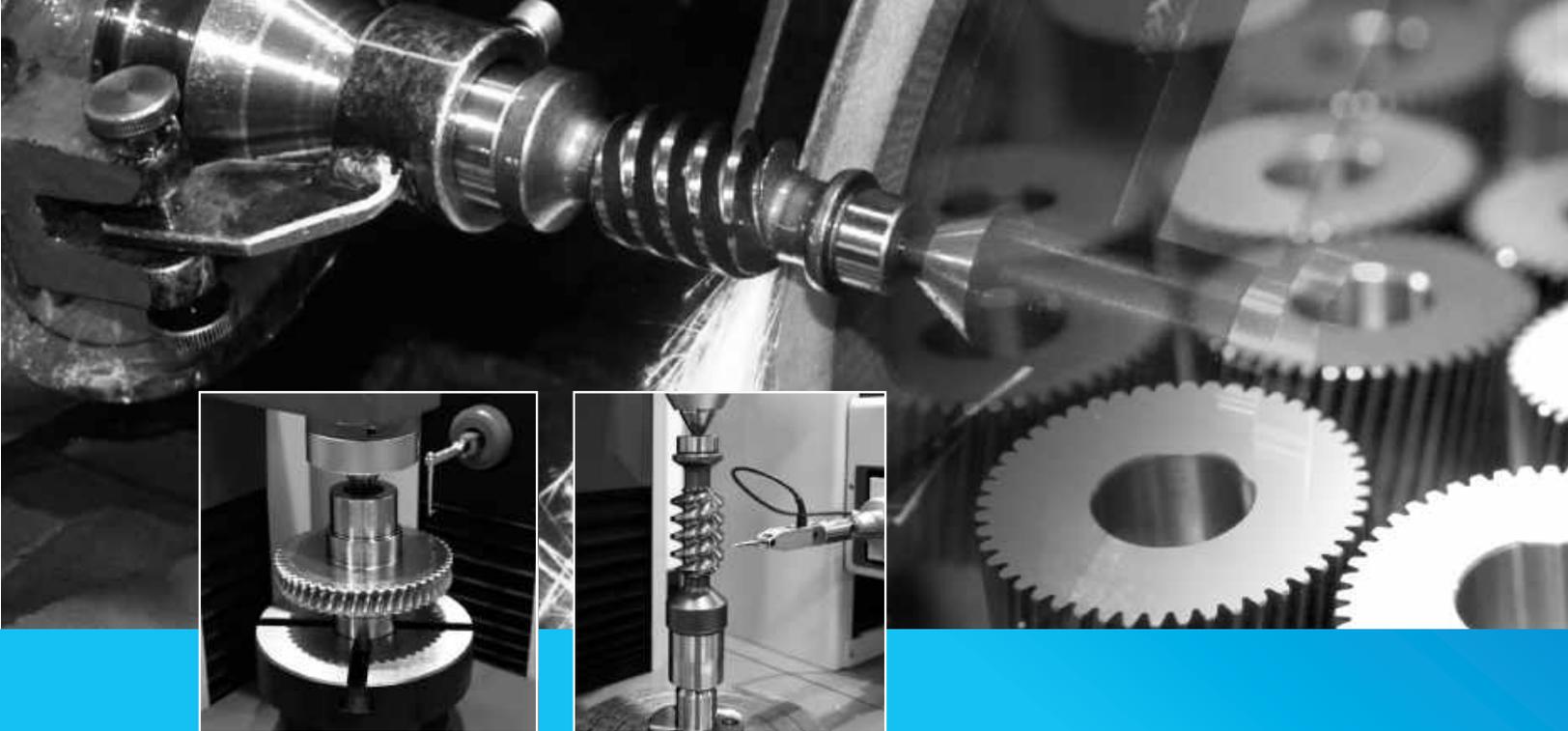
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VARITRON® Total Solution for Transmission Units

全方位的驅動產品服務





MADE IN TAIWAN

Service perfection, Quality superiority, Research and Development are the core enterprise spirits of VARITRON since 1971. Responding to both domestic customers and international market demands, we never stop to make innovation for gearbox function, efficiency and quality improvement, accompany with accurate and in-time after service. To improve quality control, VARITRON has been certified with ISO9001 since 2008.

Varitron wide power transmission product line including Cycloidal Drive, Precision Planetary Gearbox, Helical Gearmotor, Planetary Gear Reducers, Worm Gearbox, Variator and Induction Motor provides different industries sectors including CNC Machineries, Semi-conductor, Chemical, Steel Industries, Factory facilities, Automation Machineries, robo-tic arm With Varitron strong mechanical engineering team, Varitron provides customizes transmission gearbox and many newly innovated pattern products.

Service

Towards Varitron's Half-century, we serve more than 40 countries. VARITRON has more than 10 service points in cooperation with regional agents globally to timely assist our customers not only for hardware, like parts and maintenance, but also for software, like design consultant

Quality

Quality Perfection is Varitron's core value, new machinery and quality check equipment is deploy in the manufacturing. Minimum 30 quality check point is done from raw material to final gearbox. In-house testing laboratory, ISO9001 and ISO14001 quality control system to ensure every gearbox meets perfection.

Innovation

Our specialized R&D teams constantly developing new gearbox, gear motor and motors for effectively fabricating transmission products, and working to improve machine quality. VARITRON never stops doing market surveys and attending international exhibitions. With decades of knowledge accumulated about market information and changes in machineries trends, we can provide the most valuable information to our clients and assist our clients in industrial upgrading.



VARITRON®
Take Control In Speed

「服務」、「品質」、「研發」是中國變速工程股份有限公司自1971年成立以來一直秉持的核心精神。為因應國際多元化的市場需求，我們不斷挑戰速度及品質的極限亦擁有領先且精密的技術，在近半世紀的努力下，終於從一家國內的減速機工廠蛻變為國際優秀的工業自動化領導品牌。

本公司生產之減速機種類多元，包含賽驅樂減速機、低背隙行星減速機、齒輪減速機、遊星式減速機、蝸輪減速機、無段變速機、攪拌機系列等等，其工業品上的應用更是跨足不同產業，從CNC自動化、汙水處理廠、造紙廠、機械手臂、半導體及到化工廠等等…。為了滿足客戶各項傳動需求，我們尚提供客製化技術，為客戶量身打造一套屬於自己的產品，為客戶節省更多測試及人力成本。

我們具有性能卓越的獨家技術、不斷研發的專利產品，同時還有完善的售前/後服務，才能讓本公司於眾多製造廠商中脫穎而出。

服務

經過半世紀的努力，我們的客戶已超過40個國家，為因應海外市場龐大的業務量及秉持服務品質不縮水的精神，我們已在海外增設多個據點，提供給客戶更即時性的服務。

品質

因為品質的堅持是我們最重要的信念，所以本公司引進最新型、最先進的技術及機器，生產的每樣產品從原料到成品皆須歷經30道以上的檢驗關卡，我們希望透過最嚴謹的製造流程，來確保品質的無虞，並致力通過ISO9001及ISO14001的認證。除證實我們對於品質與自我的要求外，更帶領我們達到積極追求的目標 - 「提供高效率且環境友善的產品」，為環境永續更盡一份心力。

研發

本公司憑藉著永續經營、鍥而不捨的研發精神，不斷吸納專業人才、研發新技術，並努力拓銷至國際市場(韓國、日本、東南亞、澳洲、美國及歐洲等四十多個國家)，歡迎您來體驗中國變速所帶給您的傳動新感受。

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