

頂針系列
CENTERS SERIES

> NCH-61 SERIES

尖部替換式精密級高速回轉頂針

INTERCHANGEABLE MEDIUM DUTY PRECISION
HIGH SPEED LIVE CENTER

- ◎ 適用：CNC車床及高速車床。
Application CNC lathe and high speed lathe.
- ◎ 用途：適用高速精密軸心車削加工。
Working Usage High speed and high precision lathe turning.
- ◎ 結構：斜角滾珠精密級高速軸承，針狀軸承特殊設計製成。
Structure Combination of angular contact ball precise high speed bearing and needle bearing.
- ◎ 配件：Y型扳手、61型中子、61型沖子
Accessories Y spanner and 61 type Tips and 61 type pin punch.
- ◎ 精準度：0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
NCH-61-3A	36	105	8	57	31.2	23.825(MT3)	192	12,000rpm	1,600kg	1,240kg
NCH-61-4A	36	108	9	62	31.2	31.267(MT4)	216	12,000rpm	2,730kg	1,750kg
NCH-61-5A	36	108	9	62	31.2	44.399(MT5)	243	12,000rpm	2,730kg	1,750kg

> SC-61 SERIES

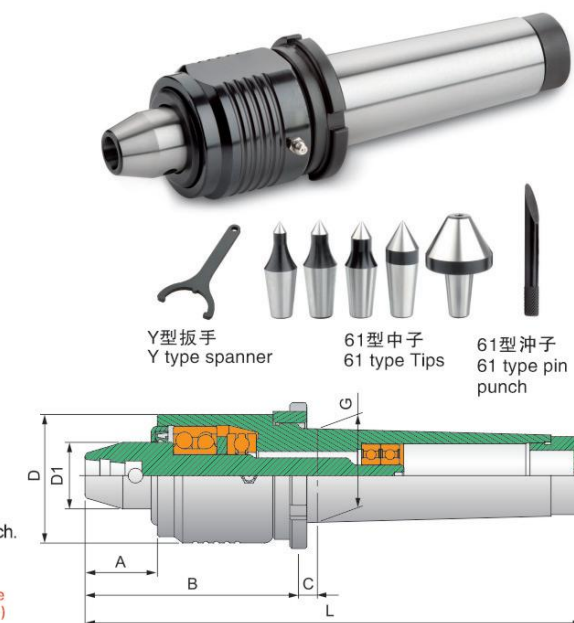
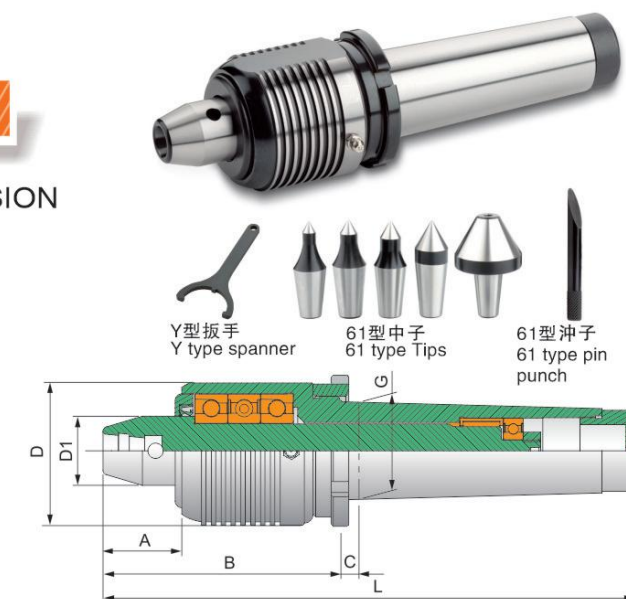
尖部替換式中負荷回轉頂針

INTERCHANGEABLE MEDIUM DUTY LIVE CENTER

- ◎ 適用：CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe machine.
- ◎ 用途：適用長度400mm以內一般軸心車削加工。
Working Usage Applicable for the length less than 400mm ordinary turning process.
- ◎ 結構：軸承徑向力和軸向力分開設計，採用雙列滾珠精密軸承、止推軸承、滾針軸承排列製成。
Structure The radial load and axial load designed separately. Combination of double row ball bearing and thrust bearing and needle bearing.
- ◎ 選配：SC-61-M-3/4/5:61型中子、61型沖子
Accessories SC-61-M-3A/4A/5A:Y型扳手、61型中子、61型沖子
1. For SC-61-M-3/4/5, 61 type Tips and 61 type pin punch.
2. For SC-61-M-3A/4A/5A, Y spanner and 61 type Tips and 61 type pin punch.
- ◎ 精準度：0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
SC-61-M-3	34	89	8	57	31.2	23.825(MT3)	176	4,500 rpm	1,200 kg	1,800 kg
SC-61-M-4	34	89	9	57	31.2	31.267(MT4)	197	4,500 rpm	1,300 kg	2,200 kg
SC-61-M-5	34	89	9	57	31.2	44.399(MT5)	224	4,500 rpm	1,400 kg	2,300 kg
SC-61-M-3A	34	101	8	57	31.2	23.825(MT3)	188	4,500 rpm	1,200 kg	1,800 kg
SC-61-M-4A	34	101	9	57	31.2	31.267(MT4)	209	4,500 rpm	1,300 kg	2,200 kg
SC-61-M-5A	34	101	9	57	31.2	44.399(MT5)	236	4,500 rpm	1,400 kg	2,300 kg

S light type for slender workpiece
另有同規格輕負荷 (S型，無螺帽)
可改善細長工件加工易變形問題中負荷
Medium duty替換式系列
Interchangeable live centers series

替換式系列
Interchangeable live centers series中負荷
Medium duty

> F361 SERIES

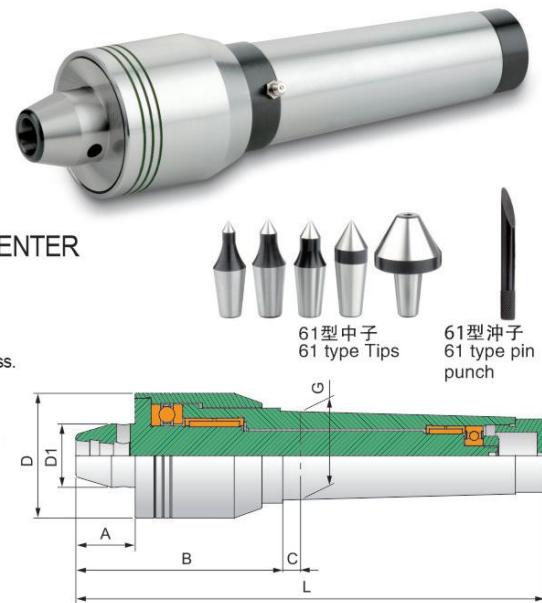
尖部替換式小徑回轉頂針

INTERCHANGEABLE MEDIUM DUTY SMALL DIAMETER LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe machine.
- 用途: 適用小徑軸心長度300mm以內中車削加工。
Working Usage Applicable for small dia. and the length less than 300mm medium turning process.
- 結構: 採用止推軸承、前後滾針軸承，兩個支撐點特殊設計製成。
Structure Combination of thrust bearing and needle bearing at front and rear place, and with the design of double supporting point.
- 配件: 61型中子、61型沖子
Accessories 61 type Tips and 61 type pin punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
F361-3	30	85	8	41	32	23.825(MT3)	172	3,500 rpm	1,200 kg	1,500 kg
F361-4	30	89	9	48	32	31.267(MT4)	197	3,500 rpm	1,400 kg	1,900 kg
F361-5	30	110	9	63	32	44.399(MT5)	245	3,000 rpm	2,200 kg	2,500 kg



> F348 SERIES

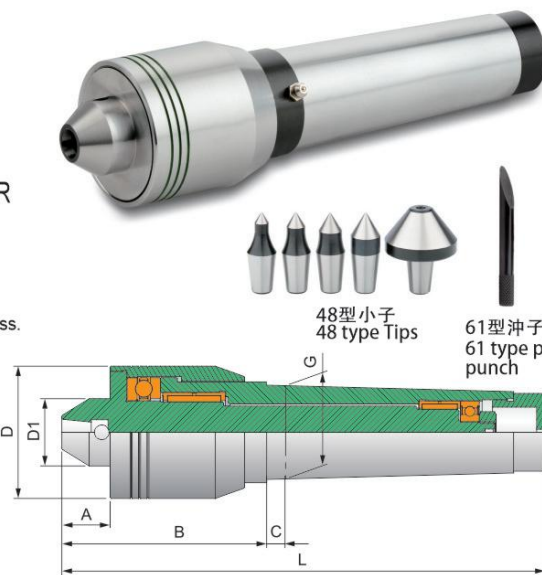
尖部替換式小徑回轉頂針

INTERCHANGEABLE MEDIUM DUTY SMALL DIAMETER LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe machine.
- 用途: 適用小徑軸心長度300mm以內中車削加工。
Working Usage Applicable for small dia. and the length less than 300mm medium turning process.
- 結構: 採用止推軸承、前後滾針軸承，兩個支撐點特殊設計製成。
Structure Combination of thrust bearing and needle bearing at front and rear place, and with the design of double supporting point.
- 選配: 48型小子、61型沖子
Accessories 48 type Tips and 61 type pin punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
F348-2	23	70	6	32	25	17.780(MT2)	139	4,000 rpm	300 kg	1,000 kg
F348-3	23	78	8	41	30	23.825(MT3)	165	3,500 rpm	1,200 kg	1,500 kg
F348-4	23	82	9	48	32	31.267(MT4)	190	3,500 rpm	1,400 kg	1,900 kg
F348-5	23	103	9	63	32	44.399(MT5)	238	3,000 rpm	2,200 kg	2,500 kg



備注: ■ 本頂針指定使用SKF-LGMT2專用潤滑油，請勿使用其他不同成分之潤滑油。
 ■ 產品型號中有“A”的表示頂針有附螺帽 ■ 配件中的頂針子，型號有“A”的為加長型頂針子。
 ■ 徑向力數據參考：加工件重量+車削力量 ■ 軸向力數據參考：尾座油壓壓力數據 ■ 注油式：可添加專用SKF潤滑油，具防水性。
 ■ For the lubricating oil, SKF-LGMT2 is designated, others aren't allowed ■ If "A" is behind the center interchangeable tip name, it denotes the tip is extended length.
 ■ If "A" is behind the center model name, it denotes a draw-off nut attached. ■ About axial force data, please refer to the hydraulic pressure data of the tailstock.
 ■ About radial force data, please refer to workpiece weight and machining force. ■ For live centers, SKF lubricating oil is designated, it is waterproof.

中負荷
Medium duty替換式系列
Interchangeable live centers series

> TSC-761 SERIES

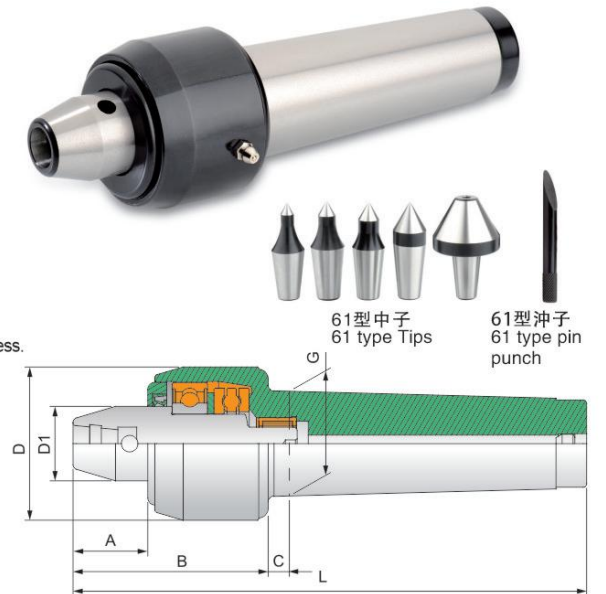
尖部替換式回轉頂針

INTERCHANGEABLE MEDIUM DUTY LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe machine.
- 用途: 適用長度300mm以內一般軸心車削加工。
Working Usage Applicable for small dia. and the length less than 300mm ordinary turning process.
- 結構: 採用前後兩個支撐點加止推軸承設計製成。
Structure Combination of thrust bearing and with the design of double supporting point.
- 配件: 61型中子、61型沖子
Accessories 61 type Tips and 61 type pin punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-761-3	32	83	8	58	31.2	23.825(MT3)	170	4,000 rpm	900 kg	2,200 kg
TSC-761-4	32	83	9	65	31.2	31.267(MT4)	191	4,000 rpm	1,100 kg	2,500 kg
TSC-761-5	32	83	9	65	31.2	44.399(MT5)	218	4,000 rpm	1,200 kg	2,500 kg



> TSC-748 SERIES

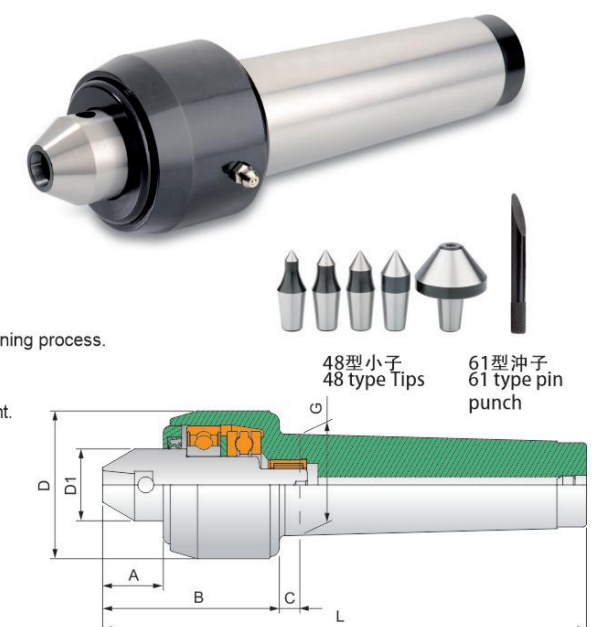
尖部替換式回轉頂針

INTERCHANGEABLE MEDIUM DUTY LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe machine.
- 用途: 適用長度300mm以內一般軸心車削加工。
Working Usage Applicable for small dia. and the length less than 300mm ordinary turning process.
- 結構: 採用前後兩個支撐點加止推軸承設計製成。
Structure Combination of thrust bearing and with the design of double supporting point.
- 選配: 48型小子、61型沖子
Accessories 48 type Tips and 61 type pin punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-748-3	27	78	8	58	31.2	23.825(MT3)	165	4,000 rpm	900 kg	2,200 kg
TSC-748-4	27	78	9	65	31.2	31.267(MT4)	186	4,000 rpm	1,100 kg	2,500 kg
TSC-748-5	27	78	9	65	31.2	44.399(MT5)	213	4,000 rpm	1,200 kg	2,500 kg



替換式系列

Interchangeable live centers series

重負荷

Heavy duty

> NCH-65 SERIES

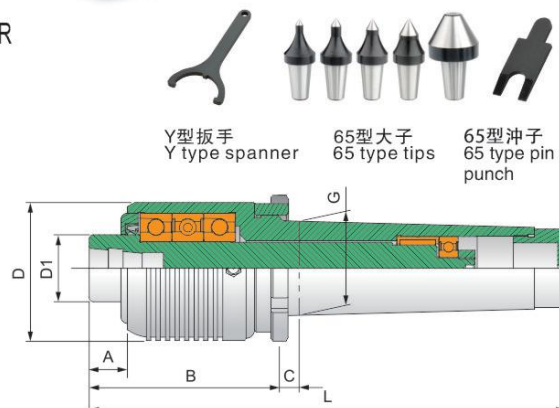
尖部替換式精密級高速回轉頂針

INTERCHANGEABLE HEAVY DUTY PRECISION HIGH SPEED LIVE CENTER

- 適用: CNC車床及高級車床。
Application CNC lathe and high speed lathe.
- 用途: 適用高速精密軸心車削加工。
Working Usage Applicable for high speed and high precision turning process.
- 結構: 斜角滾珠精密級高速軸承, 針狀軸承特殊設計製成。
Structure Combination of angular contact ball precise high speed bearing and thrust bearing and needle bearing.
- 配件: Y型扳手、65型大子、65型沖子
Accessories Y spanner and 65 type Tips and 65 type punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
NCH-65-4A	18	90	9	62	31.2	31.267(MT4)	198	12,000 rpm	2,730 kg	1,750 kg
NCH-65-5A	18	90	9	62	31.2	44.399 MT5	225	12,000 rpm	2,730 kg	1,750 kg



> SC-65 SERIES

尖部替換式重負荷回轉頂針

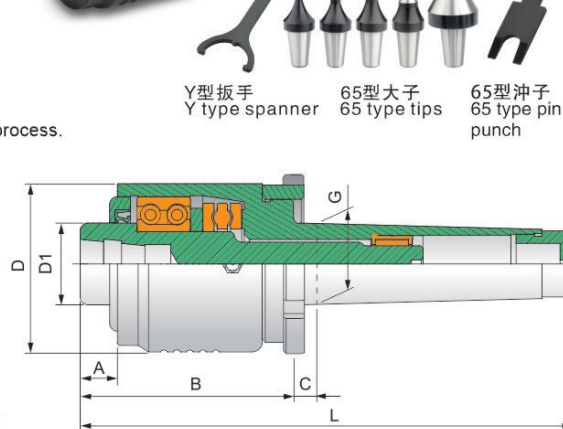
INTERCHANGEABLE HEAVY DUTY LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe.
- 用途: 適用長度400mm以內, 一般強力車削加工。
Working Usage Applicable for the length less than 400mm ordinary strong turning process.
- 結構: 採用雙列滾珠精密軸承、止推軸承、滾針軸承特殊設計製成。
Structure Combination of double row ball precise bearing and thrust bearing and needle bearing.
- 選配: SC-65-H-4/5:65型大子、65型沖子
Accessories SC-65-H-4A/5A:Y型扳手、65型大子、65型沖子
1, For SC-65-H-4/5, 65 type Tips and 65 type punch.
2, For SC-61-H-4A/5A, Y spanner and 65 type Tips and 65 type punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
SC-65H-4	14	70	9	62	31.2	31.267(MT4)	178	4,000 rpm	1,430 kg	2,700 kg
SC-65H-5	14	70	9	62	31.2	44.399(MT5)	205	4,000 rpm	1,430 kg	2,700 kg
SC-65H-4A	14	82	9	62	31.2	31.267(MT4)	190	4,000 rpm	1,430 kg	2,700 kg
SC-65H-5A	14	82	9	62	31.2	44.399(MT5)	217	4,000 rpm	1,430 kg	2,700 kg

S light type for slender workpiece
另有同規格輕負荷 (S型, 無螺帽)
可改善細長工件加工易變形問題



> TSC-265 SERIES

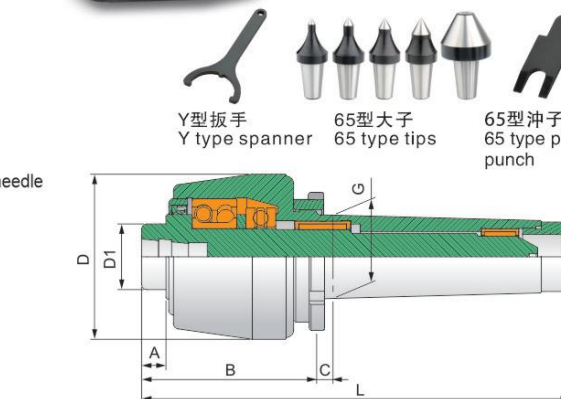
尖部替換式高性能重負荷回轉頂針

INTERCHANGEABLE HEAVY DUTY HIGH PERFORMANCE LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe.
- 用途: 適用一般軸心強力車削加工。
Working Usage Applicable for ordinary strong turning process.
- 結構: 採用雙列滾珠精密軸承, 止推軸承及滾針軸承設計, 採三個支撐點特殊設計製成。
Structure Combination of double row ball precise bearing and thrust bearing and needle bearing. With the design of three supporting points.
- 配件: Y型扳手、65型大子、65型沖子
Accessories Y spanner and 65 type Tips and 65 type punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-265-3A	15	87	8	58	34.8	23.825(MT3)	174	6,000 rpm	1,450 kg	1,800 kg
TSC-265-4A	15	87	9	65	34.8	31.267(MT4)	195	6,000 rpm	2,250 kg	2,700 kg
TSC-265-5A	15	93	9	75	34.8	44.399(MT5)	228	6,000 rpm	3,620 kg	3,000 kg



> TSC-665 SERIES

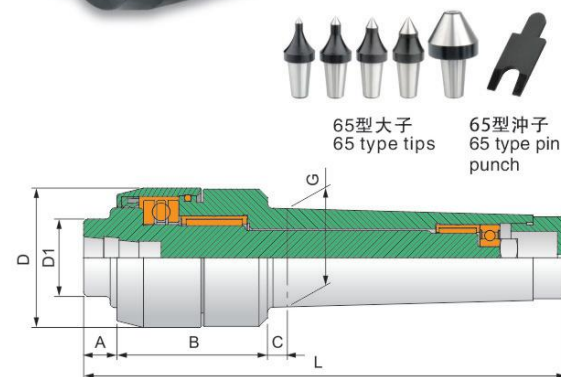
尖部替換式強力回轉頂針

INTERCHANGEABLE HEAVY DUTY STRONG LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other lathe.
- 用途: 適用高推力強力車削加工。
Working Usage Applicable for ordinary strong turning process.
- 結構: 止推軸承加大推力設計, 載重前後採用針狀軸承設計製成。
Structure Combination of thrust bearing with enhanced axial load design and needle bearing at front and rear place for radial load.
- 選配: 65型大子、65型沖子
Accessories 65 type Tips and 65 type punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-665-3	12	69	8	58	34.8	23.825(MT3)	156	3,500 rpm	1,960 kg	1,750kg
TSC-665-4	15	83	9	63	34.8	31.267(MT4)	191	3,500 rpm	2,800 kg	2,150kg
TSC-665-5	15	83	9	63	34.8	44.399(MT5)	218	3,500 rpm	3,080 kg	2,150kg



替換式系列
Interchangeable live centers series輕負荷
Light duty

> SC-48 SERIES

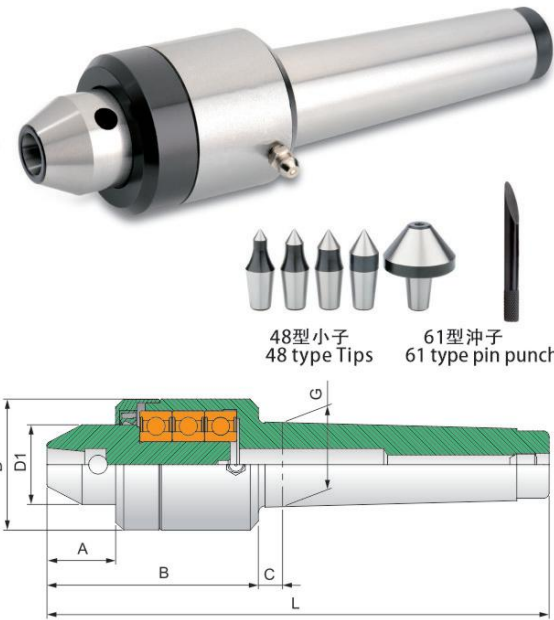
尖部替換回轉頂針

INTERCHANGEABLE LIGHT DUTY LIVE CENTER

- 適用: CNC車床、高速車床及一般車床。
Application CNC lathe and high speed lathe or center lathe.
- 用途: 適用一般小徑高速車削加工。
Working Usage Applicable for ordinary small diameter high speed turning process.
- 結構: 採用斜角滾珠軸承, 深溝滾珠軸承特殊設計製成。
Structure Combination of angular contact ball bearing and deep groove ball bearing.
- 配件: 48型小子、61型沖子
Accessories 48 type Tips and 61 type pin punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load
SC-48-M-2	25	78	6	52	28.5	17.780(MT2)	147	2,000 rpm	300 kg
SC-48-M-3	25	79	8	52	28.5	23.825(MT3)	166	2,000 rpm	400 kg
SC-48-M-4	25	78	9	52	28.5	31.267(MT4)	186	2,000 rpm	500 kg



> SC-91 SERIES

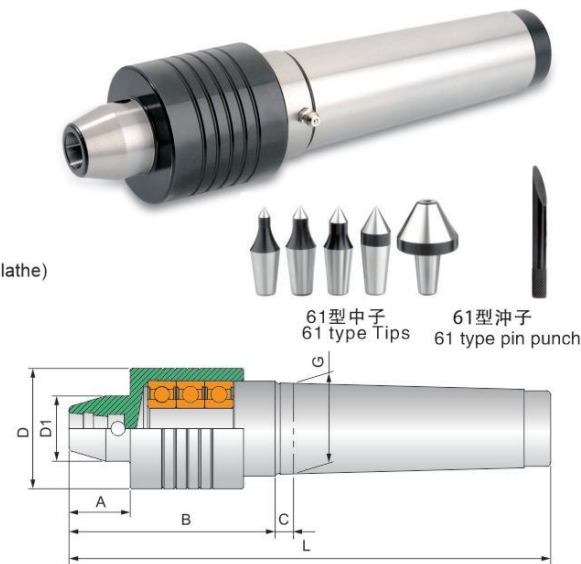
尖部替換回轉頂針

INTERCHANGEABLE LIGHT DUTY LIVE CENTER

- 適用: 一般車床使用(沒有防水功能, 不適用CNC車床)。
Application Ordinary lathe (without waterproof function, can't be used to CNC lathe)
- 用途: 適用一般軸心車削加工。
Working Usage Applicable for ordinary turning process.
- 結構: 採用合金鋼材, 經熱處理硬度達57°~60°, 內外徑研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, ground on ID and OD.
- 選配: 61型中子、61型沖子
Accessories 61 type Tips and 61 type pin punch.
- 精準度: 0.005以內
TIR Less than 0.005mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load
SC-91-L-2	30	95	6	48	32	17.780(MT2)	164	3,500 rpm	160 kg
SC-91-L-3	30	95	8	48	32	23.825(MT3)	182	3,000 rpm	250 kg
SC-91-L-4	30	95	9	48	32	31.267(MT4)	203	2,600 rpm	400 kg
SC-91-L-5	30	101	9	59	32	44.399(MT5)	236	2,200 rpm	800 kg



備注: ■ 本頂針指定使用SKF-LGMT2專用潤滑油, 請勿使用其他不同成分之潤滑油。
 ■ 產品型號中有“A”的表示頂針有附螺帽 ■ 配件中的頂針子, 型號有“A”的為加長型頂針子。
 ■ 徑向力數據參考: 加工件重量+車削力量 ■ 軸向力數據參考: 尾座油壓壓力數據 ■ 注油式: 可添加專用SKF潤滑油, 具防水性。
 ■ For the lubricating oil, SKF-LGMT2 is designated, others aren't allowed. ■ If "A" is behind the center interchangeable tip name, it denotes the tip is extended length.
 ■ If "A" is behind the center model name, it denotes a draw-off nut attached. ■ About axial force data, please refer to the hydraulic pressure data of the tailstock.
 ■ About radial force data, please refer to workpiece weight and machining force. ■ For live centers, SKF lubricating oil is designated, it is waterproof.

中負荷
Medium duty回轉式系列
Live centers series

> SC-63 SERIES

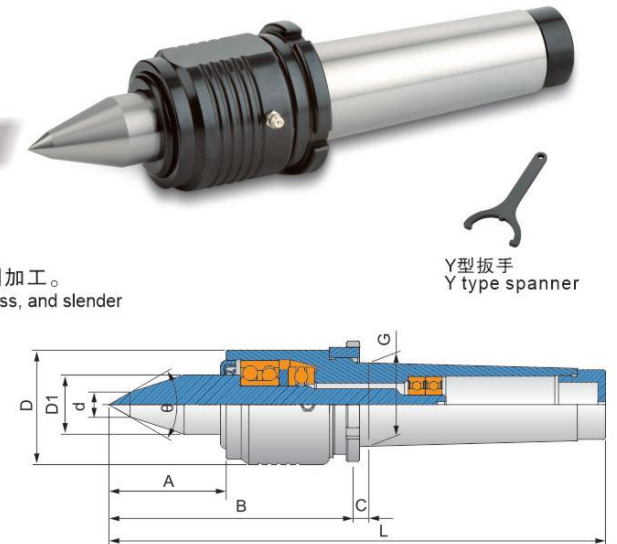
中負荷細長型回轉頂針

MEDIUM DUTY LONG NOSE LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application CNC lathe, high speed lathe and other lathe.
- 用途: 適用長度400mm以內一般軸心車削加工及細長型車削加工。
Working Usage Applicable for the length less than 400mm ordinary turning process, and slender workpiece turning process.
- 結構: 軸承徑向力和軸向力分開設計, 採用雙列滾珠精密軸承、止推軸承、滾針軸承排列製成。
Structure The radial load and axial load designed separately. Adopted double row ball precision bear and thrust bearing and needle bearing.
- 配件: SC-63-M-3A/4A/5A: Y型扳手 (Y spanner)
Accessories For SC-63-M-3A/4A/5A, Y type spanner
- 精準度: 0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	d	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
SC-63-M-3	60	115	8	57	31.2	23.825(MT3)	12	202	60°	4,500 rpm	1,200 kg	1,800 kg
SC-63-M-4	60	115	9	57	31.2	31.267(MT4)	12	223	60°	4,500 rpm	1,300 kg	2,200 kg
SC-63-M-5	60	115	9	57	31.2	44.399(MT5)	12	250	60°	4,500 rpm	1,400 kg	2,300 kg
SC-63-M-3A	60	127	8	57	31.2	23.825(MT3)	12	214	60°	4,500 rpm	1,200 kg	1,800 kg
SC-63-M-4A	60	127	9	57	31.2	31.267(MT4)	12	235	60°	4,500 rpm	1,300 kg	2,200 kg
SC-63-M-5A	60	127	9	57	31.2	44.399(MT5)	12	262	60°	4,500 rpm	1,400 kg	2,300 kg



> SC-69 SERIES

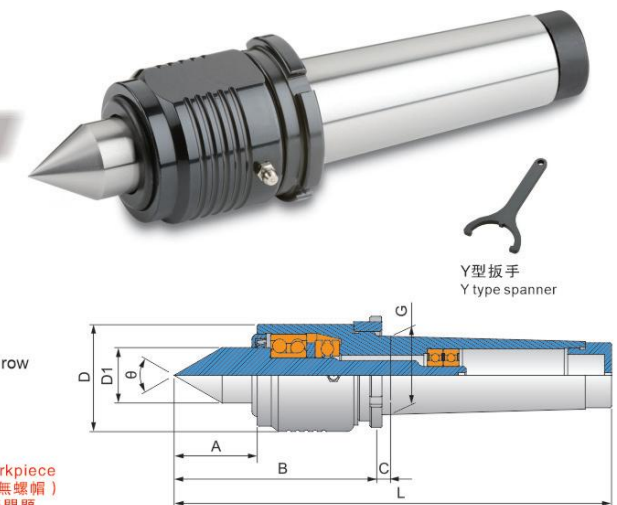
中負荷回轉頂針

MEDIUM DUTY LIVE CENTER

- 適用: CNC車床、高速車床及其他機床。
Application NC lathe, high speed lathe and other lathe.
- 用途: 適用長度400mm以內一般軸心車削加工。
Working Usage Applicable for the length less than 400mm ordinary turning process.
- 結構: 軸承徑向力和軸向力分開設計, 採用雙列滾珠精密軸承、止推軸承、滾針軸承排列製成。
Structure The radial load and axial load designed separately. Adopted double row ball precision bear and thrust bearing and needle bearing.
- 選配: SC-63-M-3A/4A/5A: Y型扳手
Accessories For SC-63-M-3A/4A/5A, Y type spanner
- 精準度: 0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
SC-69-M-3	48	103	8	57	31.2	23.825(MT3)	190	60°	4,500 rpm	1,200 kg	1,800 kg
SC-69-M-4	48	103	9	57	31.2	31.267(MT4)	211	60°	4,500 rpm	1,300 kg	2,200 kg
SC-69-M-5	48	103	9	57	31.2	44.399(MT5)	238	60°	4,500 rpm	1,400 kg	2,300 kg
SC-69-M-3A	48	115	8	57	31.2	23.825(MT3)	202	60°	4,500 rpm	1,200 kg	1,800 kg
SC-69-M-4A	48	115	9	57	31.2	31.267(MT4)	223	60°	4,500 rpm	1,300 kg	2,200 kg
SC-69-M-5A	48	115	9	57	31.2	44.399(MT5)	250	60°	4,500 rpm	1,400 kg	2,300 kg



S light type for slender workpiece
另有同規格輕負荷 (S型, 無螺帽)
可改善細長工件加工易變形問題

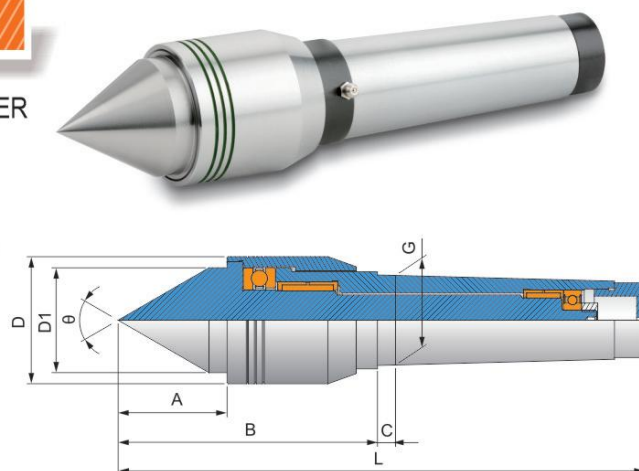
回轉式系列
Live centers series中負荷
Medium duty

> F362 SERIES

精密小徑回轉頂針

MEDIUM DUTY PRECISE SMALL DIAMETER LIVE CENTER

- ◎ 適用: CNC車床、高速車床及其他機床。
Application CNC lathe, high speed lathe and other lathe
- ◎ 用途: 適用小徑軸心長度300mm以內中車削加工。
Working Usage Applicable for small diameter and length less than 300mm medium turning process
- ◎ 結構: 採用止推軸承、前後滾針軸承，兩個支撐點特殊設計製成。
Structure Adopted thrust bearing and needle bearing at front and rear place, with the design of two supporting point
- ◎ 精準度: 0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

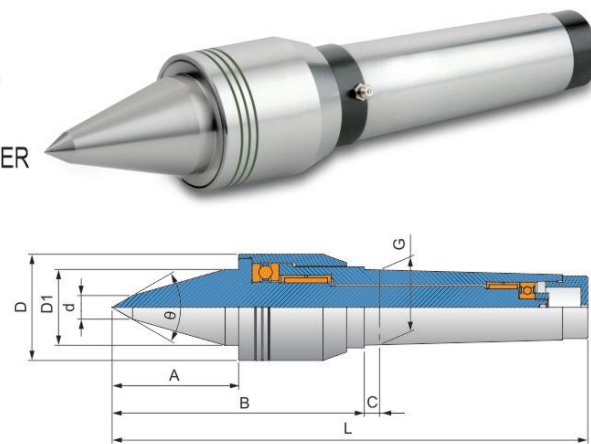
型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
F362-2	28	75	6	32	23	17.780(MT2)	144	60°	4,000 rpm	400 kg	1,000 kg
F362-3	36	91	8	41	35	23.825(MT3)	178	60°	3,500 rpm	1,200 kg	1,500 kg
F362-4	41	100	9	48	40	31.267(MT4)	208	60°	3,500 rpm	1,400 kg	1,900 kg
F362-5	54	134	9	63	52	44.399(MT5)	269	60°	3,000 rpm	2,200 kg	2,500 kg

> F363 SERIES

精密小徑細長型回轉頂針

MEDIUM DUTY PRECISE SMALL DIAMETER LONG NOSE LIVE CENTER

- ◎ 適用: CNC車床、高速車床及其他機床。
Application CNC lathe, high speed lathe and other lathe
- ◎ 用途: 適用小徑軸心長度300mm以內中車削加工 (細長型車削加工)。
Working Usage Applicable for the slender workpiece and length less than 300mm ordinary turning process
- ◎ 結構: 採用止推軸承、前後滾針軸承，兩個支撐點特殊設計製成。
Structure Adopted thrust bearing and needle bearing at front and rear place, with the design of two supporting point
- ◎ 精準度: 0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

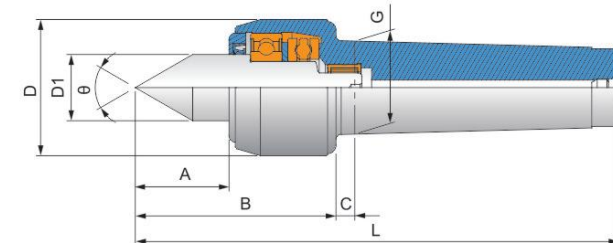
型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
F363-2	40	87	6	32	20	8	17.780(MT2)	156	60°	4,000 rpm	400 kg	1,000 kg
F363-3	46	101	8	41	25	10	23.825(MT3)	188	60°	3,500 rpm	1,200 kg	1,500 kg
F363-4	55	114	9	48	32	12	31.267(MT4)	222	60°	3,500 rpm	1,400 kg	1,900 kg
F363-5	75	155	9	63	45	14	44.399(MT5)	290	60°	3,000 rpm	2,200 kg	2,500 kg

> TSC-762 SERIES

高效能回轉頂針

MEDIUM DUTY HIGH PERFORMANCE LIVE CENTER

- ◎ 適用: CNC車床、高速車床及其他機床。
Application CNC lathe, high speed lathe and other lathe
- ◎ 用途: 適用長度300mm以內一般軸心車削加工
Working Usage Applicable for the length less than 300mm ordinary turning process
- ◎ 結構: 採用前後兩個支撐點止推軸承設計製成。
Structure Combination of thrust bearing and design of front and rear double supporting point
- ◎ 精準度: 0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

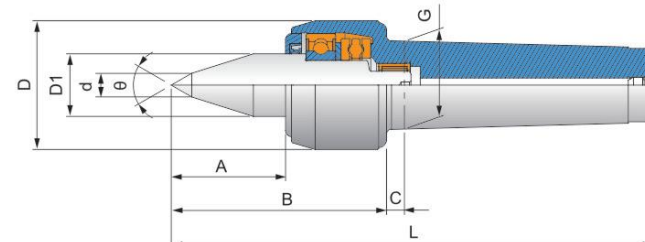
型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-762-3	45	96	8	58	31.2	23.825(MT3)	183	60°	4,000 rpm	900 kg	2,200 kg
TSC-762-4	45	96	9	65	31.2	31.267(MT4)	204	60°	4,000 rpm	1,100 kg	2,500 kg
TSC-762-5	45	96	9	65	31.2	44.399(MT5)	231	60°	4,000 rpm	1,200 kg	2,500 kg

> TSC-763 SERIES

高效能細長型回轉頂針

MEDIUM DUTY HIGH PERFORMANCE LONG NOSE LIVE CENTER

- ◎ 適用: CNC車床、高速車床及其他機床。
Application CNC lathe, high speed lathe and other lathe
- ◎ 用途: 適用長度300mm以內一般軸心車削加工 (細長型車削加工)。
Working Usage Applicable for the slender workpiece and length less than 300mm ordinary turning process
- ◎ 結構: 採用前後兩個支撐點止推軸承設計製成。
Structure Combination of thrust bearing and design of front and rear double supporting point
- ◎ 精準度: 0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-763-3	58	109	8	58	31.2	12	23.825(MT3)	196	60°	4,000 rpm	900 kg	2,200 kg
TSC-763-4	58	109	9	65	31.2	12	31.267(MT4)	217	60°	4,000 rpm	1,100 kg	2,500 kg
TSC-763-5	58	109	9	65	31.2	12	44.399(MT5)	244	60°	4,000 rpm	1,200 kg	2,500 kg

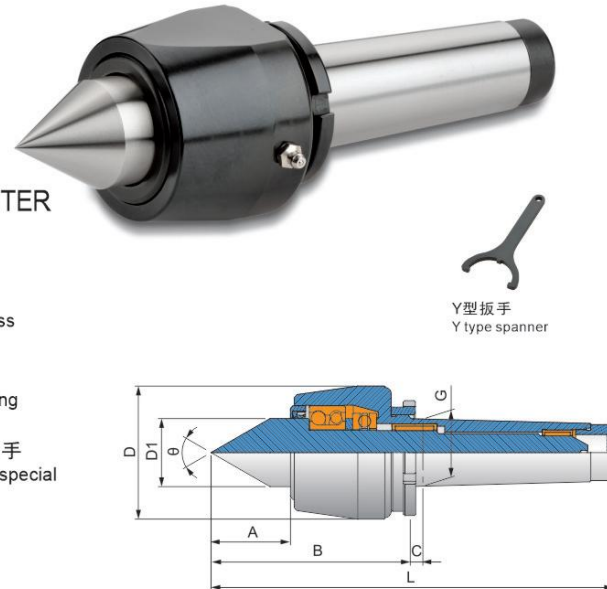
回轉式系列
Live centers series重負荷
Heavy duty

> TSC-262 SERIES

高性能精密回轉頂針

HEAVY DUTY HIGH PERFORMANCE PRECISE LIVE CENTER

- 適用：CNC重型車床及重型高速車床。
Application CNC heavy duty lathe, heavy duty high speed lathe
- 用途：適用長軸心重力車削加工。
Working Usage Applicable for the long workpiece and heavy duty turning process
- 結構：採用雙列滾珠精密軸承，止推軸承及滾針軸承設計，採三個支撐點特殊設計製成。
Structure Combination of double row precise ball bearing and thrust bearing and needle bearing, with the design of three supporting points.
- 配件：TSC262-3A/4A/5A:Y型扳手/TSC262-6A:專用Y型扳手
Accessories 1. For TSC262-3A/4A/5A, Y type spanner. / 2. For TSC262-6A, special Y type spanner.
- 精準度：0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

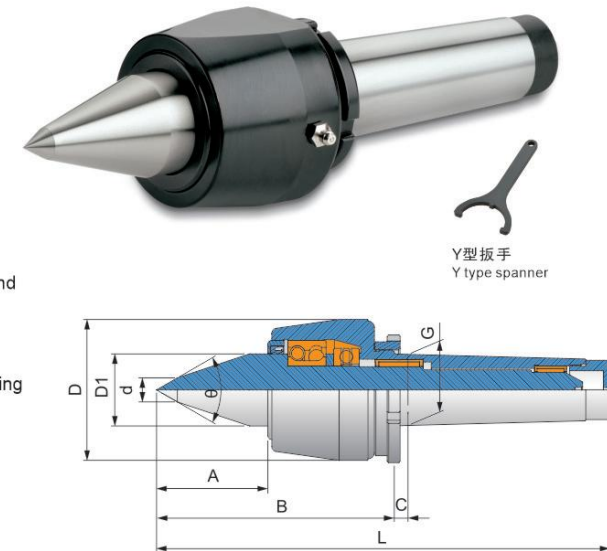
型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-262-3A	44	116	8	58	34.8	23.825(MT3)	203	60°	6,000 rpm	1,450 kg	1,800 kg
TSC-262-4A	44	116	9	65	34.8	31.267(MT4)	224	60°	6,000 rpm	2,250 kg	2,700 kg
TSC-262-5A	53	131	9	75	44.8	44.399(MT5)	266	60°	6,000 rpm	3,620 kg	3,000 kg
TSC-262-6A	67	163	10	118	59.9	63.348(MT6)	353	60°	3,500 rpm	6,000 kg	4,850 kg
TSC-2562-7A	121	296	10	197	100	MT7	556	60°	1,000 rpm	8,500 kg	6,500 kg

> TSC-263 SERIES

高性能細長型回轉頂針

HEAVY DUTY LONG NOSE LIVE CENTER

- 適用：CNC重型車床及重型高速車床。
Application CNC heavy duty lathe, heavy duty high speed lathe
- 用途：適用於長軸心重力車削加工（細長型車削加工）。
Working Usage Applicable for the long workpiece heavy duty turning process and slender workpiece turning process
- 結構：採用雙列滾珠精密軸承，止推軸承及滾針軸承設計，採三個支撐點特殊設計製成。
Structure Combination of double row precise ball bearing and thrust bearing and needle bearing, with the design of three supporting points.
- 選配：Y型扳手
Accessories Y type spanner
- 精準度：0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

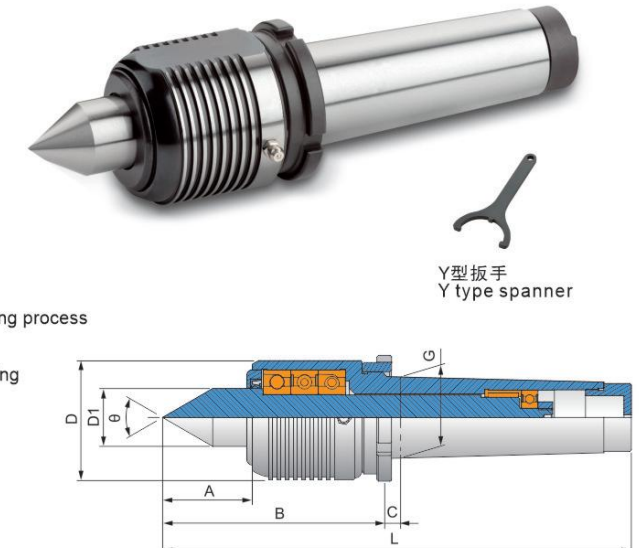
型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-263-3A	75	147	8	58	34.8	13	23.825(MT3)	234	60°	6,000 rpm	1,450 kg	1,800 kg
TSC-263-4A	75	147	9	65	34.8	13	31.267(MT4)	255	60°	6,000 rpm	2,250 kg	2,700 kg
TSC-263-5A	75	153	9	75	44.8	15	44.399(MT5)	288	60°	6,000 rpm	3,620 kg	3,000 kg

> NCH-62 SERIES

精密型高速回轉頂針

HEAVY DUTY PRECISE HIGH SPEED LIVE CENTER

- 適用：CNC車床及高速車床。
Application CNC lathe, high speed lathe
- 用途：適用高速高精軸心車削加工。
Working Usage Applicable for high speed and high precision workpiece turning process
- 結構：斜角滾珠精密級高速軸承，針狀軸承特殊設計製成。
Structure Combination of angular contact ball precise high speed bearing and needle bearing
- 配件：Y型扳手 (Y spanner)
Accessories Y type spanner
- 精準度：0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

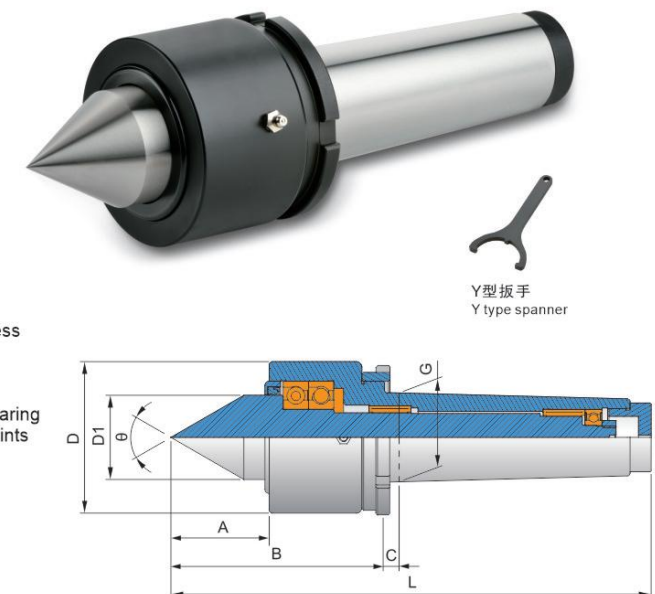
型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
NCH-62-3A	47	116	8	68	31.2	23.825(MT3)	203	60°	12,000 rpm	1,600 kg	1,240 kg
NCH-62-4A	49	121	9	68	31.2	31.267(MT4)	229	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-62-5A	49	121	9	68	31.2	44.399(MT5)	256	60°	12,000 rpm	2,730 kg	1,750 kg

> SC-60 SERIES

高速強力回轉頂針

HEAVY DUTY HIGH SPEED STRONG LIVE CENTER

- 適用：CNC重型車床及重型高速車床。
Application CNC heavy duty lathe, heavy duty high speed lathe
- 用途：適用長軸心重力車削加工。
Working Usage Applicable for the long workpiece heavy duty turning process
- 結構：採用斜角精密高速軸承，滾針軸承，三個支撐點特殊排列製成。
Structure Combination of angular contact precise high speed ball bearing and needle bearing, with the design of three supporting points
- 選配：SC-60-H-6A:專用Y型扳手
Accessories For SC-60-H-6A: special Y type spanner
- 精準度：0.002以內
TIR Less than 0.002mm



規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
SC-60-H-4	54	97	9	78	34.8	31.267(MT4)	205	60°	5,000 rpm	1,900 kg	1,600 kg
SC-60-H-5	62	109	9	83	44.8	44.399(MT5)	244	60°	5,000 rpm	3,000 kg	2,200 kg
SC-60-H-6A	70	152	10	108	59.9	63.348(MT6)	342	60°	3,000 rpm	5,000 kg	3,500 kg

回轉式系列
Live centers series重負荷
Heavy duty

> JK-562 SERIES

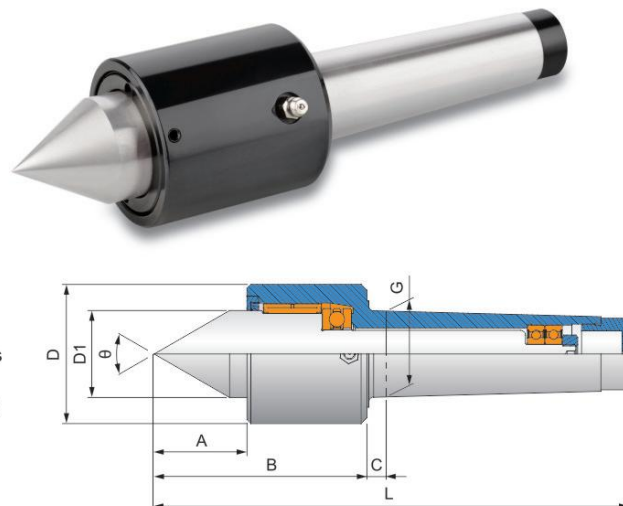
強力回轉頂針

HEAVY DUTY STRONG LIVE CENTER

- 適用：CNC車床、高速車床及外徑磨床。
Application CNC lathe, high speed lathe, cylindrical grinding machine
- 用途：適用一般長軸心強力車削加工。
Working Usage Applicable for ordinary length workpiece strong turning process
- 結構：前後滾針軸承，加止推軸承，特殊設計製成。
Structure Combination of thrust bearing and needle bearing at front and rear place
- 精準度：0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
JK-562-4	42	99	9	57	35	31.267(MT4)	207	60°	4,500 rpm	1,500 kg	2,250 kg
JK-562-5	51	119	9	72	45	44.399(MT5)	254	60°	4,000 rpm	2,300 kg	2,760 kg
JK-562-6	64	142	10	93	60	63.348(MT6)	332	60°	3,000 rpm	4,200 kg	4,850 kg



> SC-62 SERIES

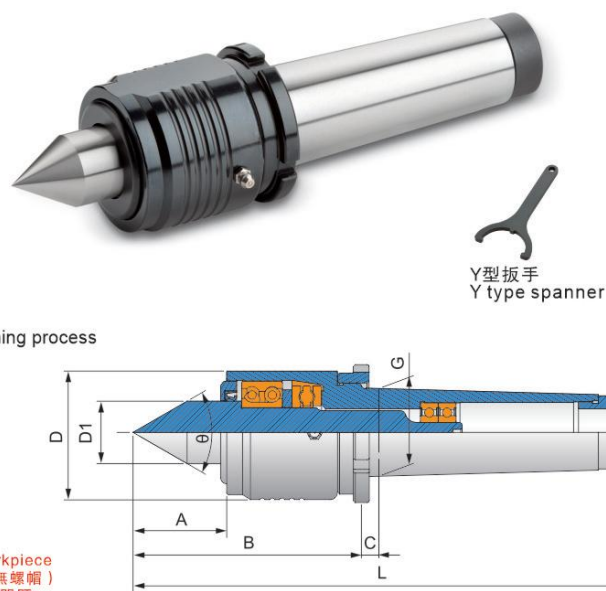
重負荷回轉頂針

HEAVY DUTY LIVE CENTER

- 適用：CNC車床、高速車床及其他機床。
Application CNC lathe, high speed lathe, other lathe machine
- 用途：適用長度400mm以內，一般強力車削加工。
Working Usage Applicable for the length less than 400mm ordinary strong turning process
- 結構：採用雙列滾珠精密軸承，止推軸承，滾針軸承
Structure Combination of double row precise ball bearing and thrust bearing and needle bearing
- 選配：SC-62-H-4A/5A:Y型扳手
Accessories For SC-62-H-4A/5A:Y type spanner
- 精準度：0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
SC-62-H-3	48	104	9	62	31.2	23.825(MT3)	212	60°	4,000 rpm	1,430 kg	2,700 kg
SC-62-H-4	48	104	9	62	31.2	31.267(MT4)	212	60°	4,000 rpm	1,430 kg	2,700 kg
SC-62-H-5	48	104	9	62	31.2	44.399(MT5)	239	60°	4,000 rpm	1,430 kg	2,700 kg
SC-62-H-3A	48	116	5	62	31.2	23.825(MT3)	224	60°	4,000 rpm	1,430 kg	2,700 kg
SC-62-H-4A	48	116	5	62	31.2	31.267(MT4)	224	60°	4,000 rpm	1,430 kg	2,700 kg
SC-62-H-5A	48	116	5	62	31.2	44.399(MT5)	251	60°	4,000 rpm	1,430 kg	2,700 kg

S light type for slender workpiece
另有同規格輕負荷 (S型，無螺帽)
可改善細長工件加工易變形問題

> TSC-662 SERIES

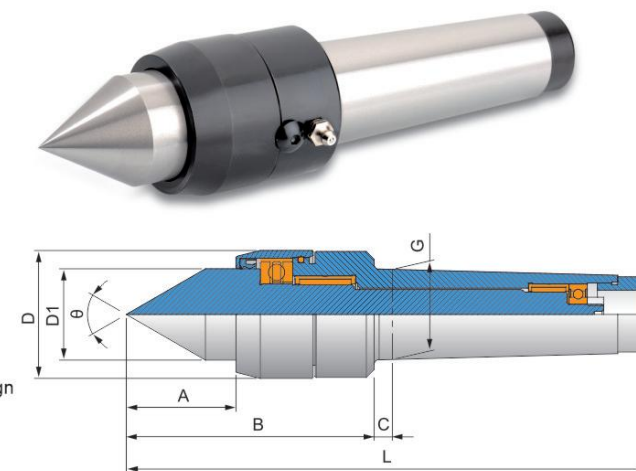
強力回轉頂針

HEAVY DUTY STRONG LIVE CENTER

- 適用：CNC車床、高速車床及滾齒機。
Application CNC lathe, high speed lathe, gear hobbing machine
- 用途：適用高推力強力車削加工。
Working Usage Applicable for high pushing force strong turning process
- 結構：止推軸承加大推力設計，載重前後
Structure 採用針狀軸承設計製成。
Combination of thrust bearing with enhanced axial load design and needle bearing at front and rear place for radial load
- 精準度：0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-662-3	42	99	8	58	34.8	23.825(MT3)	186	60°	3,500 rpm	1,960 kg	1,750kg
TSC-662-4	54	122	9	63	44.8	31.267(MT4)	230	60°	3,500 rpm	2,800 kg	2,150kg
TSC-662-5	54	122	9	63	44.8	44.399(MT5)	257	60°	3,500 rpm	3,080 kg	2,150kg



> TSC-663 SERIES

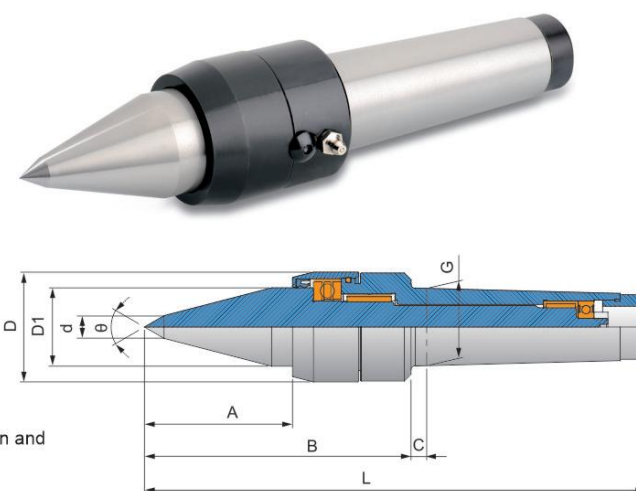
強力細長型回轉頂針

HEAVY DUTY STRONG LONG NOSE LIVE CENTER

- 適用：CNC車床、高速車床及滾齒機。
Application CNC lathe, high speed lathe, gear hobbing machine
- 用途：適用高推力強力車削加工(細長型車削加工)。
Working Usage Applicable for high pushing force strong turning process, and slender workpiece turning process
- 結構：止推軸承加大推力設計，載重前後採用針狀
Structure 軸承設計製成。
Combination of thrust bearing with enhanced axial load design and needle bearing at front and rear place for radial load
- 精準度：0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-663-5	75	143	9	63	44.8	12	44.399(MT5)	278	60°	3,500 rpm	3,080 kg	2,150kg



回轉式系列 Live centers series

輕負荷 Light duty

SC-92 SERIES

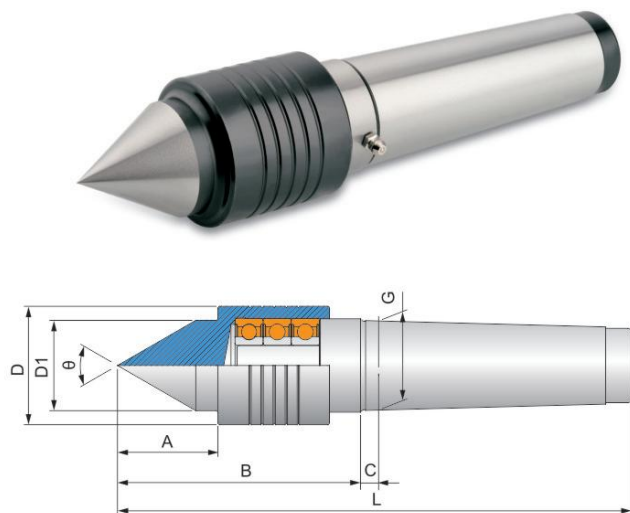
輕型回轉頂針

LIGHT DUTY LIVE CENTER

- 適用：一般車床使用。
Application Center lathe
- 用途：適用一般軸心車削加工。
Working Usage Applicable for ordinary workpiece turning process
- 結構：採用合金鋼材，經熱處理硬度達57°~60°，內外徑研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, ground on ID and OD
- 精準度：0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承軸向力 (推力) Max. axial thrust force
SC-92-L-2	40	105	6	48	35	17.780(MT2)	174	60°	3,500 rpm	160 kg
SC-92-L-3	40	105	8	48	35	23.825(MT3)	192	60°	3,000 rpm	250 kg
SC-92-L-4	40	105	9	48	35	31.267(MT4)	213	60°	2,600 rpm	400 kg
SC-92-L-5	50	121	9	59	45	44.399(MT5)	256	60°	2 200 rpm	800 kg



SC-93 SERIES

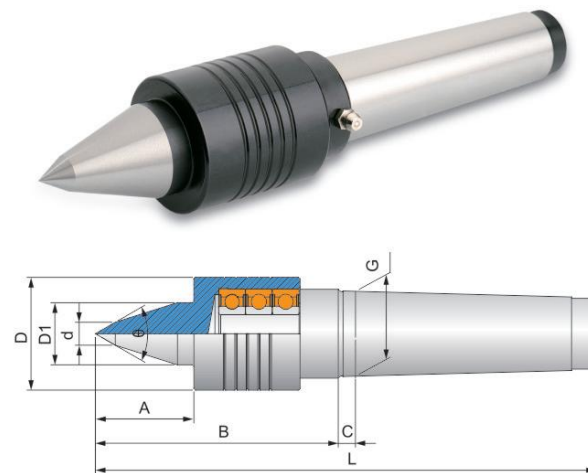
輕型細長型回轉頂針

LIGHT DUTY LONG NOSE LIVE CENTER

- 適用：一般車床使用。
Application Center lathe
- 用途：適用一般軸心車削加工(細長型車削加工)。
Working Usage Applicable for ordinary turning process, slender workpiece turning process
- 結構：採用合金鋼材，經熱處理硬度達57°~60°，內外徑研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, ground on ID and OD
- 精準度：0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ	軸承最高轉數 Max. RPM	軸承軸向力 (推力) Max. axial thrust force
SC-93-L-2	51	117	6	48	32	12	17.780(MT2)	186	60°	3,500 rpm	160 kg
SC-93-L-3	51	117	8	48	32	12	23.825(MT3)	204	60°	3,000 rpm	250 kg
SC-93-L-4	51	117	9	48	32	12	31.267(MT4)	225	60°	2,600 rpm	400 kg
SC-93-L-5	51	122	9	59	32	12	44.399(MT5)	257	60°	2,200 rpm	800 kg



備註：■ 本頂針指定使用SKF-LGMT2專用潤滑油，請勿使用其他不同成分之潤滑油。

- 產品型號中有“A”的表示頂針有附螺帽
- 配件中的頂針子，型號有“A”的為加長型頂針子。
- 徑向力數據參考：加工件重量+車削力量
- 軸向力數據參考：尾座油壓壓力數據
- 注油式：可添加專用SKF潤滑油，具防水性。
- For the lubricating oil, SKF-LGMT2 is designated, others aren't allowed
- if "A" is behind the center model name, it denotes a draw-off nut attached.
- About radial force data, please refer to workpiece weight and machining force.
- if "A" is behind the center interchangeable tip name, it denotes the tip is extended length.
- About axial force data, please refer to the hydraulic pressure data of the tailstock.
- For live centers, SKF lubricating oil is designated, it is waterproof.

高精度回轉固定 High precision live center

鎢鋼系列 Tungsten carbide series

NCH-63鎢鋼 SERIES

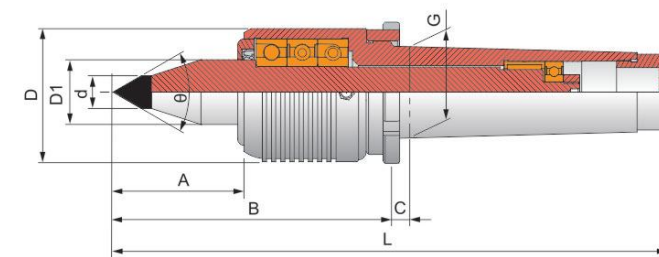
鎢鋼固定式高精度回轉頂針

TUNGSTEN CARBIDE STEEL POINT HIGH PRECISION LIVE CENTER

- 適用：CNC車床及高速車床。
Application CNC lathe and high speed lathe
- 用途：適用高速高精度軸心車削加工(細長型車削加工)。
Working Usage Applicable for high speed and high precision turning process, and slender workpiece turning process
- 結構：斜角滾珠精密級高速軸承，針狀軸承特殊設計製成。
Structure Combination of angular contact ball precise high speed bearing and needle bearing
- 特點：採用美國進口鎢鋼原料製成，不易磨損，鎢鋼
Advantage 焊接20mm深、剛性强、穩定性佳。
Adopted the tungsten material imported from the US, which is wear resisting, the welding depth of tungsten reach 20mm, strong rigidity, good stability.
- 配件：Y型扳手
Accessories Y type spanner
- 精準度：0.002以內
TIR Less than 0.002mm



Y型扳手
Y type spanner



規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
NCH-63-TS06-4A	55	127	9	62	31.2	6	31.267(MT4)	235	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS08-4A	55	127	9	62	31.2	8	31.267(MT4)	235	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS10-4A	55	127	9	62	31.2	10	31.267(MT4)	235	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS16-4A	55	127	9	62	31.2	16	31.267(MT4)	235	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS06-5A	55	127	9	62	31.2	6	44.399(MT5)	262	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS08-5A	55	127	9	62	31.2	8	44.399(MT5)	262	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS10-5A	55	127	9	62	31.2	10	44.399(MT5)	262	60°	12,000 rpm	2,730 kg	1,750 kg
NCH-63-TS16-5A	55	127	9	62	31.2	16	44.399(MT5)	262	60°	12,000 rpm	2,730 kg	1,750 kg

備註：■ 本頂針指定使用SKF-LGMT2專用潤滑油，請勿使用其他不同成分之潤滑油。

- 產品型號中有“A”的標示頂針有附螺帽
- 配件中的頂針子，型號有“A”的為加長型頂針子。
- 軸向力數據參考：尾座油壓壓力數據
- 徑向力數據參考：加工件重量+車削力量
- 注油式：可添加專用SKF潤滑油，具防水性。

- For the lubricating oil, SKF-LGMT2 is designated, others aren't allowed
- if "A" is behind the center model name, it denotes a draw-off nut attached.
- About radial force data, please refer to workpiece weight and machining force.

- if "A" is behind the center interchangeable tip name, it denotes the tip is extended length.
- About axial force data, please refer to the hydraulic pressure data of the tailstock.
- For live centers, SKF lubricating oil is designated, it is waterproof.

固定式系列
Dead centers series輕負荷
Light duty

> TSC-9662 SERIES

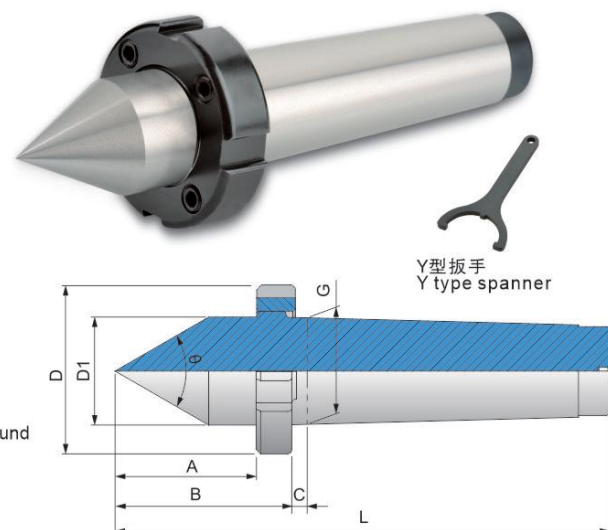
附螺帽固定式頂針

LIGHT DUTY WITH NUT DEAD CENTER

- 適用: CNC車床及其他機床。
Application CNC lathe and other lathe
- 用途: 適用尾座回轉型結構設計使用。
Working Usage Applicable for rotary structure of tailstock
- 結構: 採用合金鋼材, 經熱處理硬度達57°~60°, 精密研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, precision ground
- 配件: Y型扳手
Accessories Y type spanner
- 精準度: 0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ
TSC-9662-3A	51	66	5	53	24.1	23.825(MT3)	150	60°
TSC-9662-4A	68	93	4	68	31.6	31.267(MT4)	196	60°
TSC-9662-5A	89	114	4	88	45	44.399(MT5)	244	60°
TSC-9662-6A	100	140	--	108	65	63.348(MT6)	320	60°

鎢鋼系列
Tungsten carbide series固定式
Dead centers type

> TSC-9662鎢鋼 SERIES

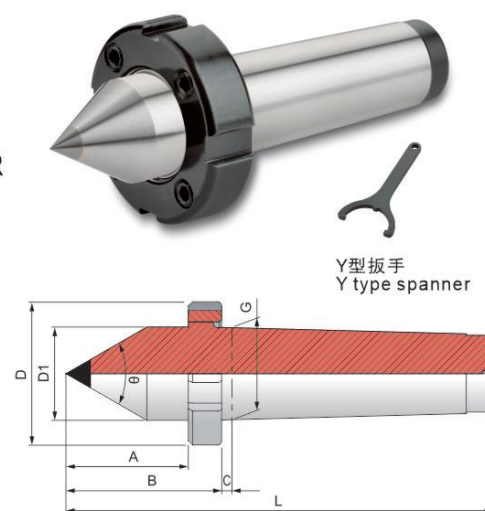
附螺帽鎢鋼固定式頂針

TUNGSTEN CARBIDE STEEL POINT WITH NUT DEAD CENTER

- 適用: CNC車床及其他機床。
Application CNC lathe and other lathe
- 用途: 適用尾座回轉型結構設計使用。
Working Usage Applicable for rotary structure of tailstock
- 結構: 採用合金鋼材, 經熱處理硬度達57°~60°, 精密研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, precision ground, adopted the tungsten carbide steel from the USA, which is high wear resistance
- 特點: 採用美國進口鎢鋼原料製成, 不易磨損。
Advantage Adopted the tungsten material imported from the US, which is wear resisting
- 配件: Y型扳手
Accessories Y type spanner
- 精準度: 0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ
TSC-9662-TS-3A	36	51	8	53	24.1	23.825(MT3)	138	60°
TSC-9662-TS-4A	42	62	9	68	31.6	31.267(MT4)	170	60°
TSC-9662-TS-5A	59	71	9	88	45	44.399(MT5)	206	60°



> TSC-9663鎢鋼 SERIES

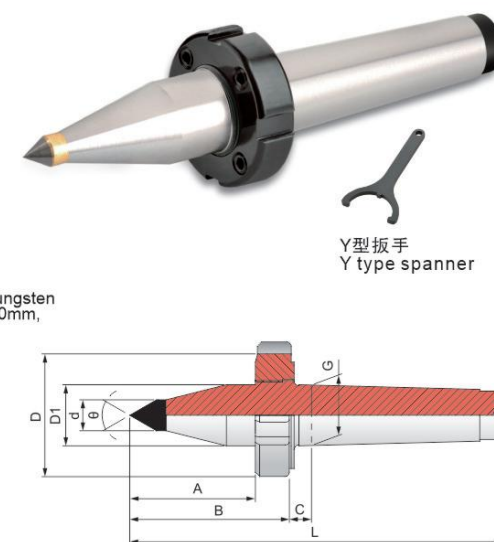
附螺帽鎢鋼兩段式固定頂針

TUNGSTEN CARBIDE STEEL POINT TWO PHASE TYPE WITH NUT DEAD CENTER

- 適用: CNC車床及其他機床。
Application CNC lathe and other lathe
- 用途: 適用尾座回轉型結構設計使用(細長型車削加工)。
Working Usage Applicable for rotary structure of tailstock, and slender workpiece turning process
- 結構: 採用合金鋼材, 經熱處理硬度達57°~60°, 精密研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, precision ground, adopted the tungsten carbide steel from the USA, which is high wear resistance. the welding depth is 20mm, strong rigidity and better stability.
- 特點: 採用美國進口鎢鋼原料製成, 不易磨損, 鎢鋼焊接20mm深、剛性強、穩定性佳。
Advantage Adopted the tungsten material imported from the US, which is wear resisting, the welding depth of tungsten reach 20mm, strong rigidity, good stability.
- 配件: Y型扳手
Accessories Y type spanner
- 精準度: 0.002以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	d	G	L	θ
TSC-9663-TS06-3A	60	75	8	53	24.1	6	23.825(MT3)	162	60°
TSC-9663-TS08-3A	60	75	8	53	24.1	8	23.825(MT3)	162	60°
TSC-9663-TS10-3A	60	75	8	53	24.1	10	23.825(MT3)	162	60°
TSC-9663-TS16-3A	60	75	8	53	24.1	16	23.825(MT3)	162	60°
TSC-9663-TS06-4A	65	85	9	68	31.6	6	31.267(MT4)	193	60°
TSC-9663-TS08-4A	65	85	9	68	31.6	8	31.267(MT4)	193	60°
TSC-9663-TS10-4A	65	85	9	68	31.6	10	31.267(MT4)	193	60°
TSC-9663-TS16-4A	65	85	9	68	31.6	16	31.267(MT4)	193	60°



> TSC-9665 SERIES

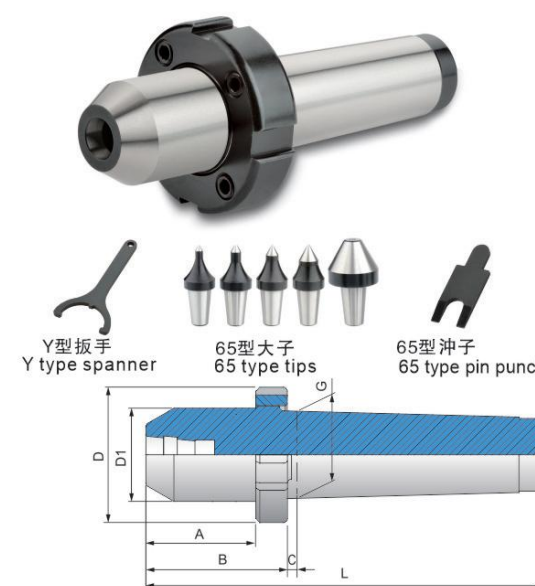
替換式附螺帽固定式頂針

INTERCHANGEABLE LIGHT DUTY WITH NUT DEAD CENTER

- 適用: CNC車床及其他機床。
Application CNC lathe and other lathe
- 用途: 適用尾座回轉型結構設計使用。
Working Usage Applicable for rotary structure of tailstock
- 結構: 採用合金鋼材, 經熱處理硬度達57°~60°, 精密研磨製成。
Structure Made of alloy steel and hardened to HRC 57-60, precision ground
- 選配: Y型扳手、65型大子、65型沖子
Accessories Y type spanner and 65 type tips and 65 type punch
- 精準度: 0.005以內
TIR Less than 0.002mm

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L
TSC-9665-3A	30	49	8	68	31.6	23.825(MT3)	136
TSC-9665-4A	30	50	9	68	31.6	31.267(MT4)	158
TSC-9665-5A	50	68	5	68	47.3	44.399(MT5)	203



傳動系列
Face driving center端面浮動式
Compensating pins type

> SC-66-A SERIES

齒部替換端面浮動式傳動頂針

CHANGEABLE SELF COMPENSATING FACE DIVER

- ◎ 適用: CNC車床、高速車床、自動送料專用機及其他機床。
Application CNC lathe and high speed lathe and auto feeder or other machine tool
- ◎ 用途: 車削軸心時，免車削工件端面，每支傳動齒自動調整平均傳動力，精度穩定性佳，可正、反轉車削。
Working Usage No need turning the workpiece face and each drive pin can adjust the transmission force, better precision and stability for turning and reversing lathing process
- ◎ 結構: 採用機械式平衡結構特殊設計製成。
Structure Adopted the design of mechanical balance structure
- ◎ 配件: SC-66-A組:中心針09-09;傳動齒10-10
Accessories For SC-66-A group, center pins 09-09 and drive pins 10-10
SC-66-B組:中心針09-09;傳動齒10-13
For SC-66-B group, center pins 09-09 and drive pins 10-13
SC-66-C組:中心針09-06;傳動齒10-17
For SC-66-C group, center pins 09-06 and drive pins 10-17
- ◎ 精準度: 0.005以內
TIR Less than 0.005mm

●標準組附件:A+C組

規格/Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	直徑加工範圍小徑-大徑 Working range(mini pin---big pin)
SC-66-A-3A	109	48	8	68.5	33.5	23.825(MT3)	180	17~40m/m
SC-66-A-3B	109	48	8	68.5	36.8	23.825(MT3)	180	15~45m/m
SC-66-A-3C	109	48	8	68.5	40.5	23.825(MT3)	180	10~50m/m
SC-66-A-4A	109	48	10	68.5	33.5	31.267(MT4)	203	17~40m/m
SC-66-A-4B	109	48	10	68.5	36.8	31.267(MT4)	203	15~45m/m
SC-66-A-4C	109	48	10	68.5	40.5	31.267(MT4)	203	10~50m/m
SC-66-A-5A	112	48	10	68.5	33.5	44.399(MT5)	227	17~40m/m
SC-66-A-5B	112	48	10	68.5	36.8	44.399(MT5)	227	15~45m/m
SC-66-A-5C	112	48	10	68.5	40.5	44.399(MT5)	227	10~50m/m

> SC-66-B-40 SERIES

齒部替換端面浮動式傳動頂針

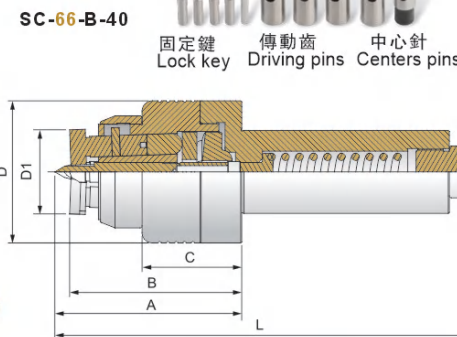
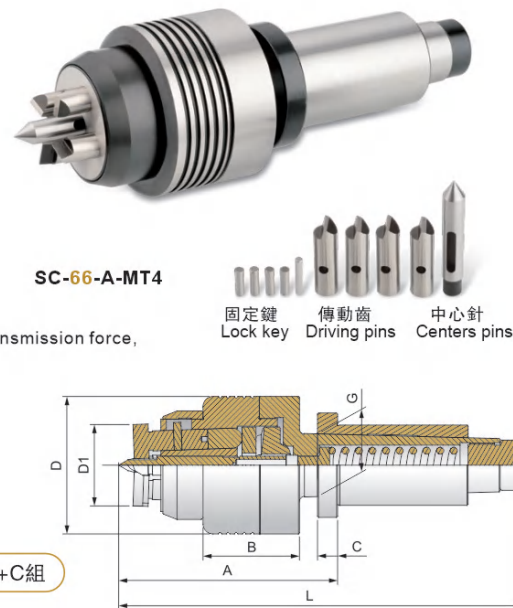
CHANGEABLE SELF COMPENSATING FACE DIVER

- ◎ 適用: CNC車床、高速車床、自動送料專用機及其他機床。
Application CNC lathe and high speed lathe and auto feeder or other machine tool
- ◎ 用途: 車削軸心時，免車削工件端面，每支傳動齒自動調整平均傳動力，精度穩定性佳，可正、反轉車削。
Working Usage No need turning the workpiece face and each drive pin can adjust the transmission force, better precision and stability for turning and reversing lathing process
- ◎ 結構: 採用機械式平衡結構特殊設計製成。
Structure Adopted the design of mechanical balance structure
- ◎ 選配: SC-66-A組:中心針09-09;傳動齒10-10
Accessories For SC-66-A group, center pins 09-09 and drive pins 10-10
SC-66-B組:中心針09-09;傳動齒10-13
For SC-66-B group, center pins 09-09 and drive pins 10-13
SC-66-C組:中心針09-06;傳動齒10-17
For SC-66-C group, center pins 09-06 and drive pins 10-17
- ◎ 精準度: 0.005以內
TIR Less than 0.005mm

●標準組附件:A+C組

規格/Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	L	直徑加工範圍小徑-大徑 Working range(mini pin---big pin)
SC-66-B-40A	92	82.7	48	68.5	33.5	203	17 ~ 40 m/m
SC-66-B-40B	92	82.7	48	68.5	36.8	203	15 ~ 45 m/m
SC-66-B-40C	92	82.7	48	68.5	40.5	203	10 ~ 50 m/m

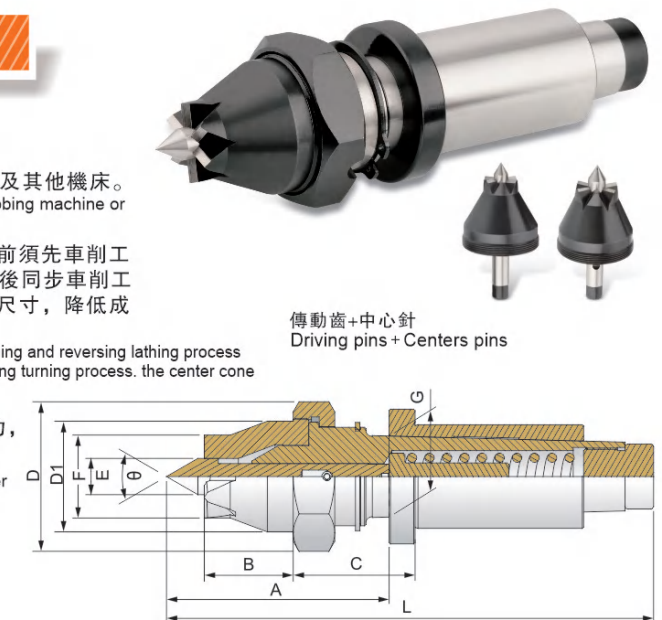
替換式端面固定
Interchangeable driving head type傳動系列
Face driving center

> SC-67-A SERIES

齒部替換式端面固定傳動頂針

CHANGEABLE CENTER CONE FACE DIVER

- ◎ 適用: CNC車床、高速車床、自動送料專用機、滾齒機及其他機床。
Application CNC lathe and high speed lathe and auto feeder and gear hobbing machine or other machine tool
- ◎ 特點: 使用本固定傳動插式頂針可正、反轉車削，使用前須先車削工件端面，才可使用於CNC車床及其他機床，可前後同步車削工件一次加工完成。本頂針特點：頭部可更換多種尺寸，降低成本，使用方便。
Characteristics Need turning the workpiece face before using this center, and turning and reversing lathing process is OK. suitable for front and rear synchronous and one time finishing turning process. the center cone can be changed to different size, easy operation and cost down.
- ◎ 注意: 本替換式端面固定齒插式傳動頂針，靠尾座足夠壓力，即可傳動車削使用，尾座壓力越高，傳動力越大。
Note Face driving by the enough pressure from the tailstock, stronger pressure, stronger driving force.
- ◎ 配件: 標準組配件: Standard accessories
Accessories SC-67-0616
SC-67-0820
SC-67-1025



規格/Specification 單位/UNIT: mm

精準度:<0.005

型式/外表尺寸 Model/Spec	A	B	C	D	D1	E	F	G	L
SC-67-A-MT3 系列									
SC-67-A-0408	77.3	34.3	45	57	42.8	4	8	23.825(MT3)	156.3
SC-67-A-0510	77.3	34.3	45	57	42.8	5	10	23.825(MT3)	156.3
SC-67-A-0612	79.3	34.3	45	57	42.8	6	12	23.825(MT3)	158.3
SC-67-A-0616	79.3	34.3	45	57	42.8	6	16	23.825(MT3)	158.3
SC-67-A-0820	79.3	34.3	45	57	42.8	8	20	23.825(MT3)	158.3
SC-67-A-1025	84.6	34.3	45	57	42.8	10	25	23.825(MT3)	161.9
SC-67-A-1225	85.9	34.3	45	57	42.8	12	25	23.825(MT3)	161.9
SC-67-A-1432	85.9	34.3	45	57	42.8	14	32	23.825(MT3)	161.9
SC-67-A-MT4 系列									
SC-67-A-0408	77.3	34.3	47	57	42.8	4	8	31.267(MT4)	179.3
SC-67-A-0510	77.3	34.3	47	57	42.8	5	10	31.267(MT4)	179.3
SC-67-A-0612	79.3	34.3	47	57	42.8	6	12	31.267(MT4)	181.3
SC-67-A-0616	79.3	34.3	47	57	42.8	6	16	31.267(MT4)	181.3
SC-67-A-0820	79.3	34.3	47	57	42.8	8	20	31.267(MT4)	181.3
SC-67-A-1025	84.6	34.3	47	57	42.8	10	25	31.267(MT4)	184.9
SC-67-A-1225	85.9	34.3	47	57	42.8	12	25	31.267(MT4)	187.9
SC-67-A-1432	85.9	34.3	47	57	42.8	14	32	31.267(MT4)	187.9
SC-67-A-MT5 系列									
SC-67-A-0408	77.3	34.3	47	57	42.8	4	8	44.399(MT5)	203.3
SC-67-A-0510	77.3	34.3	47	57	42.8	5	10	44.399(MT5)	203.3
SC-67-A-0612	79.3	34.3	47	57	42.8	6	12	44.399(MT5)	205.3
SC-67-A-0616	79.3	34.3	47	57	42.8	6	16	44.399(MT5)	205.3
SC-67-A-0820	79.3	34.3	47	57	42.8	8	20	44.399(MT5)	205.3
SC-67-A-1025	84.6	34.3	47	57	42.8	10	25	44.399(MT5)	208.3
SC-67-A-1225	85.9	34.3	47	57	42.8	12	25	44.399(MT5)	211.9
SC-67-A-1432	85.9	34.3	47	57	42.8	14	32	44.399(MT5)	211.9

傳動系列
Face driving center

替換式端面固定
Interchangeable driving head type

> SC-67-B-30 SERIES

齒部替換式端面固定傳動頂針

CHANGEABLE CENTER CONE FACE DIVER

◎ 適用：CNC車床、高速車床、自動送料專用機、滾齒機及其他機床。
Application CNC lathe and high speed lathe and auto feeder and gear hobbing machine or other machine tool.

◎ 特點：使用本固定傳動插式頂針可正、反轉車削，使用前須先車削工件端面，才可適用於CNC車床及其他機床，可前後同步車削工件一次加工完成。本頂針特點：頭部可更換多種尺寸，降低成本，使用方便。

Need turning the workpiece face before using this center, and turning and reversing lathing process is OK. suitable for front and rear synchronous and one time finishing turning process. the center cone can be changed to different size, easy operation and cost down.

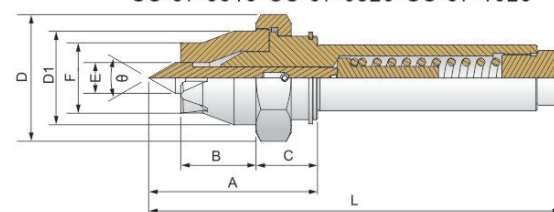


傳動齒+中心針
Driving pins + Centers pins

◎ 注意：本替換式端面固定齒插式傳動頂針，靠尾座足夠壓力，即可傳動車削使用，尾座壓力越高，傳動力越大。

Face driving by the enough pressure from the tailstock, stonger pressure, stonger driving force.

◎ 配件：標準組配件：Standard accessories
Accessories SC-67-0616 SC-67-0820 SC-67-1025



規格 / Specification 單位/UNIT: mm

精準度: <0.005

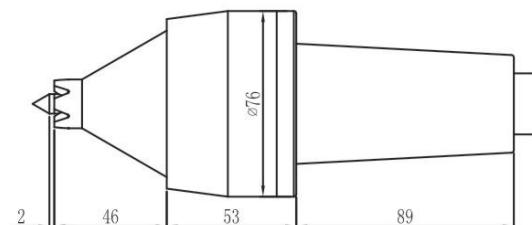
型式/外表尺寸 Model/Spec	A	B	C	D	D1	E	F	L
SC-67-B-0408	68.3	34.3	28	57	42.8	4	8	179.3
SC-67-B-0510	68.3	34.3	28	57	42.8	5	10	179.3
SC-67-B-0612	70.3	34.3	28	57	42.8	6	12	181.3
SC-67-B-0616	70.3	34.3	28	57	42.8	6	16	181.3
SC-67-B-0820	70.3	34.3	28	57	42.8	8	20	181.3
SC-67-B-1025	73.9	34.3	28	57	42.8	10	25	184.9
SC-67-B-1225	76.9	34.3	28	57	42.8	12	25	187.9
SC-67-B-1432	76.9	34.3	28	57	42.8	14	32	187.9

> TSC-285-4A SERIES

回轉型端面傳動頂針

FACE DRIVER LIVE CENTER

◎ 用于機床尾座
◎ 頂緊工件後，配合主軸端傳動頂針轉動工件，防止在重切削作業時工件打滑。
it's used on CNC machine's tailstock
It can avoid the workpiece from slipping when heavy duty machining process.



> F67 SERIES

端面固定傳動頂針

FIXED POINT FACE DIVER

◎ 適用：CNC車床、高速車床、滾齒機及其他機床。

Application CNC lathe and high speed lathe and auto feeder and gear hobbing machine or other machine tool.

◎ 特點：使用本固定傳動插式頂針可正、反轉車削，使用前須先車削工件端面，才可適用，可前後同步車削工件一次加工完成。Need turning the workpiece face before using this center, and turning and reversing lathing process is OK. suitable for front and rear synchronous and one time finishing turning process.

◎ 注意：使用本端面固定齒插式傳動頂針，靠尾座足夠壓力，即可傳動車削使用，尾座壓力越高，傳動力越大。
Face driving by the enough pressure from the tailstock, stonger pressure, stonger driving force.

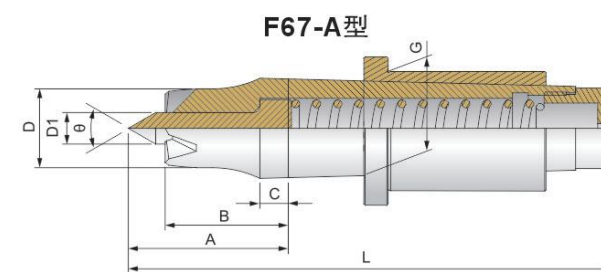
◎ 配件：MT4套筒
Accessories Mt4 sleeve



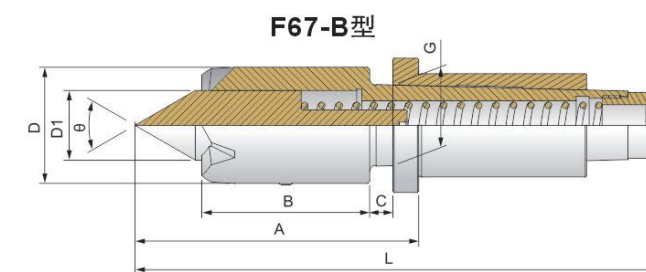
F67-A型



F67-B型



F67-A型



F67-B型

F67-A型系列：

規格 / Specification 單位/UNIT: mm

精準度: <0.005

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ
F67-0408-4	45	39	9	8	4	31.267(MT4)	147	60°
F67-0510-4	46	39	9	10	5	31.267(MT4)	148	60°
F67-0612-4	47	39	9	12	6	31.267(MT4)	149	60°
F67-0616-4	47	39	9	16	6	31.267(MT4)	149	60°
F67-0820-4	49	39	9	20	8	31.267(MT4)	151	60°
F67-0832-4	49	39	9	32	8	31.267(MT4)	151	60°
F67-1025-4	51	39	9	25	10	31.267(MT4)	153	60°
F67-1228-4	53	39	9	28	12	31.267(MT4)	155	60°
F67-1432-4	54	39	9	32	14	31.267(MT4)	156	60°

F67-B型系列：

規格 / Specification 單位/UNIT: mm

精準度: <0.005

型式/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ
F67-1836-4	102	65	10	36	18	31.267(MT4)	195	60°
F67-2240-4	107	67	10	40	22	31.267(MT4)	200	60°
F67-2745-4	115	70	10	45	27	31.267(MT4)	207	60°

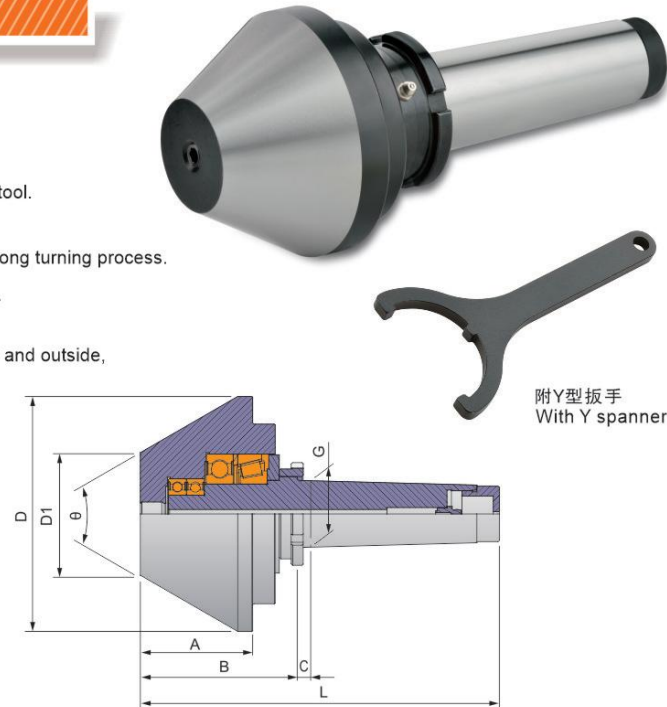
傘型系列
Bull nose centers固定式重負荷
Dead head heavy duty centers

> TSC-80 SERIES

傘型重負荷回轉頂針

BULL NOSE HEAVY DUTY LIVE CENTER

- ◎ 適用：CNC車床、高速車床及其他機床。
Application CNC lathe and high speed lathe or other machine tool.
- ◎ 用途：適用大孔徑軸心重力車削加工。
Working Usage Applicable for big size inner diameter workpiece strong turning process.
- ◎ 結構：頭部使用合金鋼材，經熱處理，內、外研磨制成，軸承採用重力型設計製成。
Structure Adopted alloy steel, hardened and ground on inner and outside, heavy duty bearing.
- ◎ 配件：Y型扳手
Accessories Y type spanner.

附Y型扳手
With Y spanner

規格 / Specification 單位/UNIT: mm

型號/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ	軸承最高轉數 Max. RPM	軸承徑向力 (載重) Max. radial load	軸承軸向力 (推力) Max. axial thrust force
TSC-80-3"-4A	65	112	4	77	15	31.267(MT4)	216	60°	2,500 rpm	2,200 kg	2,500 kg
TSC-80-4"-4A	80	127	4	107	25	31.267(MT4)	231	60°	2,500 rpm	2,200 kg	2,500 kg
TSC-80-5"-4A	90	137	4	127	40	31.267(MT4)	241	60°	2,200 rpm	3,200 kg	3,800 kg
TSC-80-6"-4A	107	152	4	157	45	31.267(MT4)	256	60°	2,200 rpm	3,200 kg	3,800 kg
TSC-80-8"-4A	110	157	4	207	107	31.267(MT4)	261	60°	2,000 rpm	5,300 kg	5,600 kg

精準度: <0.002

TSC-80-3"-5A	65	112	5	77	15	44.399(MT5)	243	60°	2,500 rpm	2,200 kg	2,500 kg
TSC-80-4"-5A	80	127	5	107	25	44.399(MT5)	258	60°	2,500 rpm	2,200 kg	2,500 kg
TSC-80-5"-5A	90	137	5	127	40	44.399(MT5)	268	60°	2,200 rpm	3,200 kg	3,800 kg
TSC-80-6"-5A	107	152	5	157	45	44.399(MT5)	283	60°	2,200 rpm	3,200 kg	3,800 kg
TSC-80-8"-5A	110	157	5	207	107	44.399(MT5)	288	60°	2,000 rpm	5,300 kg	5,600 kg
TSC-80-10"-5A	110	157	5	257	157	44.399(MT5)	288	60°	2,000 rpm	5,300 kg	5,600 kg
TSC-80-12"-5A	110	157	5	306	206	44.399(MT5)	288	60°	2,000 rpm	5,300 kg	5,600 kg

TSC-80-5"-6A	90	141	6	127	40	63.348(MT6)	327	60°	2,200 rpm	3,200 kg	3,800 kg
TSC-80-6"-6A	107	156	6	157	45	63.348(MT6)	342	60°	2,200 rpm	3,200 kg	3,800 kg
TSC-80-8"-6A	110	161	6	207	107	63.348(MT6)	347	60°	2,000 rpm	5,300 kg	5,600 kg
TSC-80-10"-6A	110	161	6	257	157	63.348(MT6)	347	60°	2,000 rpm	5,300 kg	5,600 kg
TSC-80-12"-6A	110	161	6	306	206	63.348(MT6)	347	60°	2,000 rpm	5,300 kg	5,600 kg

> TSC-96880 SERIES

替換式傘型固定頂針

CHANGEABLE BULL NOSE DEAD CENTER

- ◎ 適用：CNC車床及其他機床。
Application CNC lathe and other machine tool.
- ◎ 用途：適用大孔徑車削，配合尾座回轉型結構設計使用。
Working Usage Applicable for big size inner diameter workpiece turning process.



TSC-880-3" TSC-880-4" TSC-880-5" TSC-880-6"

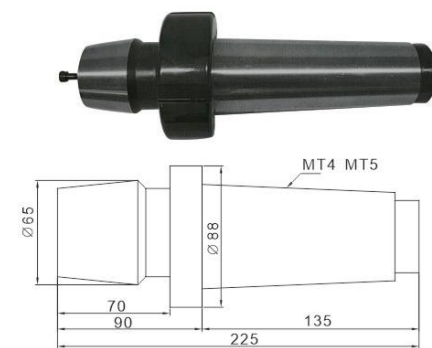
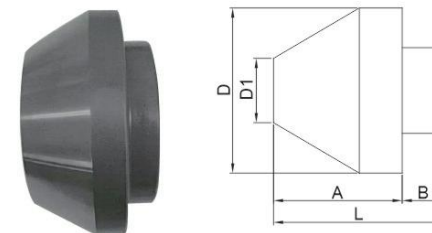
Y型扳手
Y type spanner

規格 / Specification 單位/UNIT: mm

精準度: <0.005

型號/外表尺寸 Model/Spec	A	B	C	D	D1	G	L	θ
TSC-96880-3"-3A	50	31	8	76.2	24.2	23.825(MT3)	168	60°
TSC-96880-4"-3A	50	31	8	101.6	49.6	23.825(MT3)	168	60°
TSC-96880-5"-3A	50	31	8	127	75	23.825(MT3)	168	60°
TSC-96880-6"-3A	50	31	8	152.4	100.4	23.825(MT3)	168	60°
TSC-96880-3"-4A	50	31	9	76.2	24.2	31.267(MT4)	189	60°
TSC-96880-4"-4A	50	31	9	101.6	49.6	31.267(MT4)	189	60°
TSC-96880-5"-4A	50	31	9	127	75	31.267(MT4)	189	60°
TSC-96880-6"-4A	50	31	9	152.4	100.4	31.267(MT4)	189	60°

> TSC-96680 SERIES



規格 / Specification 單位/UNIT: mm

精準度: <0.005

型號/外表尺寸 Model/Spec	A	B	D	D1	L
TSC96680-3"	60	20	77	30	80
TSC96680-4"	60	20	107	60	80
TSC96680-5"	60	20	127	80	80
TSC96680-6"	60	20	157	110	80
TSC96680-8"	60	20	207	160	80
TSC96680-10"	60	20	257	210	80
TSC96680-12"	60	20	306	259	80

> GY SERIES

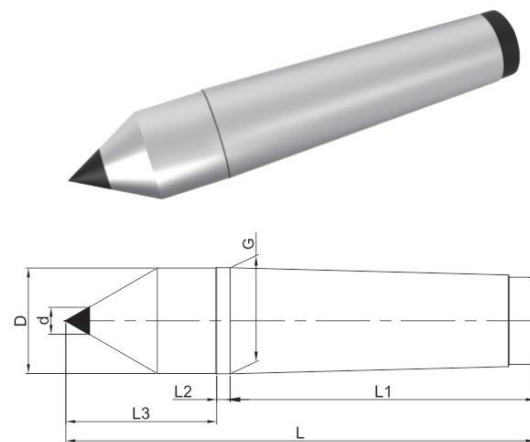
精密級固定頂針

PRECISION DEAD CENTER

- ◎ 頂尖主體材料為低淬透性滲碳鋼，經滲碳淬火處理，硬度HRC58-62
The center body hardness can meet HRC58-62
- ◎ 頂尖軸頭部鑲嵌優質鎢鋼，硬度HRA89
The center head with carbide tip which hardness can meet HRA 89
- ◎ 適用於高精度軸心研磨加工
It's applicable for high precision shaft grinding process

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	d	D	L	L1	L2	L3	G	精度(mm)
GY-3	10	23.6	125	82	6	37	23.825(MT3)	0.003
GY-4	15	31	160	105	6.5	48.5	31.267(MT4)	0.003
GY-5	18	44.5	205	132	6.5	66.5	44.399(MT5)	0.003
GY-6	30	63.8	275	182	8	82	63.348(MT6)	0.005



> GR SERIES

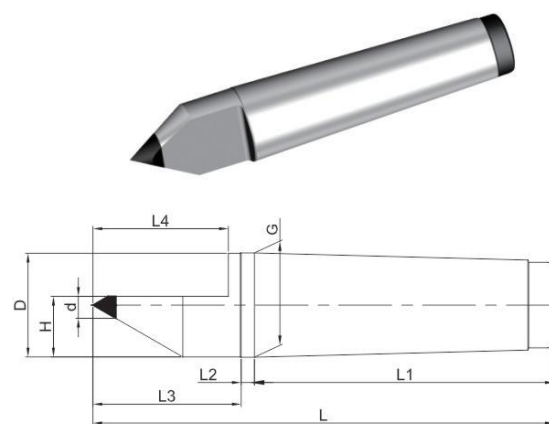
精密級固定頂針(半邊式)

PRECISION DEAD CENTER(HALF TYPE)

- ◎ 頂尖主體材料為低淬透性滲碳鋼，經滲碳淬火處理，硬度HRC58-62
The center body hardness can meet HRC58-62
- ◎ 頂尖軸頭部鑲嵌優質鎢鋼，硬度HRA89
The center head with carbide tip which hardness can meet HRA 89
- ◎ 適用於高精度軸心研磨加工
It's applicable for high precision shaft grinding process

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	d	D	H	L	L1	L2	L3	L4	G	精度(mm)
GR-3	10	23.6	15	125	82	6	37	36	23.825(MT3)	0.003
GR-4	15	31	20.5	160	105	6.5	48.5	48	31.267(MT4)	0.003
GR-5	18	44.5	29.2	205	132	6.5	66.5	63	44.399(MT5)	0.003



> LCC SERIES

回轉式莫氏柄卡盤座

LIVE CENTER ADAPTER

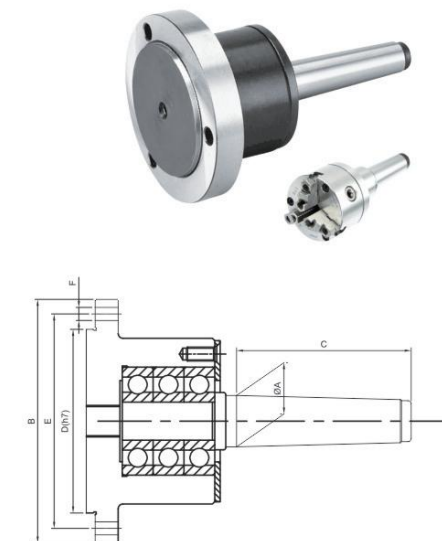
該產品主要用於校正或加工中支撐工件，配合標準卡盤使用。

This product is mainly used to calibrate or support workpiece during processing. It is used with standard chucks.

- ◎ 內部採用三祇精密深溝球軸承並列，適用於較高速度場合。
The internal adopts three precise deep groove ball bearings, it is applicable to the high rotating speed processing
- ◎ 前端採用標準三爪自定心卡盤連接尺寸，亦可根據客戶需求定制。
The adapter is suitable for mounting NTH SC and SK series manual chuck and it can be customized
- ◎ 主體和錐柄均採用優質碳鋼，整體淬火，具備良好的使用性能。
The main body and the taper shank adopt quality carbon steel, with whole quenched, it thus has good performance.

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	E	F	徑向載荷(KG) Max load	最高轉速 Max.rpm	精度 (mm) Accuracy
LCC-MT3	23.825	112	81	80	95	3-M8	800	2000rpm	0.005
LCC-MT4	31.267	132	102.5	100	115	3-M8	1000	1500rpm	0.01
LCC-MT5	44.399	167	129.5	130	147	3-M10	1500	800rpm	0.01
LCC-MT6	63.348	193	182	155	172	3-M10	1800	600rpm	0.01



> DCC SERIES

固定式莫氏柄卡盤座

DEAD CENTER ADAPTER

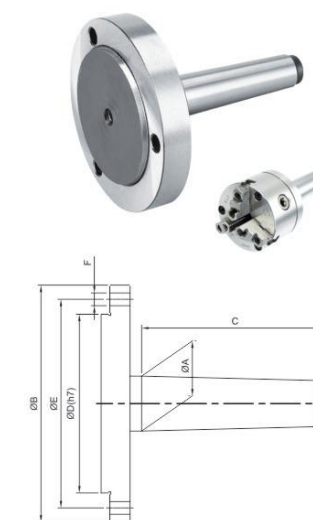
該產品主要用於校正或加工中支撐工件，配合標準卡盤使用。

This product is mainly used to calibrate or support workpiece during processing. It is used with standard chucks.

- ◎ 前端採用標準三爪自定心卡盤連接尺寸，亦可根據客戶需求定制。
The adapter is suitable for mounting NTH SC and SK series manual chuck and it can be customized
- ◎ 主體和錐柄均採用優質碳鋼，整體淬火，具備良好的使用性能。
The main body and the taper shank adopt quality carbon steel, with whole quenched, it thus has good performance.

規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	E	F	精度 (mm) Accuracy
DCC-MT3	23.825	112	81	80	95	3-M8	0.005
DCC-MT4	31.267	132	102.5	100	115	3-M8	0.01
DCC-MT5	44.399	167	129.5	130	147	3-M10	0.01
DCC-MT6	63.348	193	182	155	172	3-M10	0.01



可伸縮系列
Retractable series

替換式
Interchangeable

> TSC-36465 SERIES

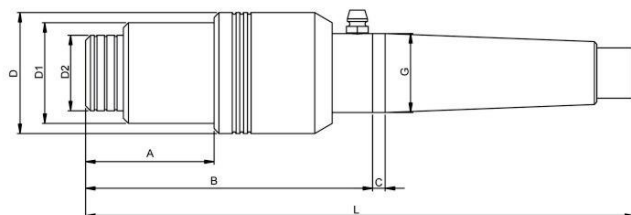
伸縮式彈簧頂尖

RETRACTABLE SPRING LIVE CENTER

- 適用: CNC車床, 磨床及其他機床
Application CNC lathe or grinder and other lathe
- 用途: 可因應工件長度在加工時因熱脹冷縮而變化的情形, 防止工件變形
Working Usage The center which retractable feature can response the situation of workpiece length thermal expansion during turning process. So it can avoid deformation.
- 精準度: <0.01mm
TIR <0.01mm
- 顏色刻度: 當顏色刻度線與頂針前端固定平面齊平時, 紅線頂力: 80Kgf 黃線頂力: 50Kgf 綠線頂力: 0Kgf
Color scale When the color line reach the fixed end plan of the center, Red line: 80Kgf Yellow line: 50Kgf Green line: 0Kgf



65型大子
65 type tips



規格 / Specification 單位/UNIT: mm

型式/外表尺寸 Model/Spec	A	B	C	D	D1	D2	G	L
TSC36465-4	51	110	9	48	40	30	31.267(MT4)	218
TSC36465-5	51	131	9	63	40	30	44.399(MT5)	266

配件區
Centers accessories

▶ 48小子系列 48 type tips series



48-06 48-08 48-10 48-12.7 48-32

▶ 61中子系列 61 type tips series



61-06 61-08 61-10 61-15 61-35

頂針子 Centers tips

▶ 內孔型頂針子 Inner bore type tips



內孔型頂針子皆提供多種尺寸, 可依需求選購

For inner bore type tips, many size can be provided according to your requirements.

▶ 一字型頂針子 Cross type tips



一字型頂針子皆提供多種尺寸, 可依需求選購。

For cross type tips, many size can be provided according to your requirements.

配件區
Centers accessories

▶ 65大子系列 65 type tips



65-06 65-08 65-10 65-15 65-35

▶ 加長型頂針子 Extended length tips



61-10A 65-10A

加長型頂針子皆提供多種尺寸, 可依需求選購。

For extended length type tips, many size can be provided according to your requirements.

66系列-傳動齒 66 Series-Driving pins

單位: mm



10-10 10-13 10-17

傳動齒每個型號4個/組

Driven pins 4pcs/unit

66系列-中心針 66 Series-Centers pins

單位: mm



09-09 09-06 09-13 09-16

頂針專用油 Designated lubricating oil



SKF-LGMT2
注油式頂針可添加專用SKF潤滑油, 具防水性, 可延長頂針使用壽命。
For our live centers, it can fill into SKF lubricating oil, it is waterproof, so the service life can be extended.

套筒 Sleeve

▶ MT3套筒 (Sleeve)
MT4套筒 (Sleeve)
MT5套筒 (Sleeve)



注油式後蓋 Back cover with oil nipple

MT3·MT4·MT5



固定鍵 lock key



C型扳手 C spanner

一般扳手·96-6A專用扳手·262-6A/60-6A專用扳手
Common spanner·96-6A Special spanner·262-6A/60-6A Special spanner



Y型扳手 Y Spanner



沖子 Pin punch

61系列·65系列·MT4系列·MT5系列
61 series·65 series·MT4 series·MT5 series



SC-TY-61



SC-TY-65



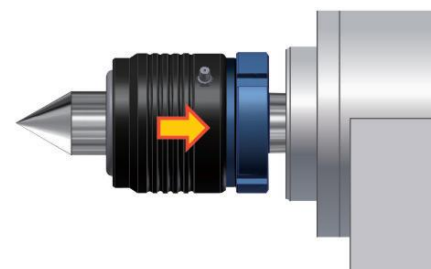
SC-TY-MT4/MT5

活動頂針(附鎖緊螺帽)使用方法 Manual For Live Center With Draw Off Nut

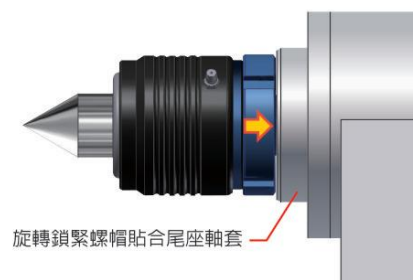
1. 插入尾座軸孔前先擦拭頂針錐柄，並將鎖緊螺帽旋靠頂心柄。
Before inserting, please wipe the center's shaft and turn the draw-off nut tight with center's handle.



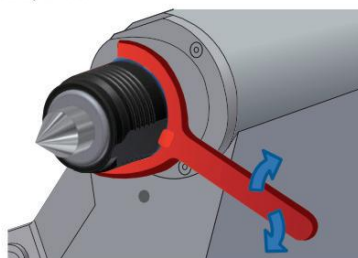
2. 請將頂針錐柄插入尾座軸孔。
Please insert center's shaft into tailstock.



3. 再將鎖緊螺帽以手旋轉貼合尾座軸套端面。
please turn the draw-off nut close up the face of tailstock.



4. 退出活動頂針時，以所附扳手旋轉螺帽。
When take out the center, please turn the draw-off by attached spanner.



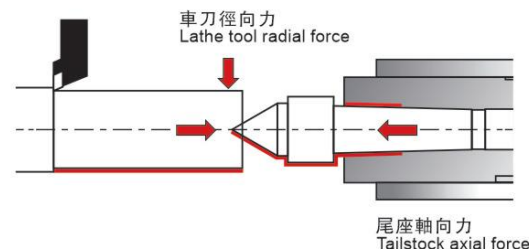
頂針附螺帽重要性

■ 備注：紅線區為徑向力受力區
The importance of the centers with draw-off nut. Remarks: Red line is force area of radial force.

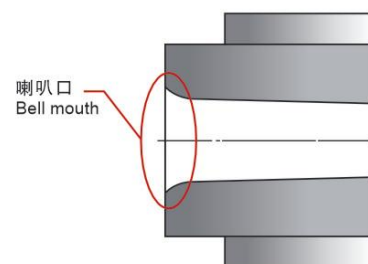
一般頂針受力圖

Common center without draw-off nut force graphic

1. 長時間使用後，尾座軸套內孔易成喇叭口。
After long time using, the inner bore of tailstock sleeve is easy to be bell mouth.



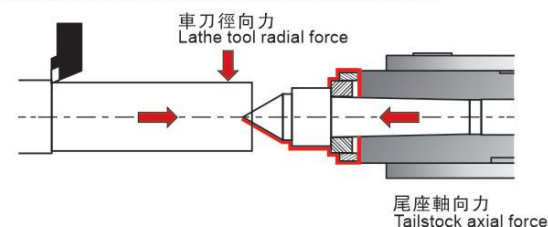
2. 熱影響內孔會隨着溫度上升擴大，冷機時頂針拔不出來。
The inner bore will be impacted with temperature, the center is very hard to pulled out under normal temperature conditions.



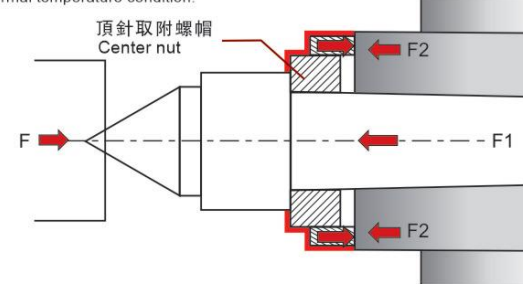
使用附螺帽頂針受力圖

The centers with draw-off nut force graphic

1. 頂針之螺帽加大接觸受力面積，減低尾座軸套受力，使軸套內孔不會變成喇叭口。
The draw-off nut can increase the force area, reduce the force of sleeve of the tailstock, and avoid the sleeve of tailstock to be bell mouth.



2. 有效防止溫度上升錐度擴大使頂針插的更深，冷機時頂針容易取出。
It can effectively avoid the center is deeply inserted into the tailstock caused by the hot temperature making the taper extended. It's easy to pull the center out under normal temperature condition.



頂針使用技術要點說明

Technical Instructions for Centers

Question&Answer



Q1 頂針主體剖半的作用 THE EFFECT OF CUTTING PLANE OF CENTER'S HANDLE BODY

ANS: 小徑車削加工時，刀座不易碰撞頂針(閃刀座作用)。
When machining small diameter workpiece, the centers can avoid interfere the tools turret.

Q2 油嘴的優點(可舊油換新油，延長頂針壽命) THE OIL NIPPLE'S ADVANTAGES--WHICH IS OUR PATENT.

ANS: 因頂針本身無動力，需靠頂針孔傳動，油封需緊配，無法緊配，導致無法百分之百防水，切削時切削液會滲入內部，導致磨損壽命減短，此時可以利用油嘴換油把切削液排出，則此頂針可延長4倍以上壽命。
換油方式：頂針連續使用8小時或加工完後不使用時，讓頂針頂住工件慢速旋轉約100~200轉每分鐘，然後將頂住專用潤滑油注入油嘴，讓舊油與切削液從出油孔排出直到乾淨的油流出為止，然後將頂針外部切削液擦乾淨。
• 本頂針指定使用SKF LGMT2專用油。

The oil nipple can be used to fill into the grease and change the old grease in the center, it can prolong the centers working life. The oil changing method: after finished processing, please use the live center to prop up workpieces and turn slowly by around 100 -200 RPM, and fill the grease of SKF LGMT2 into the nipple, let the old oil and cutting fluid discharge from the oil outlet until the new oil flow out, and then stop filling into the new oil, wipe up the live center's surface, please maintain your live center like this which can prolong the live center's working life more 3 times.

Notes: SKF LGMT2 grease is appointed to lubricate our live centers.
This maintenance also can avoid bearing rusting, it can discharge the water or cutting fluid by changing old oil.

Q3 頂針附螺帽的優點 THE DRAW-OFF NUT ADVANTAGES

ANS: 附螺帽頂針與尾座套筒錐度結合後，將螺帽轉至套筒平面貼合，將會加強頂針與尾座套筒的剛性，使套筒錐度內孔不會造成橢圓孔，能有效防止頂針錐度往內擠壓，可達到容易拆解。
When the draw-off nut is close to the tailstock sleeve, it will enhance the rigidity of the centers and tailstock sleeve, it can avoid that the tailstock sleeve become bell mouth. It also effectively avoid the center is shoved deeply, so it can be easy to take the center out.

Q4 新品頂針與尾座套筒無法緊密貼合問題 THE CENTER CAN'T CLOSELY MATCH THE TAILSTOCK SLEEVE

ANS: 此現象是新機臺才會有問題，請將頂針錐柄及尾座套筒內孔錐度上所殘留油霧務必擦拭乾淨為止，再重新安裝頂針，才不會導致無法貼合。
For this issue, it usually occurred on the new CNC machines, please clean and wipe up the center's taper-shank and the tailstock sleeve, and then remount it.

Q5 頂針尖部容易磨損原因 THE REASON OF CENTER'S HEAD ABRASION

ANS: 頂針本身無動力，尾座壓力不夠，會導致工件與頂針無法同步轉動，造成頂針尖部容易磨損。
The workpiece slipping caused by not enough pressure of the tailstock can cause the center's head abrasion or the workpiece center's moving, it will impact the turning work stability, the tailstock's pressure should be adjusted according to different processing requirements, if this situation, please adjust proper tailstock pressure and make the center's rotating speed and lathe machine spindle rotating speed synchronization, it will avoid this center's head abrasion issue.
How to know the pressure of the tailstock enough or not?
Please mark one line both the workpiece and center's head, after processed, if the mark line moved, it indicates the pressure of the tailstock is not enough, the pressure need increasing until the mark line never moved.

Q6 為什麼頂針會發燙，甚至會冒煙 WHY DO NEW LIVE CENTERS GET HOT AND HAVE SMOKING PHENOMENON

ANS: 本公司所製造的每支活動頂針，軸承設計採用高預壓值緊密配製，加上使用時熱脹冷縮之原理，故在高速旋轉所產生的溫度達50度上下，加工時切削液噴在頂針上會有冒煙現象（屬於正常現象），軸承經磨合期穩定後溫度就會下降，且不會有鬆動不穩定的情形產生，因此使用壽命更長。
一般頂針不發燙的原因是因為軸承採用預壓值鬆配配製，其缺點是經使用一段時間，磨合期過後軸承就會產生鬆動導致車削尺寸不穩定會有鈍刀的情形，因此軸承易損壞壽命會減短。
During the usage for new live centers, the center's temperature will reach 50-60 Celsius, it's normal situation, after the run-in period, the temperature will drop slowly, the live center will keep working stably. Because the live center's body temperature is high, it will come out water evaporation when the cutting fluid is sprayed on the centers, it's normal.

Q7 新品頂針剛使用時會有漏油現象 WHY DO NEW CENTER HAVE THE OIL LEAK PROBLEM

ANS: 頂針製造完成包裝前，會將頂針注滿潤滑油，所以新品使用時，軸承高速旋轉，會將多餘的油從油孔排出，才會有漏油，這是正常現象。
The new center is fully filled the grease, during the usage, the excess oil will discharge from the oil outlet.

如頂針有故障後，請勿自行拆解，本公司製造頂針已有30餘年技術與經驗，可研發各類客製型特殊頂針，國內外任何廠牌均可維修。

If there is any issue on the centers, please don't disassemble it by yourself and contact with Omatei company for help.