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Lio Shing Turret

Hydraulic Servo Turret
油 壓 伺 服 刀 塔



LIO SHING CO., LTD.

Lio ShingTurret

A Strong Commitment to Quality Turrets....

R&D Uses the latest computer technology and peripheral equipment to create and develop high quality, higher performance, multi-functional turrets with various specifications that meet market demand. All developed products are assembled accurately and pass our endurance tests. After such endurance tests, each part of the machine is tested again to measure wear conditions. After the wear test, meetings are held with our staff to assess quality, ensuring a perfect product.

High precision, quality, efficiency and creativity are our principles. We are a harmonious team and highly organized, and this is the basis for our stable growth. For a long time, LioShing staff has worked together to upgrade the quality of our products, thus increasing sales. Concentrating on R&D and combining professional knowledge, we feel that LioShing has established the ideal organization. LioShing has integrated its management department, business department, R&D department, production department and Q&A department so that every department is in constant contact and is able to make its best effort. We also have a highly spirited and talented staff that works well with one another and makes the most of their abilities.

研發創新.是企業經營延續之命脈.六鑫設計出高品質.高性能,符合市場所需求之刀塔規格型式的產品.開發之各項產品.均經過精密組裝及長期測試後,針對各部傳動元件之磨耗狀況進行再檢驗.並經由各部門之研討改善讓品質更臻完美。

六鑫數十年來我們運用團隊力量緊密結合,在生產與設備上不斷提升,精心研究並結合專業人士建立完善的組織,結合管理部、營業部、研發部、生產部、品保部、各司其職並發揮其所長,我們以技術分工、精神合作為要求,確實將每一個角色由個人、小組推至各部門及全組織均能依其所司充份發揮。部門與部門間相輔相成,致力於刀塔製造的研究、品質的控制、顧客的滿意,為六鑫在國際市場開拓出一片天地,創造更美好的未來。



六鑫公司與您共創未來！
Thus creating a better future for LioShing.

QUALITY:

After assembly, the turret is processed by high precision horizontal CNC machining center to meet the requirements of high precision CNC lathes. We offer high quality products and complete after sales service, supplying spare parts and offering technology transfer.

品質:

組裝試車完成後為符合CNC車床,對刀塔之高精度要求,本公司採用ZEISS三次元座標儀做產品精度的檢驗。



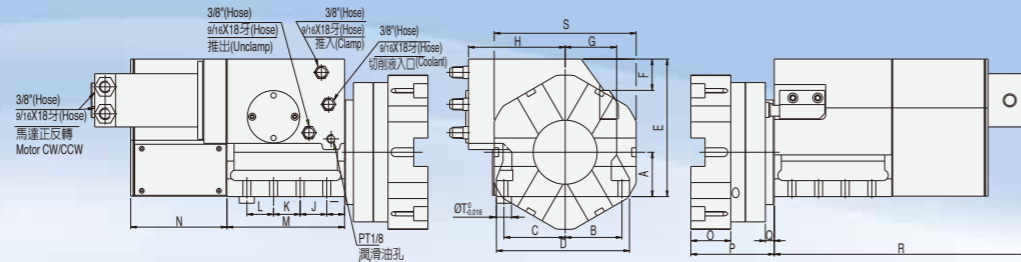
Each department works together in the development, production and quality control of the lathe turret to ensure customer satisfaction.

精心設計製造的六鑫刀塔,絕對符合您對性能的嚴苛要求。

Hydraulic Turret | 油壓刀塔

LS-100

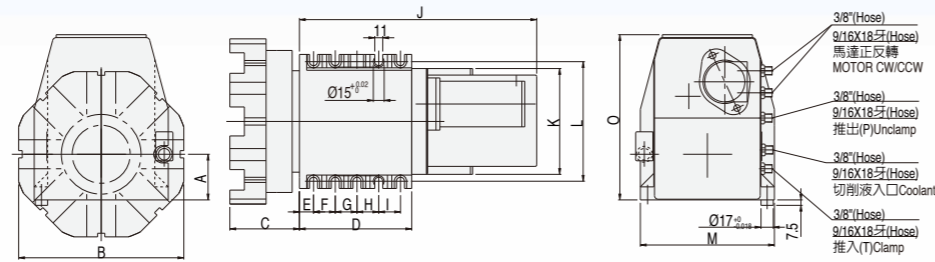
Lio ShingTurret



型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
LS-100	50	64	69	150	155	35.3	58	109	20	30	30	30	132.5	108.5	45	94	10	285.5	160	17

LS-120/LS-160

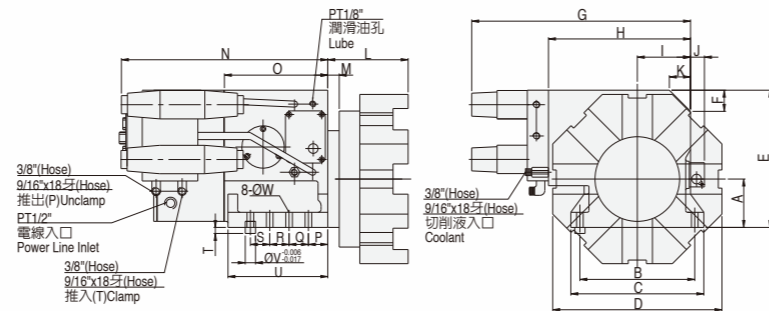
Lio ShingTurret



型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	O
LS-120	63	228	96	155	19.5	30	30	30	30	328	146	165	185	228
LS-160	80	240	117	170	22	32	32	32	32	340	158	190	210	245

LS-160A/LS-200

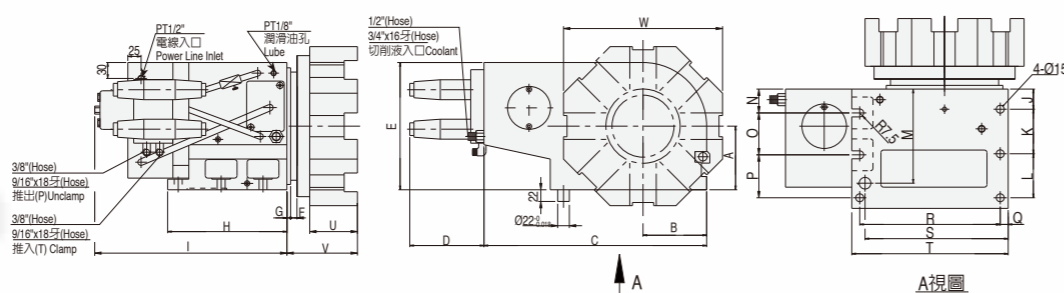
Lio ShingTurret



型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
LS-160A	80	190	220	280	227	35	362	235	88	24	35	133	19	345	171	32	32	32	32	10	165	17	11
LS-200	100	220	250	300	293	50	393	272	98	24	50	133	19	370	185	34	40	30	30	13	175	20	13

LS-240

Lio ShingTurret

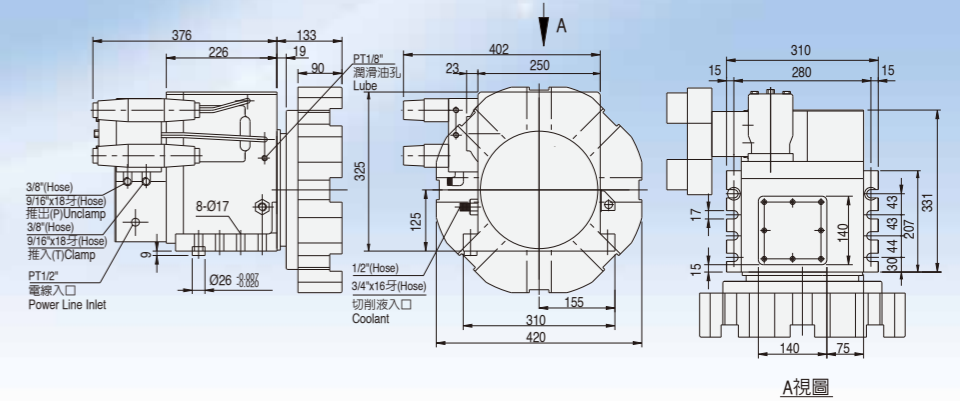


型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
LS-240	120	120	420	140	240	12	7	225	363	38	84	83	177.5	45	79	81	15	265	270	295	90	133	300

每一型式刀塔都將徹底展現高速度的旋轉與定位精度。
Each unit is carefully designed and manufactured to present outstanding fast and accurate positioning.

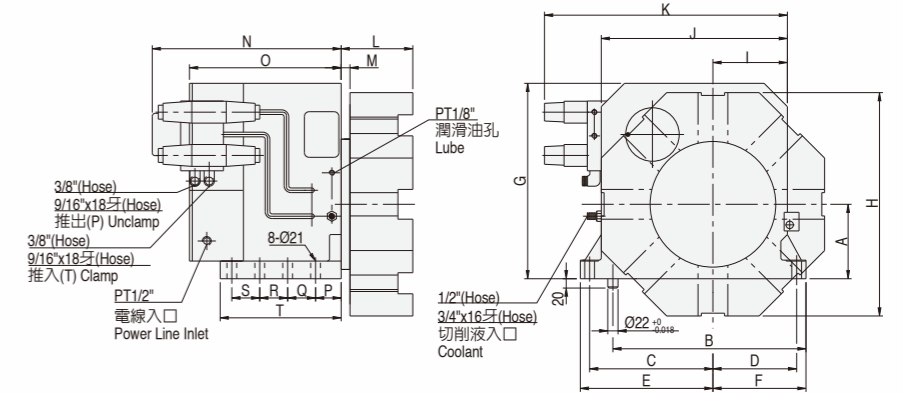
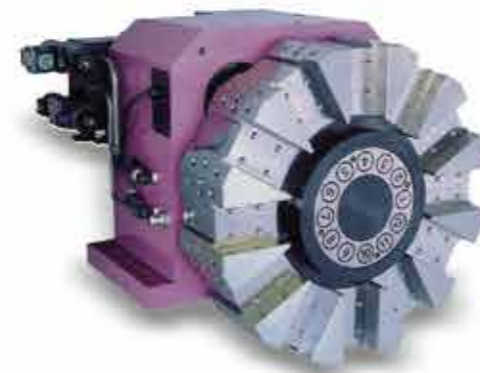
LS-250H

Lio ShingTurret



LS-320

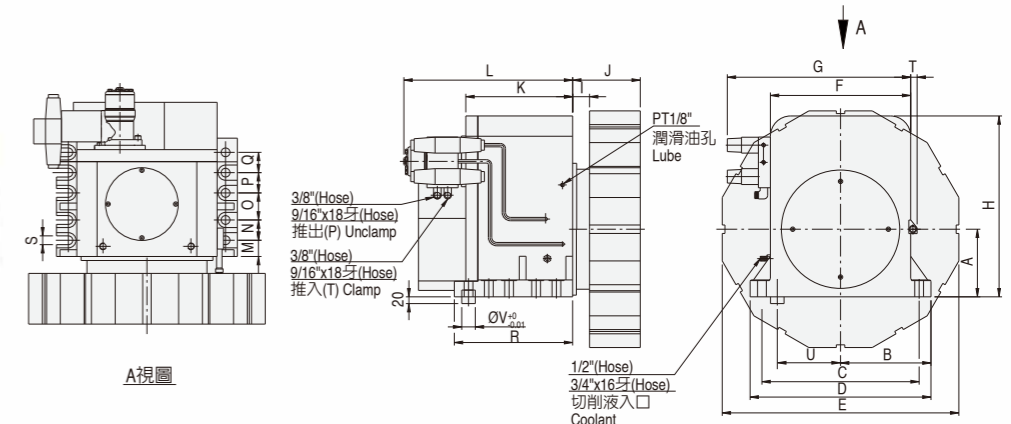
Lio ShingTurret



型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
LS-320	160	415	265	180	285	200	420	480	160	400	522	154	19	406	326	55	60	60	60	260

LS-400A/LS-400

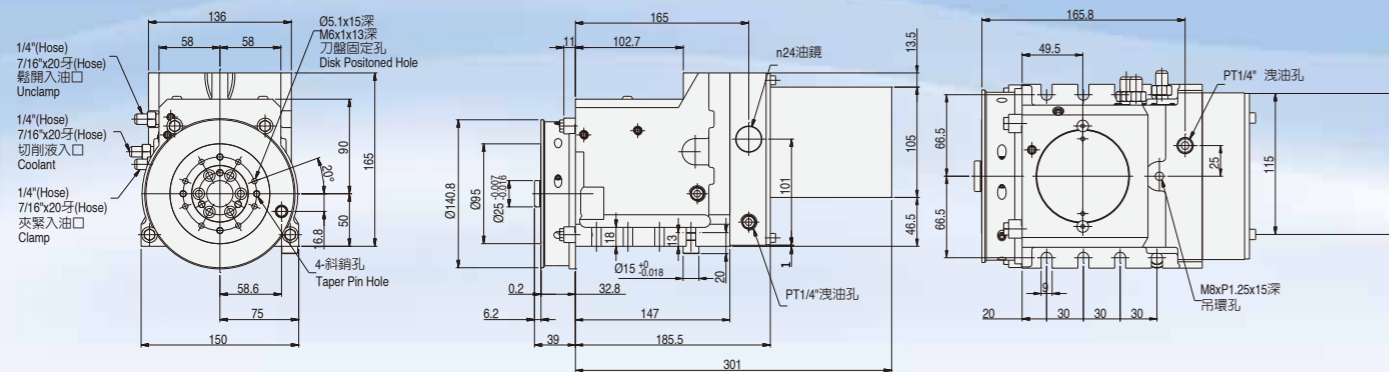
Lio ShingTurret



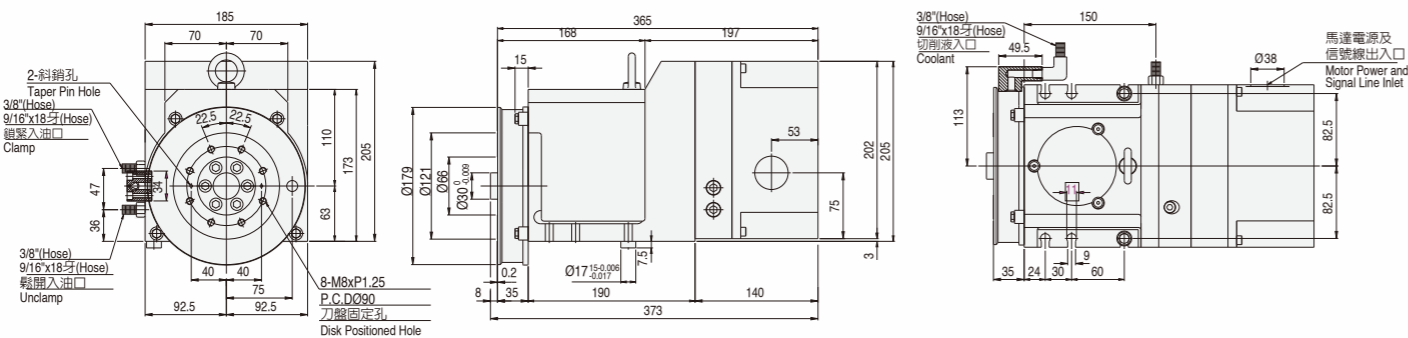
型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
LS-400A	200	242.5	445	485	600	400	523	450	50	200	294	461.5	55	60	60	60	75	365	26	14	172.5	22
LS-400	200	267.5	465	535	700	415	542.5	535	50	200	316	500	48	60	80	60	60	350	26	19	232.5	40

SERVO Turret | 伺服刀塔

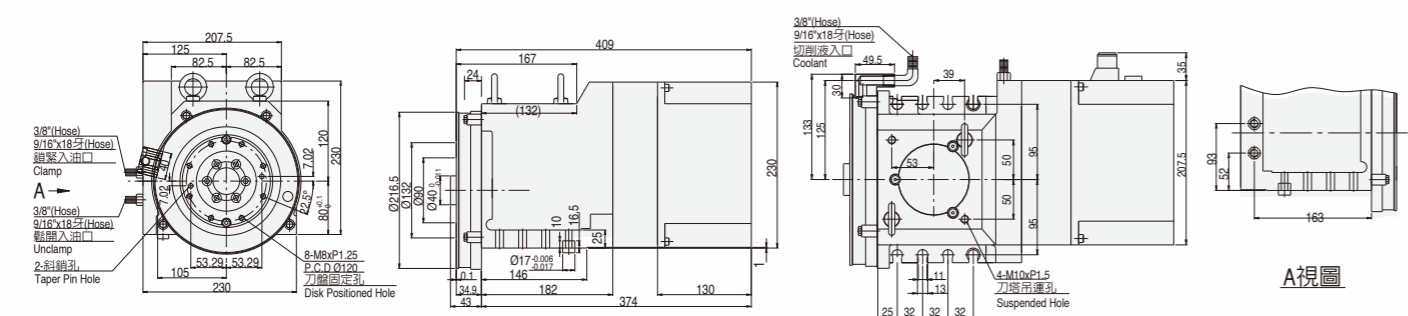
LS-100SV Lio ShingTurret



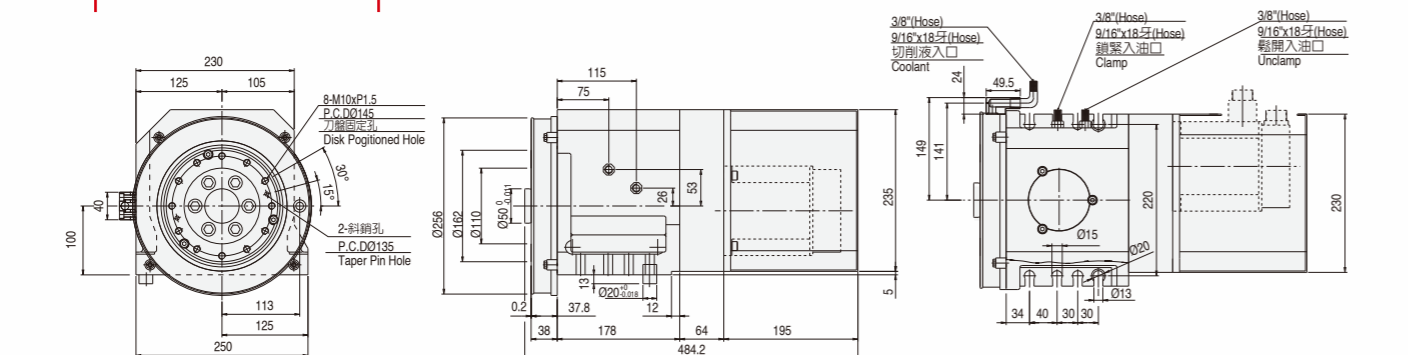
LS-120SV Lio ShingTurret



LS-160SV Lio ShingTurret

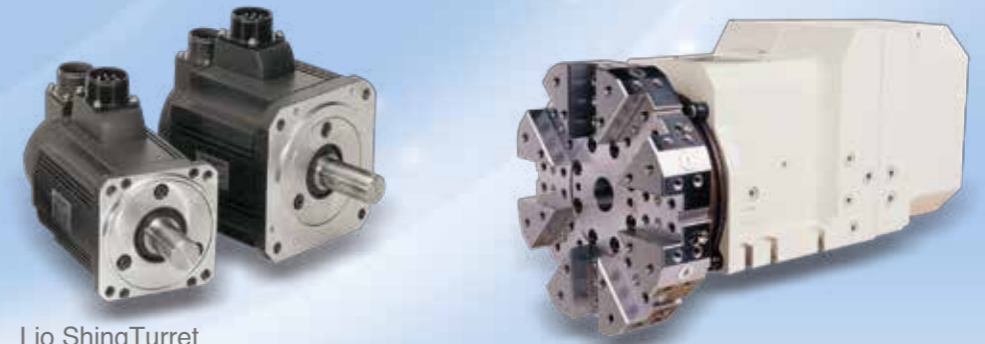


LS-200SV Lio ShingTurret

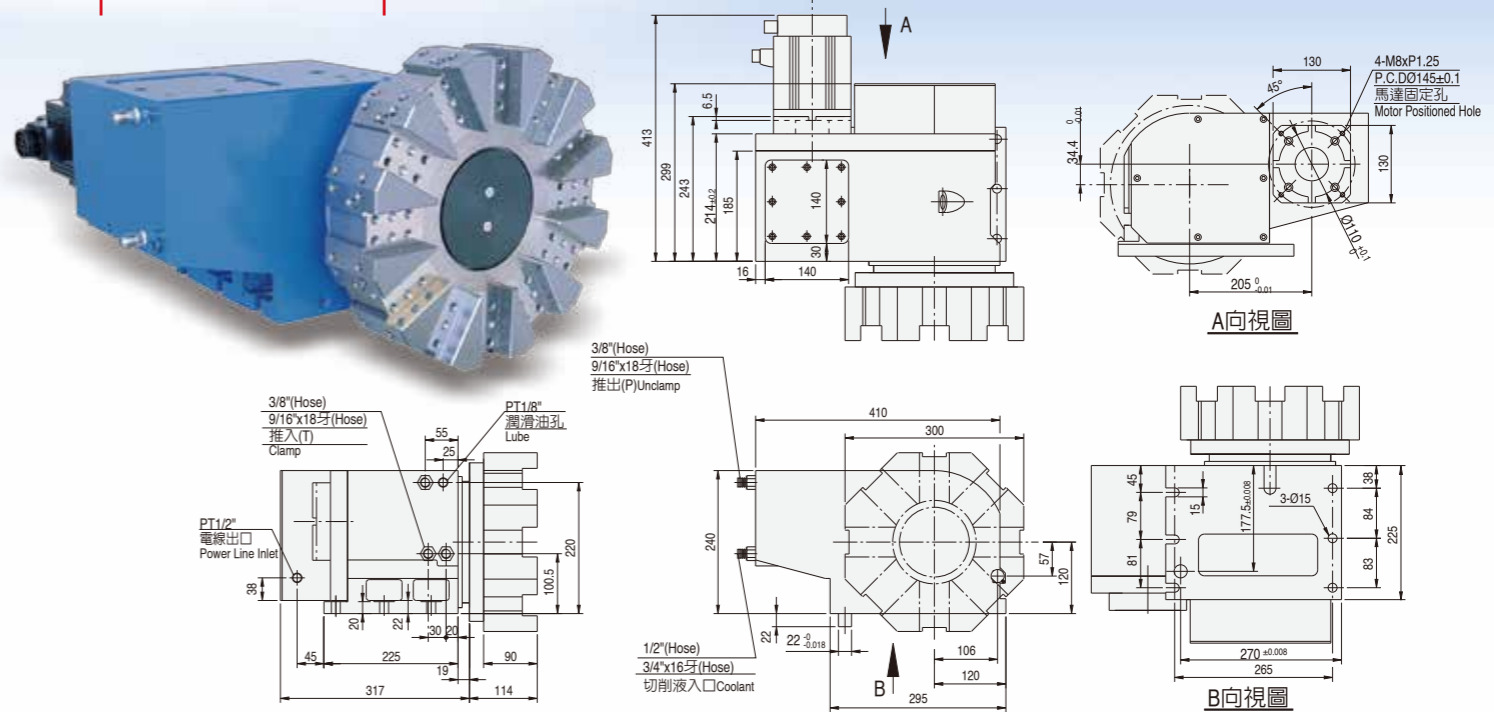


每一型式刀塔都將徹底展現高速度的旋轉與定位精度。
Each unit is carefully designed and manufactured to present outstanding fast and accurate positioning.

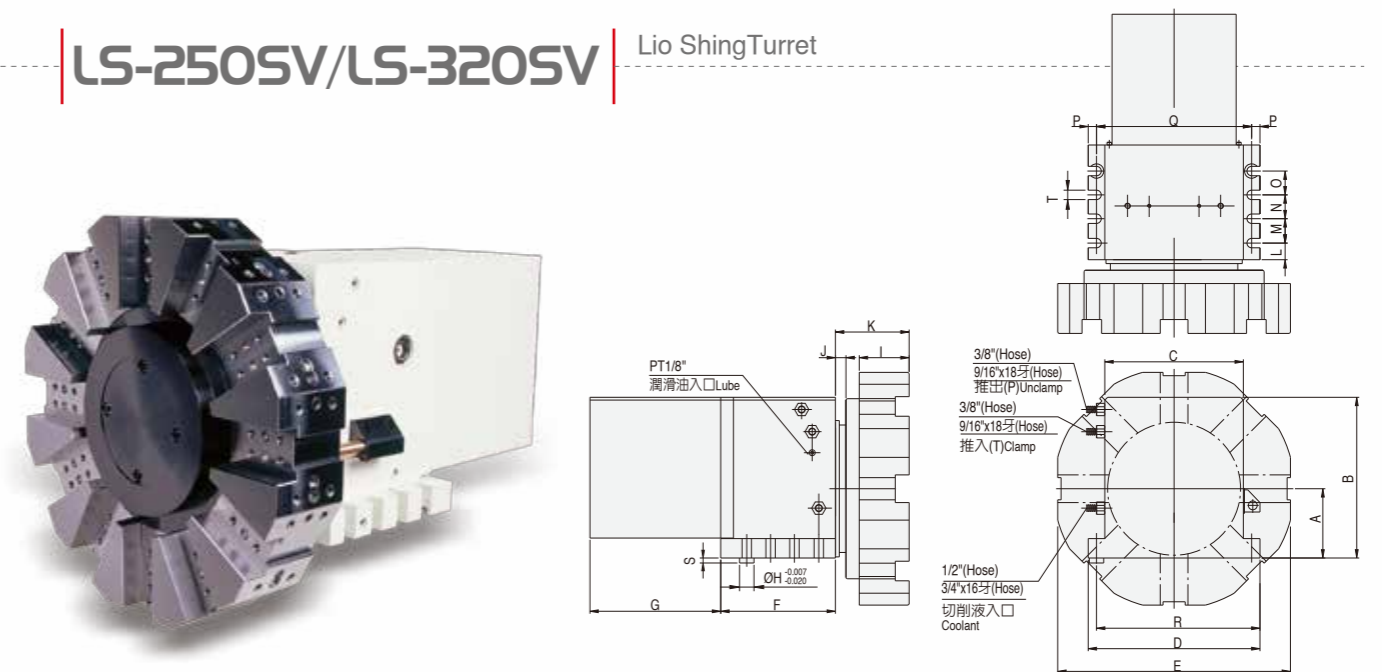
Servo Motor 伺服馬達



LS-240SV Lio ShingTurret



LS-250SV/LS-320SV Lio ShingTurret



型號 MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
LS-250SV	125	290	250	310	420	207	236	26	90	19	133	30	44	43	43	15	280	295	9	17
LS-320SV	160	420	400	490	480	260	230	22	135	19	154	55	60	60	60	22.5	445	420	20	21

Absolute Positioning Accuracy & Speed in Every and Each Unit.

每一型式刀塔都將徹底展現高速度的旋轉與定位精度。

六鑫-油壓凸輪式車床刀塔 LIO SHING - Hydraulic Cam Type Lathe Turret

TURRET SPEC.

型號 MODEL		LS-100	LS-120	LS-160	LS-240	LS-240A
中心高 Center height	mm	50	63	80	120	120
刀數 Number of tools	No.	6T/8T	8T	8T/10T	8T/10T/12T	8T/10T/12T
相鄰刀換刀時間 Rotating time(tool-to-tool)	sec	0.41	0.47	0.47	0.6	0.6
相鄰刀換刀並鎖緊時間 Rotating time (including locking)	sec	0.51	0.57	0.57	0.7	0.7
換最遠刀時間 Total indexing time for 180°	sec	0.8/1	1.1	1.1/1.3	1.2/1.4/1.5	1.2/1.4/1.5
換最遠刀並鎖緊時間 Total indexing time for 180° (including locking)	sec	0.9/1.2	1.3	1.3/1.5	1.6/1.9/2.2	1.6/1.9/2.2
曲齒離合器型式 Curvic couplings type		24100	24120	24140	24180	24180
油壓馬達型式 Oil hydraulic motor type	DANFOSS	OMM50	OMM50	OMM50	OMP80/100	OMP80/100
電磁切換閥 Solenoid operated valve		AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V
工作壓力 Hydraulic working pressure	Kgf/cm ²	(20~25)20	(25~30)30	(25~30)30	(35~40)35	(35~40)35
流量 Flow rate	L/min.	20	20	20	40	40
油壓缸拉力 Thrusting force of hyd. cyl.	Kgf	810	1,602	2,067	4,396	4,396
重現精度 Accuracy of repeatability	mm	0.003	0.003	0.003	0.003	0.003
淨重 (不含刀盤) N.W.(without tool disc)	Kg	30	40	50	131	131

高速 + 穩定 + 精準

Fast + Stable + Accurate

油壓刀塔特性：

- 內部機構採用平行凸輪設計，分割角度準確，換刀速度快。
- 刀盤旋轉，使用油壓馬達驅動，扭力大且平穩。
- 刀盤夾鬆開配合油壓動力源，動作確實順暢，適重切削。
- 具有左右安裝之設計及就近選刀功能。

伺服刀塔特性：

- 刀盤旋轉及分割配合專用型伺服馬達設計。
- 扭力大，噪音低。
- 換刀速度快，且絕不亂刀。
- 可配合各種不同廠牌之控制器使用。

Hydraulic Turret Features:

- This inside mechanism employs parallel cam, featuring high indexing accuracy and fast tool change.
- The turret rotation is driven by hydraulic motor for high torque output and maximum stability.
- Turret clamping/unclamping is operated through hydraulic power, assuring smooth motion and permitting for heavy duty machining.
- The turret can be mounted at right or left side with random tool selection function.

Servo Turret Features:

- The turret rotation and indexing is driven by a special servo motor.
- High torque output, low noise.
- Fast tool change without tool change error.
- The turret can be controlled by various controllers.

● 以上參數六鑫保留修改權利，如有修改，恕不另行通知。
● LIO SHING reserves the right to modify the above parameters, which may be changed without prior notice.

Various tool holders | 各式刀盤持刀座



刀盤標準規格及配件表 Turret Specifications And Accessories

型號 MODEL	規格 SPECIFICATION	LS-100	LS-120	LS-160	LS-160A	LS-200	LS-240 LS-240A	LS-250H	LS-320	LS-400A	LS-400	LS-100SV	LS-120SV	LS-160SV	LS-200SV	LS-240SV	LS-250SV	LS-320SV
8T	6T:160m/m 8T:180m/m	對置 Opposite Side 228m/m	240m/m	280m/m	300m/m	300m/m	300m/m	420m/m	480m/m	480m/m	600m/m	6T:160m/m 8T:180m/m	228m/m	280m/m	300m/m	300m/m	420m/m	480m/m
10T			272m/m	300m/m	340m/m	340m/m	420m/m	480m/m	520m/m	640m/m			270m/m	340m/m	340m/m	340m/m	420m/m	520m/m
12T			-	316m/m	410m/m	410m/m	440m/m	520m/m	600m/m	700m/m				316m/m	410m/m	410m/m	440m/m	550m/m
搪刀座 Boring Tool	Ø16 Ø20	Ø20 Ø25	Ø25 Ø32	Ø25 Ø32	Ø32 Ø40	Ø32 Ø40	Ø32 Ø40	Ø32 Ø40	Ø50	Ø60	Ø80	Ø16 Ø20	Ø20 Ø25	Ø25 Ø32	Ø32 Ø40	Ø32 Ø40	Ø32 Ø40	Ø50
外徑刀 O.D. Tool	□16 □20	□20	□20 □25	□20 □25	□20 □25	□20 □25	□20 □25	□20 □25	□25 □32	□32 □40	□32 □40	□16 □20	□20	□16 □20 □25	□20 □25	□20 □25	□20 □25	□25 □32
端面刀 Facing Tool	□16 □20	□20	□20 □25	□20 □25	□20 □25	□20 □25	□20 □25	□20 □25	□25 □32	□32 □40	□32 □40	□16 □20	□20	□16 □20 □25	□20 □25	□20 □25	□20 □25	□25 □32

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六鑫-油壓凸輪式車床刀塔 LIO SHING - Hydraulic Cam Type Lathe Turret

TURRET SPEC.

型號 MODEL		LS-160A	LS-200	LS-250H	LS-320	LS-400A	LS-400
中心高 Center height	mm	80	100	125	160	200	200
刀數 Number of tools	No.	8T/10T/12T	8T/10T/12T	8T/10T/12T	8T/10T/12T	8T/10T/12T	8T/10T/12T
相鄰刀換刀時間 Rotating time(tool-to-tool)	sec	0.55	0.6	0.67	0.85	0.93	0.93
相鄰刀換刀並鎖緊時間 Rotating time (including locking)	sec	0.65	0.7	0.8	0.95	1.1	1.1
換最遠刀時間 Total indexing time for 180°	sec	1.6/2/2.3	1.4/1.7/2	1.4/1.8/2	1.8/2.2/2.6	1.9/2.3/2.7	1.9/2.3/2.7
換最遠刀並鎖緊時間 Total indexing time for 180° (including locking)	sec	1.7/2.1/2.4	1.5/1.8/2.1	1.5/1.9/2.1	1.9/2.2/2.7	2/2.4/2.8	2/2.4/2.8
曲齒離合器型式 Curvic couplings type		24160	24180	24210	24250	24350	24350
油壓馬達型式 Oil hydraulic motor type		OMP80	OMP100	OMP125	OMP250	OMP315	OMP315
電磁切換閥 Solenoid operated valve		AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V	AC 110V DC 24V
工作壓力 Hydraulic working pressure	Kgf/cm ²	(25~30)25	(35~40)35	(40)40	(40)40	(45-50)50	(45-50)50
流量 Flow rate	L/min	20	30	40	40	50	50
油壓缸拉力 Thrusting force of hyd. cyl.	Kgf	2,200	3,800	6,380	7,732	12,370	12,370
重現精度 Accuracy of repeatability	mm	0.003	0.003	0.003	0.003	0.003	0.003
淨重 (不含刀盤) N.W.(without tool disc)	Kg	78	106	120	237	405	450

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六鑫-伺服刀塔 LIO SHING - Servo Motor Lathe Turret

TURRET SPEC.

型號 MODEL		LS-100SV	LS-120SV	LS-160SV	LS-200SV	LS-240SV	LS-250SV	LS-320SV
中心高 Center height	mm	50	63	80	100	120	125	160
刀數 Number of tools	No.	6T/8T	8T/10T	8T/10T/12T	8T/10T/12T	8T/10T/12T	8T/10T/12T	8T/10T/12T
相鄰刀換刀時間 Rotating time(tool-to-tool)	sec	0.31	0.38/0.36	0.4/0.38/0.35	0.4/0.38/0.35	0.37/0.35/0.34	0.43/0.41/0.39	0.65/0.55/0.5
相鄰刀換刀並鎖緊時間 Rotating time (including locking)	sec	0.41	0.48/0.46	0.5/0.48/0.45	0.5/0.48/0.45	0.47/0.45/0.44	0.53/0.51/0.49	0.85/0.75/0.7
換最遠刀時間 Total indexing time for 180°	sec	0.62	0.76	0.85	0.85	0.7	0.9	1.6
換最遠刀並鎖緊時間 Total indexing time for 180° (including locking)	sec	0.72	0.86	0.97	0.97	0.8	1.1	1.9
齒輪速比 Gear speed ratio		36:1	48:1	24:1	24:1	15:1	18:1	36:1
曲齒離合器型式 Curvic couplings type		三片式 3 Piece type	三片式 3 Piece type	三片式 3 Piece type	三片式 3 Piece type	24180	24210	24250
伺服馬達 Servo motor		HG-KR43JK	HG-KR43JK	HG-SR52JK	HG-SR102JK	HG-SR81JK	HG-SR81JK	HG-SR81JK
工作壓力 Hydraulic working pressure	Kgf/cm ²	(20~25)20	(25~30)30	(25~30)30	(35~40)35	(35~40)40	(35~40)35	40
流量 Flow rate	L/min.	20	20	20	30	40	40	40
油壓缸拉力 Thrusting force of hyd. cyl.	Kgf	663	1,640	2,500	3,130	4,396	6,380	7,732
重現精度 Accuracy of repeatability	mm	0.003	0.003	0.003	0.003	0.003	0.003	0.003
淨重 (不含刀盤) N.W.(without tool disc)	Kg	30	48	72	95	122	110	190

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