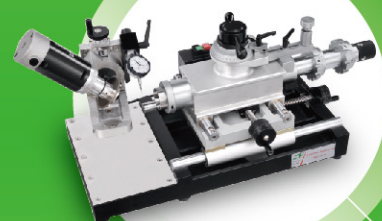


Machine Tools

Light Up Your Horizon & Head The Steel World

/ LIVE CENTER / EDGE FINDER / AXIAL PRESET GAUGE /
/ SHARPENER MACHINE / CUSTOMIZED CENTERS /



公司簡介

LIHSUN INDUSTRIAL CO., LTD.
C O M P A N Y P R O F I L E



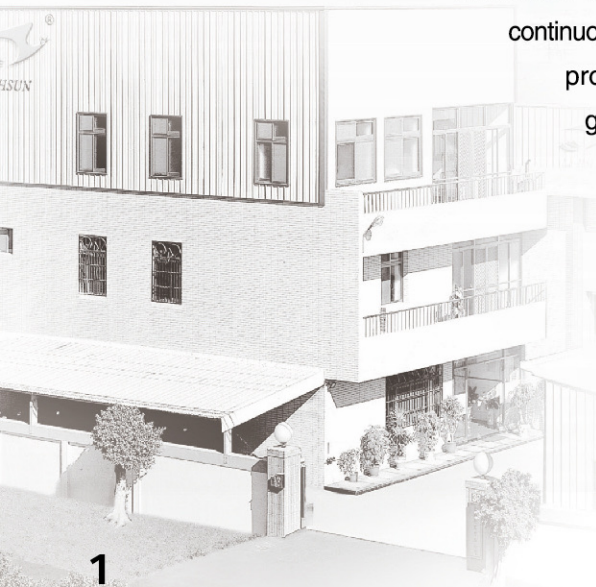
麗勳企業有限公司於西元1978年成立，一直秉持著【求質、求實、求、求新】的理念提供顧客最好的產品與服務。更研發製造一系列CNC超高速迴轉頂針、替換式頂針、高性能頂針及重型迴轉頂針…。等產品約10多種高速、輕、中、重型之迴轉頂針。此外更進一步研發出Z軸設定器（光電型、附錶型）、尋邊器（光電式、機械式）以及不導磁之全陶瓷尋邊器、搪孔器系列。

在累積了三十幾年的技術、經驗及全體員工不斷的努力下，更積極研發設計一系列產品，為進入國際市場奠定更穩固的基礎。面對新世紀的挑戰，積極強化企業體系以增加產品競爭力；不斷提供顧客優越的產品及服務，努力朝向“發展創新、提昇效率、保證質量”，之目標向前邁進。本公司更朝鑽頭、銑刀研磨機系列研發、設計…。

LI-HSUN INDUSTRIAL CO., LTD. was founded in 1978 and moved into the Taichung Industrial Park in October 2003 with 1,682 meters of factory and company premise. We always adhere to the operational principle of "Looking for high quality, utility and innovation" to provide our customers with the best product service.

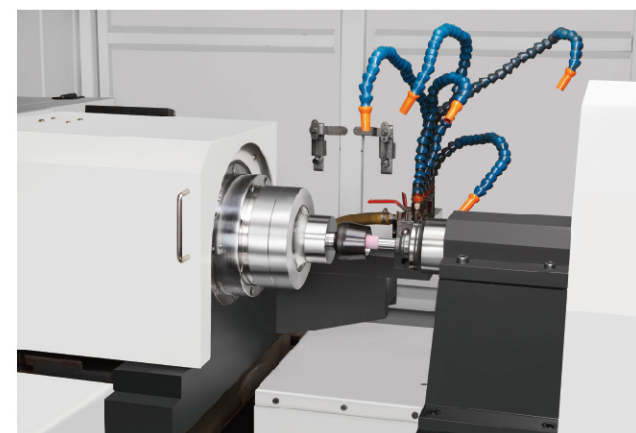
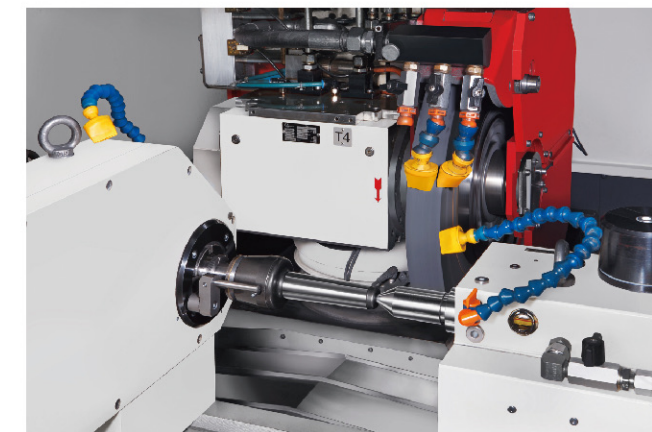
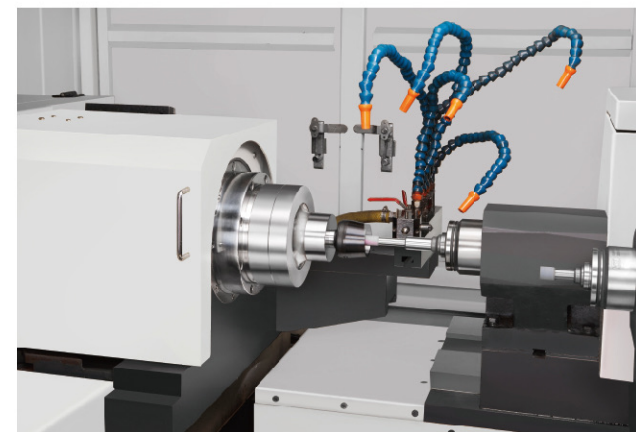
Under our constant research and development, we provide a series of CNC superior and high performance centers, interchangeable insert centers, high performance centers, and heavy-duty rotary centers, etc. More than ten kinds of rotary centers include high speed, light, medium-duty, and heavy-duty types. Furthermore, we have developed the Z Axial Preset (optical and dial gauge type), Edge Finder (optical and mechanical type), and non-conduction fully ceramic edge finder.

After more than three decades of rich experience having been accumulated, the specialized operations conducted with the improving technologies, along with the strong dedication and continuous effort from our staff to develop and design a series of newly innovative products, have altogether laid the solid foundation for Li Hsun to enter the global market. To face up to the challenges of the new century, Li Hsun progressively consolidates the symmetrical structure of its enterprise in order to increase the competitiveness of the products. At all times, Li Hsun aims to provide the users with superior products and outstanding service. Striving to continue our innovative product development with guaranteed quality is our ultimate and highest regard. Li Hsun currently devotes its R&D energy into fast drill and end mill re-sharpening machines.



麗勳企業公司為提高產品之精度使其產品更為優良，購入高端瑞士研磨機 (STUDER)，使產品達到精益求精，同時帶來更多使用麗勳企業有限公司產品之客戶，擁有更好的加工產能以及精準度。

LIHSUN INDUSTRIAL CO., LTD. imported CNC universal cylindrical grinding machine(STUDER) from Swiss to improve products' concentricity deviation accuracy that aim to be the excelsior on this field. To satisfy our customers with the best processing capacity and accuracy.

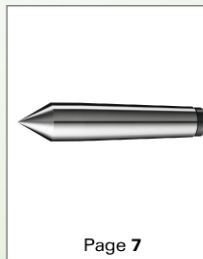


公司簡介 COMPANY PROFILE

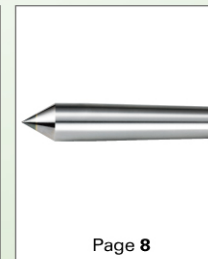
Page 1-2

(鎢鋼) 固定頂針 SOLID CENTERS

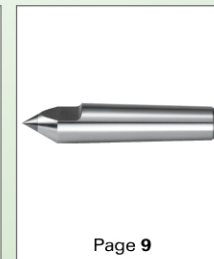
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傳統迴轉頂針 LIVE CENTER FOR CONVENTIONAL LATHE

Page 10-13



NK Type
LIVE CENTER

Page 11



NKS Type
LIVE CENTER

Page 11



PC Type
LIVE CENTER

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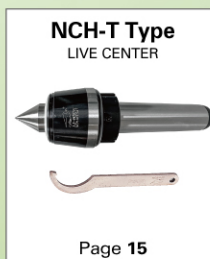
數控CNC迴轉頂針 LIVE CENTER FOR CNC LATHE

Page 14-26



NCH Type
LIVE CENTER

Page 15



NCH-T Type
LIVE CENTER

Page 15



NCS Type
LIVE CENTER

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NCS-T Type
LIVE CENTER

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NCF Type
LIVE CENTER

Page 19



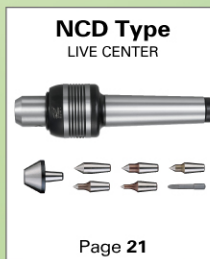
NCFP Type
LIVE CENTER

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NC Type
LIVE CENTER

Page 21



NCD Type
LIVE CENTER

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NCR Type
LIVE CENTER

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NCK Type
LIVE CENTER

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SW Type
LIVE CENTER

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BC Type
LIVE CENTER

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傳動頂針系列 TRANSMISSION CENTER

Page 27-30



DK Type
WORK-DRIVING
CENTER-CHANGABLE TIPS

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DKS Type
WORK-DRIVING
CENTER-CHANGABLE TIPS

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NHD Type
TRANSMISSION CENTER

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傳動夾 & 套筒 ACCESSORIES

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DRIVING CENTER

Page 32



MORSE TAPER
CONVERT SLEEVE

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客製化頂針 CUSTOMIZED CENTERS

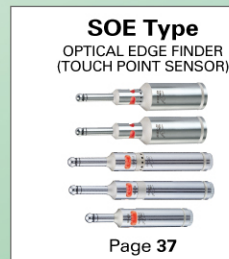
Page 34-35



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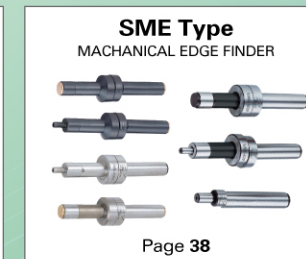
尋邊器 EDGE FINDER

Page 36-39



SOE Type
OPTICAL EDGE FINDER
(TOUCH POINT SENSOR)

Page 37



SME Type
MECHANICAL EDGE FINDER

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MEP Type
CERAMIC EDGE FINDER

Page 39

Z軸設定器 Z AXIAL PRESET GAUGE

Page 40-44



ZOP-50 Type
Z AXIAL PRESET GAUGE
(OPTICAL TYPE)

Page 41



LTS Type
LED TYPE HIGH-PRECISION
MANUAL Z AXIS TOOL SETTER

Page 42



ZIP-50/50A Type
Z AXIAL PRESET GAUGE
(INDICATOR TYPE)

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ZOV-50 Type
GAUGE ATTACHED

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LT Type
TOOL SETTER FOR
CNC MACHINE CENTER

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拉桿螺栓 PULL STUDS

Page 45-47



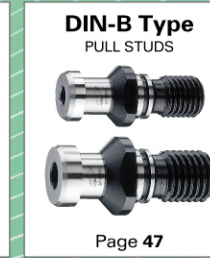
BT-MAS 403 Type
PULL STUDS

Page 46



DIN-A Type
PULL STUDS

Page 47



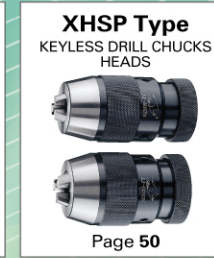
DIN-B Type
PULL STUDS

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INT Type
INTEGRATED KEYLESS
DRILL CHUCKS

Page 49



XHSP Type
KEYLESS DRILL CHUCKS
HEADS

Page 50



XH Type
KEYLESS DRILL CHUCKS
HEADS

Page 51

各式鑽頭研磨機 DRILL BIT SHARPENER MACHINE

Page 52-56



DM Type (DM-213)
DRILL BIT
SHARPENER MACHINE

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DM Type (DM-320)
DRILL BIT
SHARPENER MACHINE

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DM Type (DM-1226)
DRILL BIT
SHARPENER MACHINE

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MD Type
3 SLANT DRILL BIT
SHARPENER MACHINE

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SG Type (SG-313)
DRILL BIT
SHARPENER MACHINE

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PD Type
PORTABLE SHEET DRILL BIT
SHARPENER MACHINE

Page 56

銑刀研磨機及切斷機 ENDMILL SHARPENER & CUTTING-OFF MACHINE

Page 57-60



GH Type (GH-413)
ENDMILL
SHARPENER MACHINE

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GH Type (GH-1225)
ENDMILL
SHARPENER MACHINE

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CM Type (CM-316)
CUTTING-OFF MACHINE

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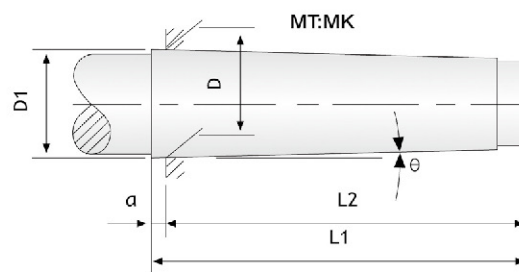
螺旋角修磨機 ENDMILL HELIX RE-SHARPENING

Page 61-63



EH-832
ENDMILL HELIX
RE-SHARPENING MACHINE

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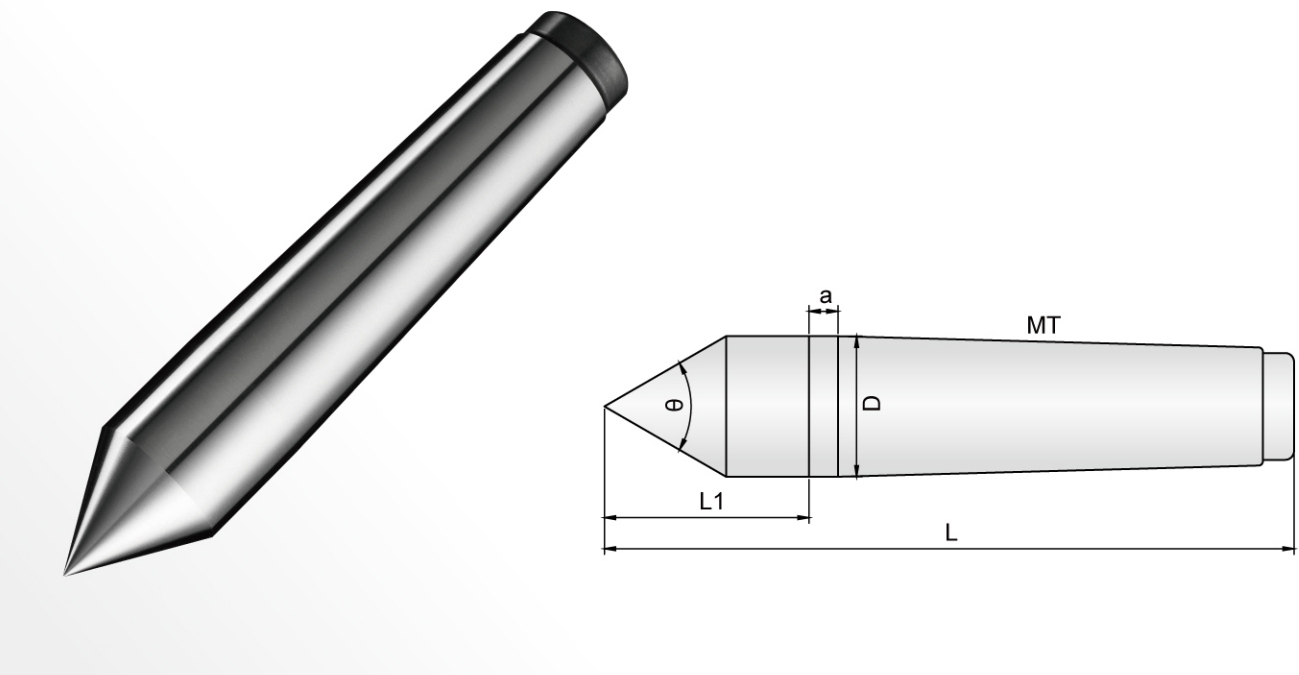
單位/Unit:mm

MORES TAPER MT/MK	a	L1	L2	D	D1	θ
0	3.0	53	50.0	9.045	9.2	1° 29'27"
1	3.5	57	53.5	12.065	12.2	1° 25'43"
2	5.0	69	64.0	17.780	18.0	1° 25'50"
3	5.0	86	81.0	23.825	24.1	1° 26'16"
4	6.5	109	102.5	31.267	31.6	1° 29'15"
5	6.5	136	129.5	44.399	44.7	1° 30'26"
6	8.0	190	182.0	63.348	63.8	1° 29'36"
7	10.0	260	250.0	83.058	83.6	1° 29'22"

(錫鋼) 固定頂針 SOLID CENTERS (CARBIDE TIPPED)

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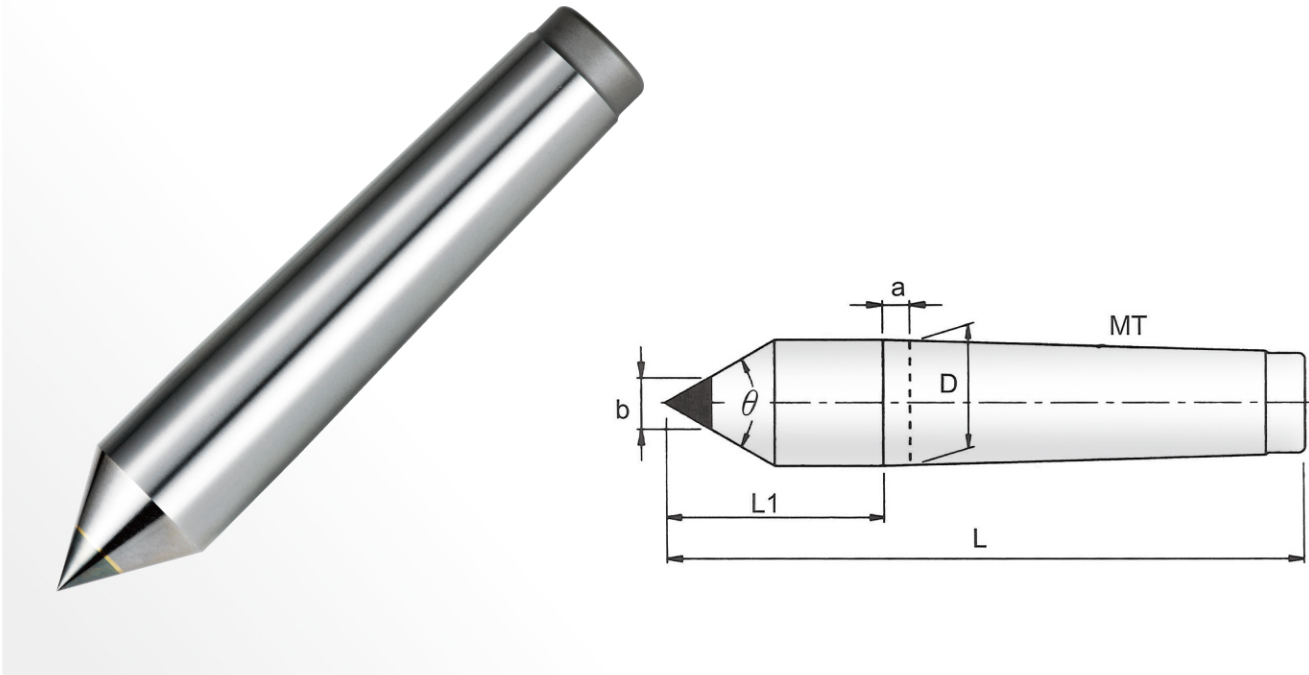


1. 本體及頂心經過研磨處理。
 2. 適用於車床及磨床等機械。
 3. 外徑斜度採用DIN806規格。
- ※ 皆有製作附螺帽系列，歡迎詢問。

1. Body and Center is under precise grinding process.
 2. Application to lathe and grinder.
 3. Morse Taper complies with DIN806 standard.
- ※ A nut-type series is also available.

單位/Unit:mm

產品規格 MODEL No.	D	a	L1	L	Co.精度 Accuracy	θ
MT3	23.825	5	39	125	0.005	60°
MT4	31.267	6.5	46	155	0.005	60°
MT5	44.399	6.5	64	200	0.005	60°
MT6 (訂製品)	63.348	8	80	270	0.005	60°



1. 本體使用高碳鋼之材質；經熱處理。
 2. 本體及頂心經過精密研磨處理。
 3. 適用於車床及磨床等機械。
 4. 外徑斜度(Morse Taper)採用DIN806規格。
- ※ 皆有製作附螺帽系列，歡迎詢問。

1. Body is made of carbon tool steel with heat treatment.
 2. Body and Center is under precise grinding process.
 3. Application to lathe and grinder.
 4. Morse Taper complies with DIN806 standard.
- ※ A nut-type series is also available.

單位/Unit:mm

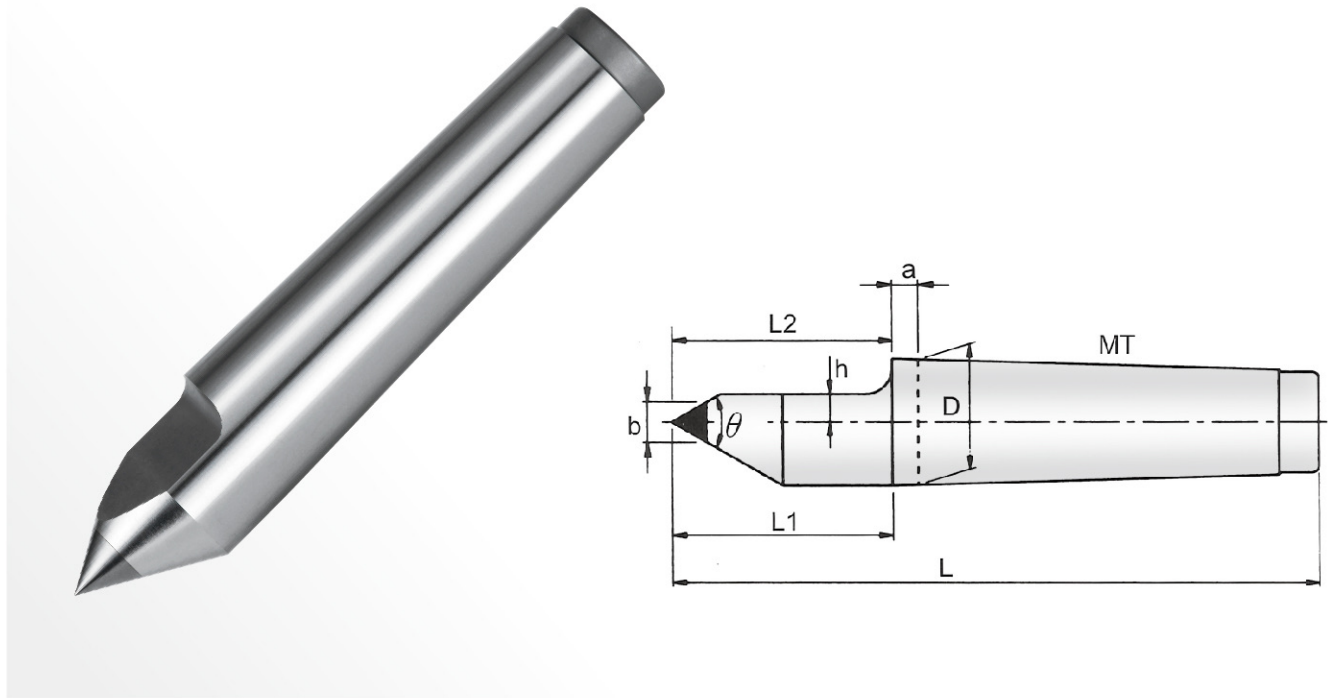
產品規格 MODEL No.	D	a	b	L1	L	Co.精度 Accuracy	θ
MT3C10	23.825	5	10	39	125	0.005	60°
MT4C14	31.267	6.5	14	46	155	0.005	60°
MT5C18	44.399	6.5	18	64	200	0.005	60°
MT6C30 (訂製品)	63.348	8	30	80	270	0.005	60°

半邊鎢鋼固定頂針

HALF-SIDE SOLID CENTERS OF CARBIDE TIPPED



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1. 本體使用高碳鋼之材質；經熱處理。
2. 本體及頂心經過精密研磨處理。
3. 適用於車床及磨床等機械。
4. 外徑斜度(Morse Taper)採用DIN806規格。

1. Body is made of carbon tool steel with heat treatment.
2. Body and Center is under precise grinding process.
3. Application to lathe and grinder.
4. Morse Taper complies with DIN806 standard.

單位/Unit:mm

產品規格 MODEL No.	D	a	b	h	L1=L2	L	Co.精度 Accuracy	θ
MT3C10	23.825	5	10	6	39	125	0.005	60°
MT4C14	31.267	6.5	14	8	46	155	0.005	60°
MT5C18	44.399	6.5	18	10	64	200	0.005	60°

傳統迴轉頂針 LIVE CENTER FOR CONVENTIONAL LATHE

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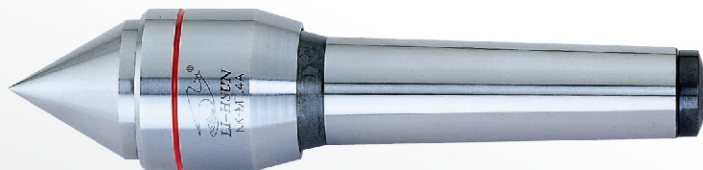


迴轉頂針
ROLLING TYPE

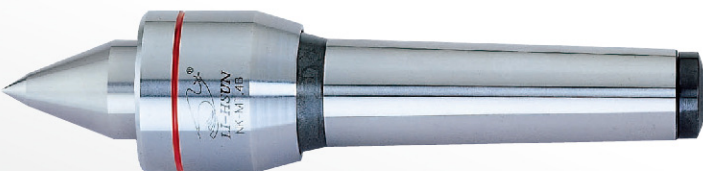
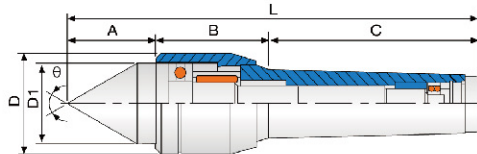
RPM: 2000 - 5000 MT/MK. 2, 3, 4, 5

NK

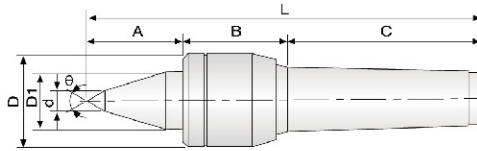
型 LIVE CENTER



A-TYPE

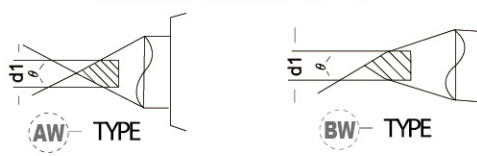


B-TYPE



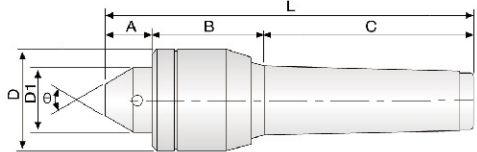
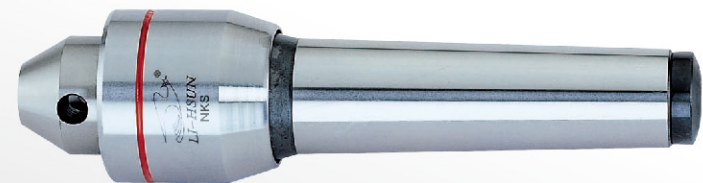
特殊規格 SPECIAL ORDER

鎢鋼 WITH CARBIDE TIPPED



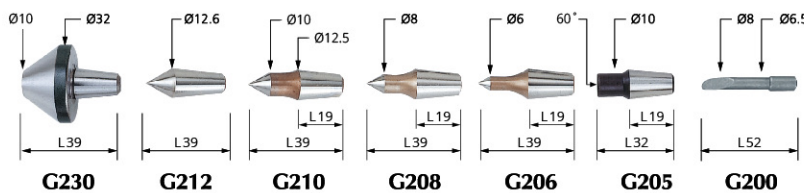
NKS

型 LIVE CENTER



單位/Unit:mm

※ 頂針仔-安裝示意圖



NK

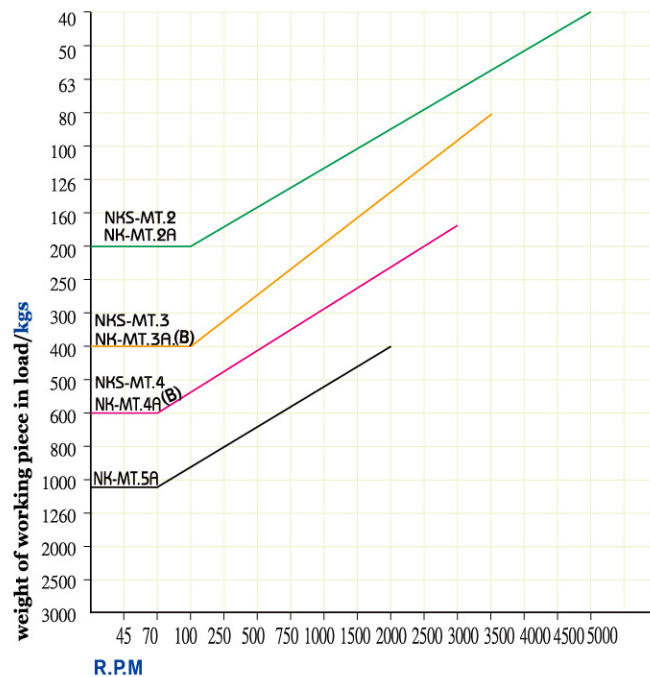
型 LIVE CENTER

1. 心軸及本體使用軸承鋼之材質，經適當熱處理為(HRC60° ± 1°)
2. 此頂針使用止推軸承，針狀軸承及滾針軸承，滾珠軸承之組合。
3. 適用中、高速之車床，及中負載使用。
4. 車床尾座調整壓力建議 5~8 公斤。

※ NK-B型;適合中小工作物之加工切削。

1. Center shaft and main body are made of dearing alloy steel and hardened to (HRC60° ± 1°).
2. Center is assembled with thrust bearing, needle bearing and ball bearing.
3. Applicable to medium and high speed lathes with heavy loads.
4. The tailstock pressure of lathe adjusts to five to eight kilograms (for reference)

※ NK-B model: Long nose live centers are suitable for small workpieces.



單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	d	L	d1、AW、BW	Co精度 Accuracy	Max R.P.M	θ	G.W. weight kgs	包裝尺寸 L x W x H
08040002	NK-MT.2A	28	35	69	32	25	-	132	-	0.003	5000R.P.M	60°	0.38 kgs	175 x 45 x 45
08040003	NK-MT.3A	36	44	86	41	35	-	166	12	0.003	3500R.P.M	60°	0.88 kgs	200 x 65 x 53
08040004	NK-MT.4A	41	51	108	47	40	-	200	12	0.003	3000R.P.M	60°	1.48 kgs	240 x 80 x 65
08040005	NK-MT.5A	54	72	136	65	52	-	262	18	0.003	2000R.P.M	60°	3.60 kgs	300 x 90 x 90
08040013	NK-MT.3B	46	44	86	41	25	10	176	12	0.003	3500R.P.M	60°	0.84 kgs	200 x 65 x 53
08040014	NK-MT.4B	55	51	108	47	32	12	214	12	0.003	3000R.P.M	60°	1.44 kgs	240 x 80 x 65
08040022	NKS-MT.2	22	36	69	32	25	-	127	-	0.005	5000R.P.M	60°	0.84 kgs	173 x 102 x 62
08040023	NKS-MT.3	23	44	86	41	30	-	153	-	0.005	3500R.P.M	60°	1.16 kgs	235 x 130 x 100
08040024	NKS-MT.4	23	51	108	47	32	-	182	-	0.005	3000R.P.M	60°	1.60 kgs	235 x 130 x 100

普通型頂針 NORMAL TYPE

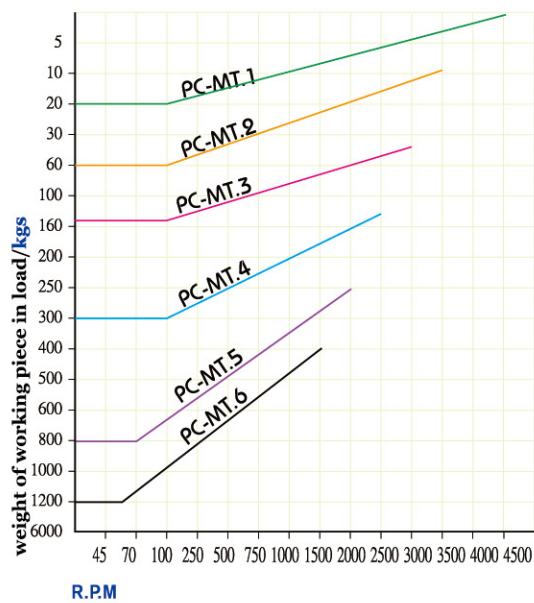
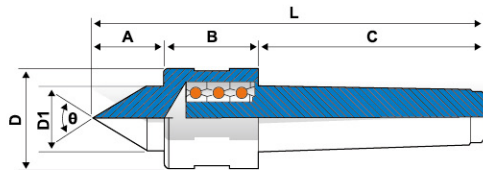
RPM: 2000 - 4500 MT/MK. 1, 2, 3, 4, 5



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PC

型 LIVE CENTER



1. 此頂針使用鉻鉬鋼之材質，經適當熱處理為 (HRC58° ~ 60°) 具高鋼性。
 2. 此頂針為滾珠軸承之組合。
 3. 適用於中、高速車床及輕負載之使用。
 4. 車床尾座調整壓力建議5~8 公斤。
1. Center is made of Cr-Mo steel and hardened to HRC 58° ~ 60°.
 2. Center is assembled with ball bearings.
 3. Applicable to medium and high speed lathes with light duty.
 4. The tailstock pressure of lathe adjusts to five to eight kilograms (for reference)

單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	L	Co精度 Accuracy	Max R.P.M	θ	G.W. weight kgs	包裝尺寸 L x W x H
08080001	PC-MT.1	21	31	56	32	16	108	0.005	4500R.P.M	60°	0.22 kgs	110 x 40 x 40
08080002	PC-MT.2	26	37	69	40	22	132	0.005	3500R.P.M	60°	0.42 kgs	140 x 50 x 50
08080003	PC-MT.3	32	46	86	45	26	164	0.005	3000R.P.M	60°	0.82 kgs	170 x 50 x 50
08080004	PC-MT.4	34	46	108	48	30	188	0.005	2500R.P.M	60°	1.30 kgs	205 x 60 x 60
08080005	PC-MT.5	50	62	136	68	45	248	0.005	2000R.P.M	60°	3.20 kgs	260 x 80 x 80
08080006	PC-MT.6	65	82	190	102	55	337	0.008	1500R.P.M	60°	9.95 kgs	370 x 140 x 130

數控CNC迴轉頂針 LIVE CENTER FOR CNC LATHE



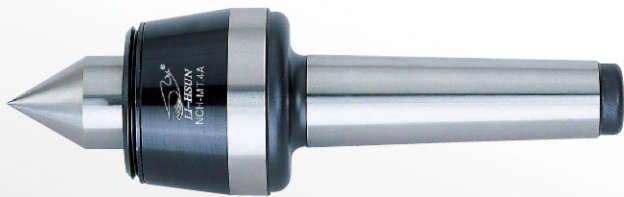
高速頂針(螺帽型)
HIGH-SPEED LIVE CNETER (WITH NUT)

RPM: 1500 - 5000 MT/MK. 3, 4, 5, 6



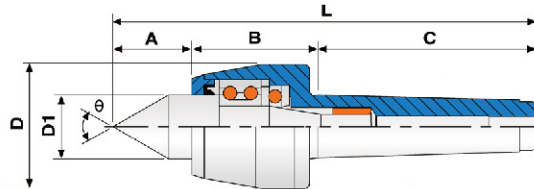
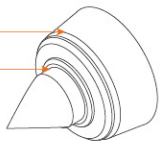
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NCH 型 LIVE CENTER

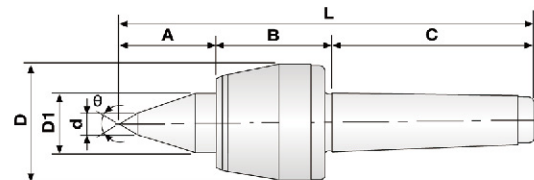


A-TYPE

迷宮式迴轉頂針無油封防水結構
專利號碼 M553237
MAZE TYPE, WATERPROOF DESIGNED
WITHOUT SEAL, PAT. NO. M553237

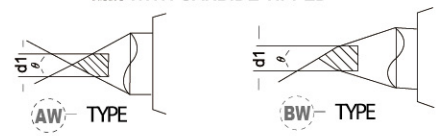


B-TYPE

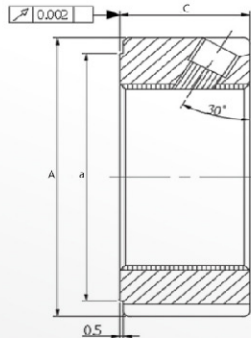
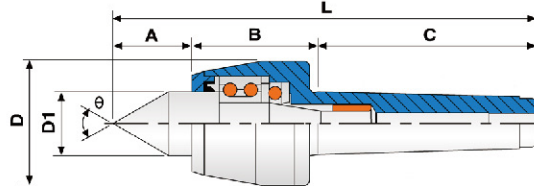


特殊規格 SPECIAL ORDER

鑄鋼 WITH CARBIDE TIPPED



NCH-T 型 LIVE CENTER



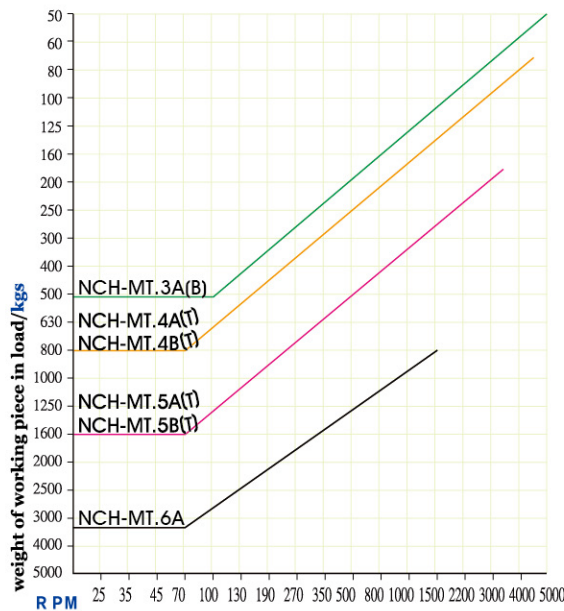
MORES TAPER MT/MK	DIMENSIONS(mm)			
	A	a	B	C
NCH-MT.4AT NCH-MT.4BT	70	64	M48x1.5	20
NCH-MT.5AT NCH-MT.5BT	70	64	M50x1.5	20

NCH 型 LIVE CENTER

1. 前端使用雙列滾珠軸承及止推軸承，滾針軸承之組合。
 2. 適用於CNC車床，具中負荷使用與防水性。
 3. 車床尾座調整壓力建議5~8公斤。
- ※ NCH-B(T)型；適合小工作物之加工切削。

1. Center shaft is made of alloy steel and hardened through vacuum heat treatment to provide higher rigidity HRC60°±1°
2. Center is fitted with dual ball bearing, thrust bearing and needle roller bearing assembly, the waterproof is maze type.

3. The tailstock pressure of lathe adjusts to five to eight kilograms. (for reference)
- ※ Applicable to high speed lathes and CNC lathes with heavy loads.



單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	d	L	d1	Co精度 Accuracy	Max R.P.M	θ	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08030002	NCH-MT.2A	20	43	69	35.7	13	-	132	-	0.003	6000R.P.M	60°	0.38 kgs	70 x 50 x 50
08030003	NCH-MT.3A	39	55	86	53	30	-	180	12	0.003	5000R.P.M	60°	1.30 kgs	240 x 80 x 65
08030004	NCH-MT.4A	43	60	108	63	32	-	211	12	0.003	4500R.P.M	60°	2.08 kgs	263 x 100 x 90
08030005	NCH-MT.5A	45	71	136	83	40	-	252	18	0.003	3500R.P.M	60°	4.40 kgs	320 x 118 x 110
08030006	NCH-MT.6A	80	110	190	128	70	-	380	-	0.008	1500R.P.M	60°	16.5 kgs	425 x 185 x 180
08030013	NCH-MT.3B	45	55	86	53	30	10	186	12	0.003	5000R.P.M	60°	1.34 kgs	240 x 80 x 65
08030014	NCH-MT.4B	53	60	108	63	32	12	221	12	0.003	4500R.P.M	60°	2.12 kgs	263 x 100 x 90
08030015	NCH-MT.5B	65	73	136	83	40	14	274	18	0.003	3500R.P.M	60°	4.42 kgs	320 x 118 x 110
08020044	NCH-MT.4AT	42	76	108	60	32	-	226	12	0.003	4500R.P.M	60°	2.42 kgs	263 x 100 x 90
08020045	NCH-MT.5AT	45	84	136	83	40	-	265	18	0.003	3500R.P.M	60°	5.02 kgs	320 x 118 x 110
08030046	NCH-MT.6AT	80	130	190	128	70	-	400	-	0.008	1500R.P.M	60°	16.5 kgs	425 x 185 x 180
08020054	NCH-MT.4BT	52	76	108	60	32	12	256	12	0.003	4500R.P.M	60°	2.46 kgs	263 x 100 x 90
08020055	NCH-MT.5BT	65	84	136	83	40	14	285	18	0.003	3500R.P.M	60°	5.04 kgs	320 x 118 x 110

替換式高速頂針(螺帽型)
INTERCHANGEABLE HIGH-SPEED LIVE CNETER (WITH NUT)

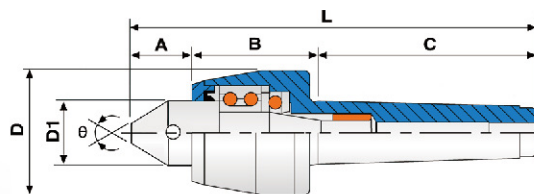
R.P.M: 3500- 5000 MT/MK. 3, 4, 5



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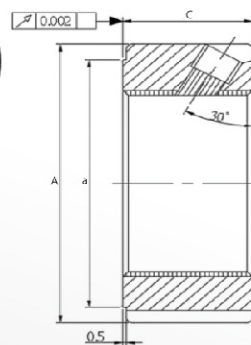
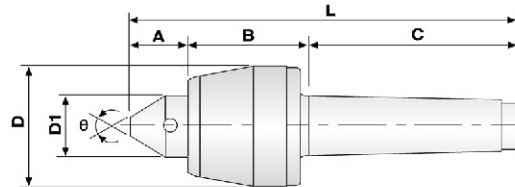
NCS

型 LIVE CENTER



NCS-T

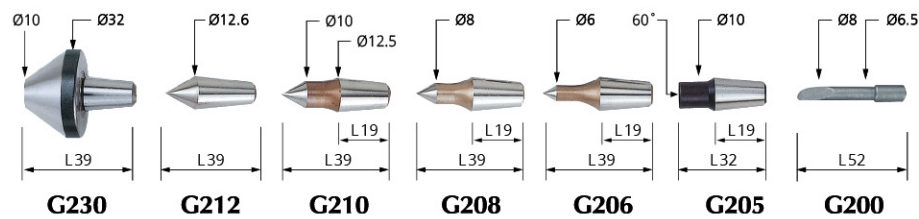
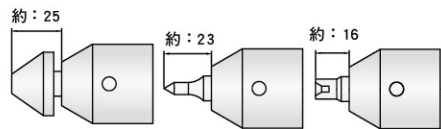
型 LIVE CENTER



MORES TAPER MT/MK	DIMENSIONS(mm)			
	A	a	B	C
NCS-MT.4(T) NCS-MT.4P(T)	70	64	M48x1.5	20
NCS-MT.5P(T)	70	64	M50x1.5	20

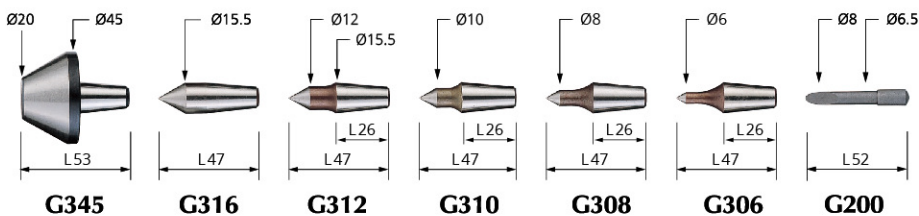
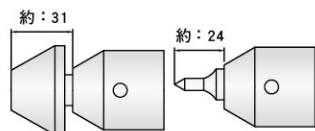
NCS-MT.3 / NCS-MT.4(T)

※ G2頂針仔-安裝示意圖



NCS-MT.4P(T) / NCS-MT.5P(T)

※ G3頂針仔-安裝示意圖



NCS

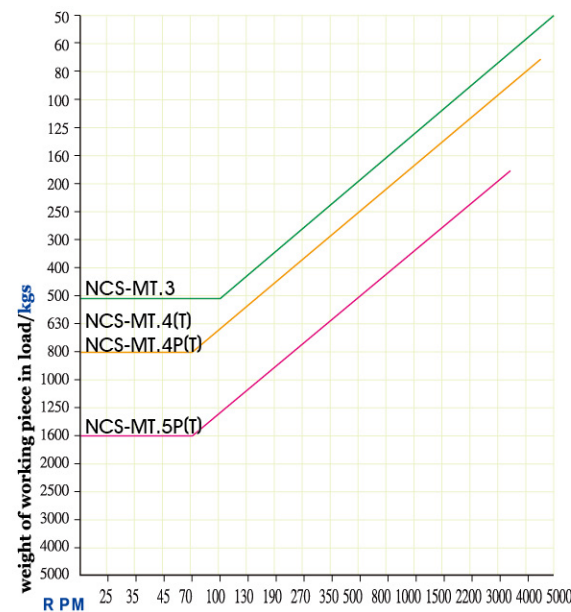
型 LIVE CENTER

1. 前端使用雙列滾珠軸承及止推軸承，滾針軸承之組合。
2. 適用於CNC車床，具中負荷使用與防水性。
3. 車床尾座調整壓力建議5~8公斤。

1. Center shaft is made of alloy steel and hardened through vacuum heat treatment to provide higher rigidity HRC60°±1°
2. Center is fitted with dual ball bearing, thrust bearing and needle roller bearing assembly, the waterproof is maze type.

3. The tailstock pressure of lathe adjusts to five to eight kilograms. (for reference)

※ Applicable to high speed lathes and CNC lathes with heavy loads.



單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	L	Co 精度 Accuracy	Max R.P.M	θ	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08030022	NCS-MT.2	29	43	69	35.7	13	141	0.003	6000 R.P.M	60°	0.38 kgs	70 x 50 x 50
08030023	NCS-MT.3	28	62	108	63	32	169	0.005	5000 R.P.M	60°	1.50 kgs	235 x 130 x 100
08030024	NCS-MT.4	30	62	108	63	32	200	0.005	4500 R.P.M	60°	2.16 kgs	238 x 132 x 80
08030034	NCS-MT.4P	30	62	108	63	32	200	0.005	4500 R.P.M	60°	2.70 kgs	263 x 100 x 90
08030035	NCS-MT.5P	32	71	136	83	40	239	0.005	3500 R.P.M	60°	5.00 kgs	320 x 118 x 110
080300604	NCS-MT.4T	30	62	108	63	32	196	0.005	4500 R.P.M	60°	2.54 kgs	263 x 100 x 90
08030064	NCS-MT.4PT	30	62	108	63	32	196	0.005	4500 R.P.M	60°	3.08 kgs	263 x 100 x 90
08030065	NCS-MT.5PT	32	71	136	83	40	266	0.005	3500 R.P.M	60°	5.35 kgs	235 x 130 x 100

重負荷頂針
HEAVY-LOAD TYPE

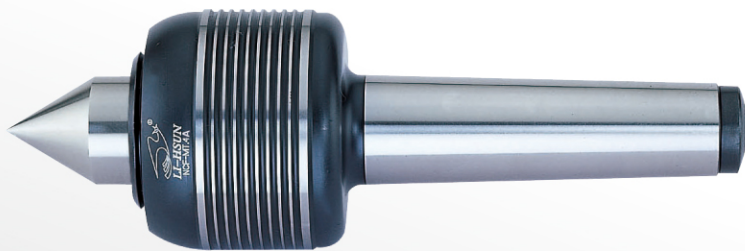
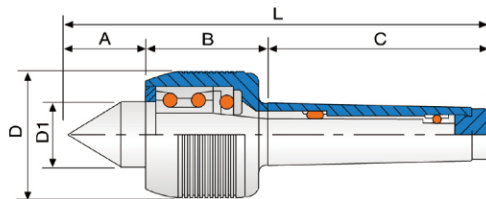
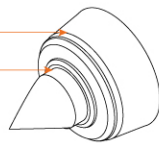
RPM: 4000 - 6000 MT/MK. 3, 4, 5

NCF

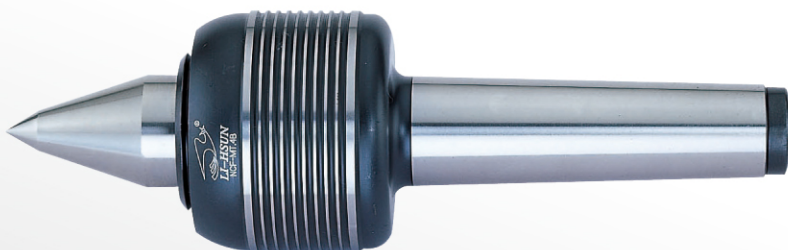
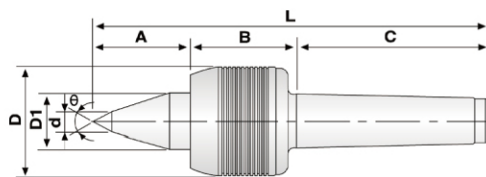
型 LIVE CENTER

迷宮式迴轉頂針無油封防水結構
專利號碼 M553237

MAZE TYPE, WATERPROOF DESIGNED
WITHOUT SEAL, PAT. NO. M553237



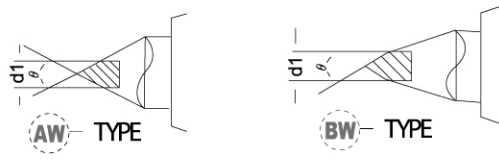
A TYPE



B TYPE

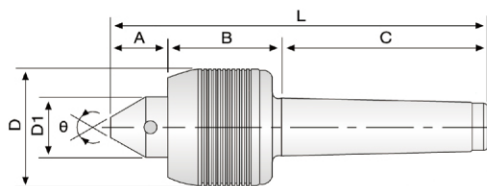
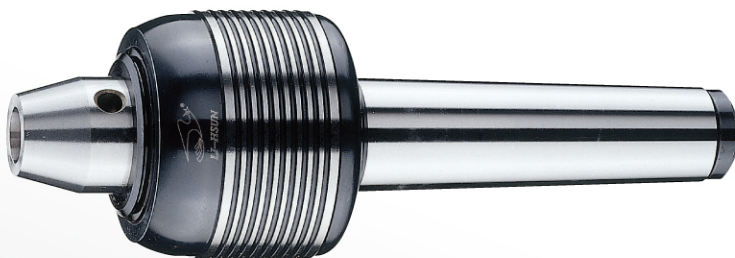
特殊規格 SPECIAL ORDER

鎢鋼 WITH CARBIDE TIPPED



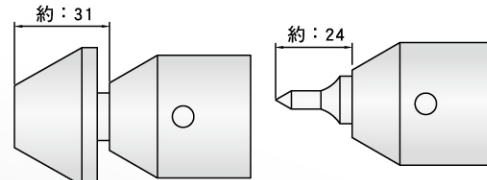
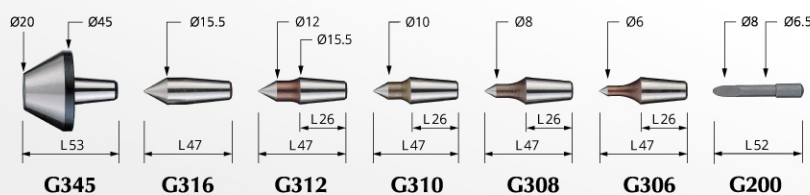
NCFP

型 LIVE CENTER



單位/Unit:mm

※ 頂針仔-安裝示意圖



NCF

型 LIVE CENTER

1. 心軸使用合金工具鋼之材質，經真空熱處理為(HRC60° ± 1°)具高鋼性及耐磨性。
2. 前端使用雙列斜角滾珠軸承及止推軸承中段及後段使用滾針軸承之組合，具防水性。
3. 車床尾座調整壓力建議 5~8 公斤。

※ NCF-B型；適合小工作物加工使用。

※ 皆有製作附螺帽系列，歡迎詢問。

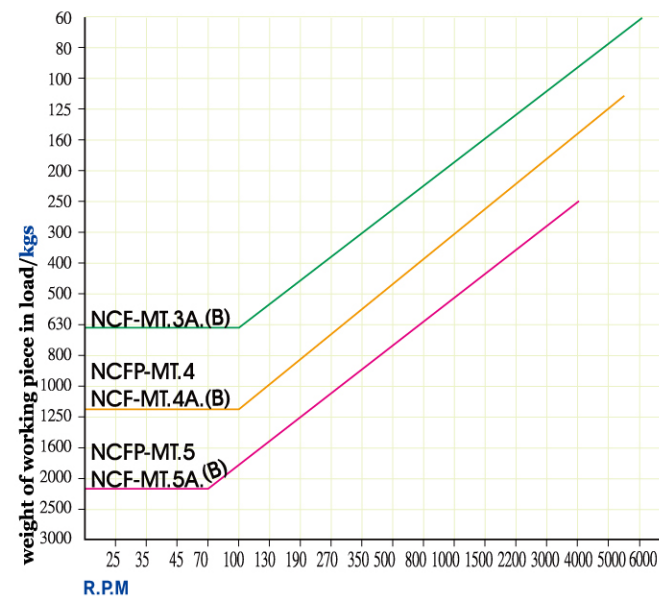
1. The shaft is made of alloy steel and through vacuum heat treatment (HRC 60 ± 1°). It possesses great rigidity and high durability.

2. Front end is fitted with angular contact ball bearing & thrust bearing. Middle & Rear end are fitted with needle bearing, the waterproof is maze type.

3. The tailstock pressure of lathe adjusts to five to eight kilograms. (for reference)

※ NCF-B type: Long nose live centers are suitable for small workpieces.

※ A nut-type series is also available.



單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	d	L	d1	Co精度 Accuracy	Max R.P.M	θ	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08020003	NCF-MT.3A	38	50	86	53	30	-	174	12	0.003	6000R.P.M	60°	1.26 kgs	240 x 80 x 65
08020004	NCF-MT.4A	45	60	108	68	32	-	213	12	0.003	5500R.P.M	60°	2.36 kgs	263 x 100 x 90
08020005	NCF-MT.5A	52	70	136	87	40	-	258	18	0.003	4000R.P.M	60°	4.76 kgs	320 x 118 x 110
08020013	NCF-MT.3B	52	50	86	53	30	10	188	12	0.003	6000R.P.M	60°	1.32 kgs	240 x 80 x 65
08020014	NCF-MT.4B	55	60	108	68	32	12	223	12	0.003	5500R.P.M	60°	2.44 kgs	263 x 100 x 90
08020015	NCF-MT.5B	67	70	136	87	40	14	273	18	0.003	4000R.P.M	60°	4.84 kgs	320 x 118 x 110
08020024	NCFP-MT.4	30	64	108	68	32	-	202	-	0.005	5500R.P.M	60°	2.94 kgs	232 x 130 x 90
08020025	NCFP-MT.5	37	70	136	87	40	-	243	-	0.005	4000R.P.M	60°	5.40 kgs	280 x 150 x 100

中負荷頂針
MEDIUM-LOAD TYPE

RPM: 5000 - 6500 MT/MK. 4, 5

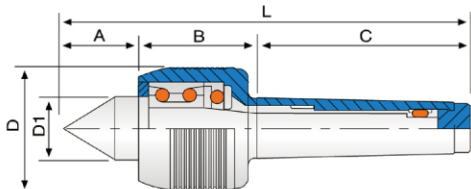
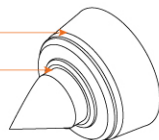
NC

型 LIVE CENTER

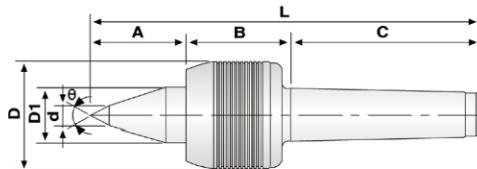


A-TYPE

迷宮式迴轉頂針無油封防水結構
專利號碼 M553237
MAZE TYPE, WATERPROOF DESIGNED
WITHOUT SEAL, PAT. NO. M553237

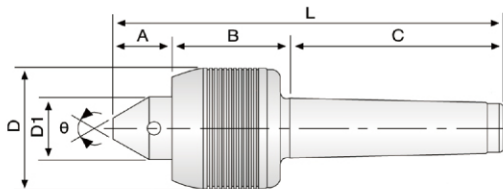


B-TYPE



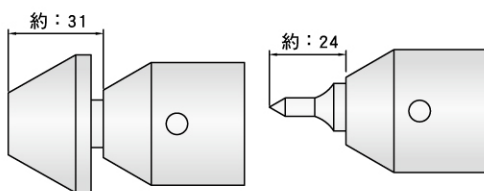
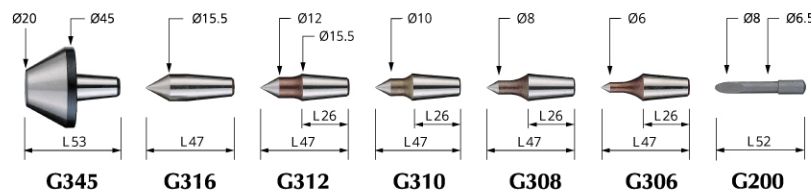
NCD

型 LIVE CENTER



單位/Unit:mm

※ 頂針仔-安裝示意圖

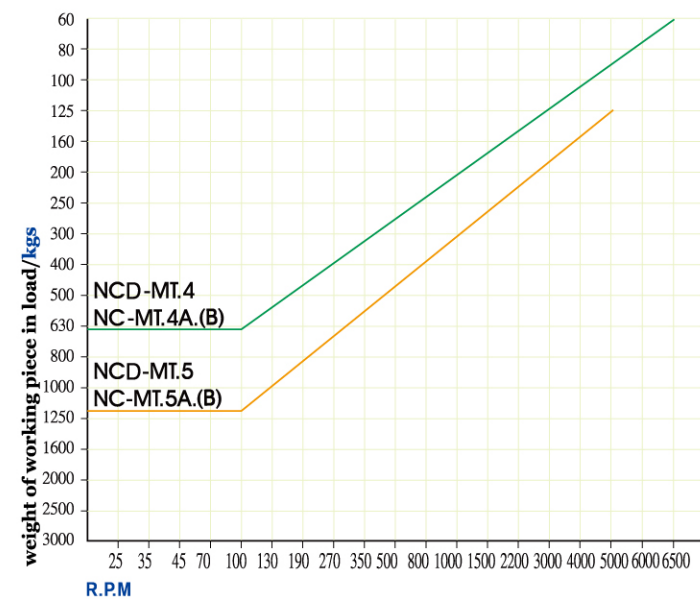


NC

型 LIVE CENTER

1. 前端使用雙列斜角滾珠軸承及止推軸承，及滾針軸承之組合。
 2. 此頂針適用於CNC車床，具高速及中負荷使用，具防水性。
 3. 車床尾座調整壓力建議5~8公斤。
- ※ NC-B型;適合小工作物之加工切削。
※ 皆有製作附螺帽系列，歡迎詢問。

1. Front end is fitted with angular contact ball bearing, thrust bearing and needle bearing.
 2. These centers are suitable for CNC lathes at high-speed and medium-load. Waterproof design, the waterproof is maze type.
 3. The tailstock pressure of lathe adjusts to five to eight kilograms (for reference)
- ※ NC-B type: Long nose live centers are suitable for small workpieces.
※ A nut-type series is also available.



單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	d	L	Co精度 Accuracy	Max R.P.M	θ	G.W. weight kgs	包裝尺寸 L x W x H
08200004	NC-MT.4A	44	55	108	53	30	-	207	0.003	6500R.P.M	60°	1.62 kgs	240 x 80 x 65
08200005	NC-MT.5A	48	61	136	68	35	-	245	0.003	5000R.P.M	60°	3.26 kgs	300 x 90 x 90
08200014	NC-MT.4B	52	55	108	53	30	12	215	0.003	6500R.P.M	60°	1.63 kgs	240 x 80 x 65
08200015	NC-MT.5B	58	61	136	68	35	14	255	0.003	5000R.P.M	60°	3.28 kgs	300 x 90 x 90
08200024	NCD-MT.4	33	55	108	53	30	-	196	0.005	6500R.P.M	60°	2.28 kgs	235 x 130 x 86
08200025	NCD-MT.5	37	61	136	68	35	-	234	0.005	5000R.P.M	60°	4.12 kgs	280 x 150 x 100

可調式頂針

ADJUSTMENT WATER-PROOF TYPE

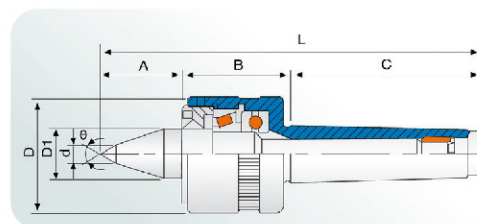
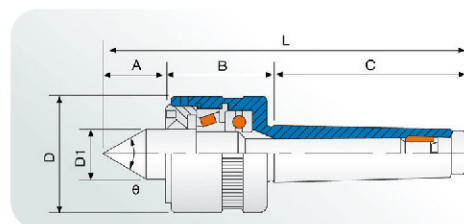
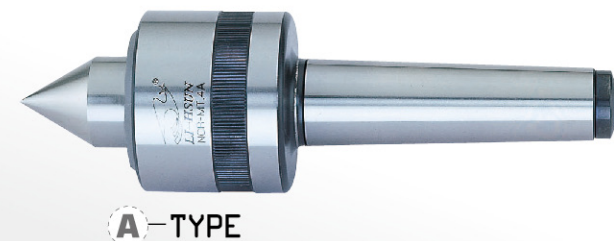
RPM: 1500 - 5000 MT/MK. 3, 4, 5, 6



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NCR

型 LIVE CENTER



1. 心軸使用合金工具鋼之材質，經真空熱處理(HRC60° ± 1°)具高鋼性及耐磨性。
2. 此頂針使用錐狀、止推以及滾針軸承之組合。
3. 適用於中、重負荷使用，具防水性。
4. 車床尾座調整壓力建議5~8公斤。

※ 防水設計

1. The shaft uses alloy steel and hardened through vacuum heat treatment to (HRC60° ± 1°).
2. The center uses the combination of taper roller bearing, thrust bearing and needle bearing.
3. Applicable to medium and heavy loads, the waterproof is maze type.
4. The tailstock pressure of lathe adjusts to five to eight kilograms (for reference)
5. The center is adjustable to reach original loading capacity after using for a long period of time.

※ Long nose live centers are suitable for small workpieces.

※ Waterproof design.

單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	d	L	Co精度 Accuracy	Max R.P.M	θ	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08070003	NCR-MT.3A	37	47	86	50	25	-	170	0.003	5000R.P.M	60°	1.12 kgs	240 x 80 x 65
08070004	NCR-MT.4A	45	59	108	65	32	-	212	0.003	4500R.P.M	60°	2.44 kgs	263 x 100 x 90
08070005	NCR-MT.5A	50	62	136	80	40	-	248	0.003	3500R.P.M	60°	4.32 kgs	320 x 118 x 110
08070006	NCR-MT.6A	78	85	189	128	60	-	352	0.008	1500R.P.M	60°	15.12 kgs	425 x 185 x 180
08070013	NCR-MT.3B	47	47	86	50	25	10	180	0.003	5000R.P.M	60°	1.13 kgs	240 x 80 x 65
08070014	NCR-MT.4B	60	59	108	65	32	12	227	0.003	4500R.P.M	60°	2.46 kgs	263 x 100 x 90
08070015	NCR-MT.5B	70	62	136	80	40	14	268	0.003	3500R.P.M	60°	4.52 kgs	320 x 118 x 110

高性能迴轉頂針

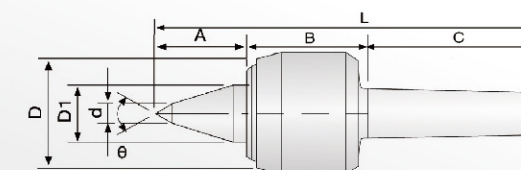
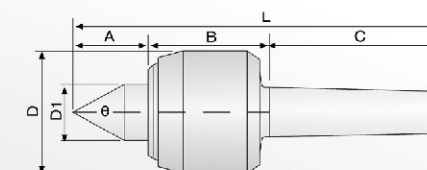
HIGH-PERFORMANCE TYPE



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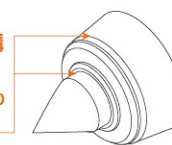
NCK

型 LIVE CENTER



迷宮式迴轉頂針無油防水結構
專利號碼 M553237

MAZE TYPE, WATERPROOF DESIGNED
WITHOUT SEAL, PAT. NO. M553237



1. 心軸使用合金工具鋼之材質，經真空熱處理為 (HRC60° ± 1°)具高鋼性及耐磨性。
2. 此頂針使用圓筒滾柱軸承及止推軸承。深溝滾珠軸承之組合，適合CNC車床使用、有防水設計，車床尾座調整壓力建議5~8公斤。

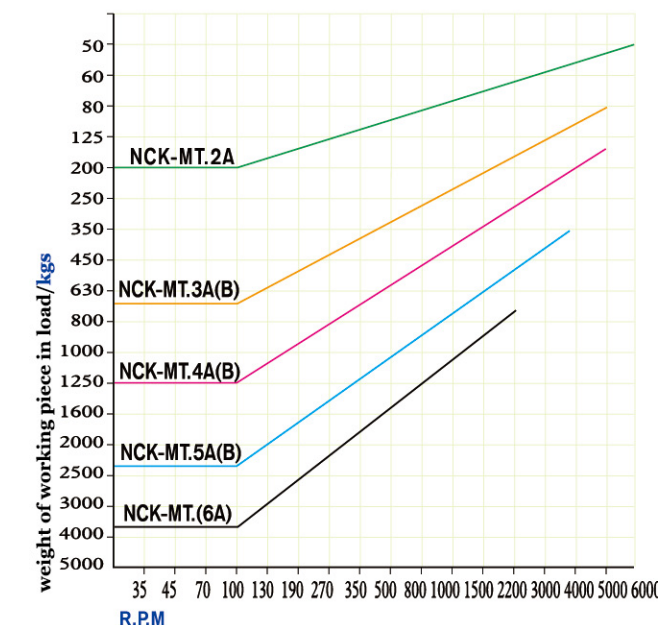
※ NCK-B型；適合小工作物加工使用。

1. The shaft is made of alloy steel and through vacuum heat treatment HRC60° ± 1°. It possesses great rigidity and high durability.
2. The center uses the combination of roller bearing, thrust ball bearing and ball bearing, the tailstock pressure of lathe adjusts to five to eight kilograms (for reference), the waterproof is maze type.
3. Applicable to CNC lathes, can be used at high speed turning, and is water-proof.

※ NCK-B type: Long nose live centers are suitable for small workpieces.

單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	d	L	Co精度 Accuracy	Max R.P.M	θ	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08010022	NCK-MT.2A	20	38	69	32	13	-	127	0.005	6000R.P.M	60°	0.38 kgs	180 x 50 x 40
08010023	NCK-MT.3A	34	61	86	58	25	-	181	0.005	5200R.P.M	60°	1.58 kgs	240 x 80 x 65
08010024	NCK-MT.4A	44	72	109	76	35	-	225	0.005	5000R.P.M	60°	3.04 kgs	257 x 100 x 90
08010025	NCK-MT.5A	60	91	136	95	45	-	287	0.005	3500R.P.M	60°	6.54 kgs	320 x 118 x 115
08010026	NCK-MT.6A	64	106	190	120	58	-	360	0.008	2300R.P.M	60°	15.0 kgs	425 x 185 x 180
08010033	NCK-MT.3B	45	61	86	58	25	10	192	0.005	5200R.P.M	60°	1.58 kgs	240 x 80 x 65
08010034	NCK-MT.4B	55	72	109	76	35	12	236	0.005	5000R.P.M	60°	3.10 kgs	257 x 100 x 90
08010035	NCK-MT.5B	70	91	136	95	45	14	297	0.005	3500R.P.M	60°	6.54 kgs	320 x 118 x 110



超重負荷頂針 SUPER-LOAD TYPE

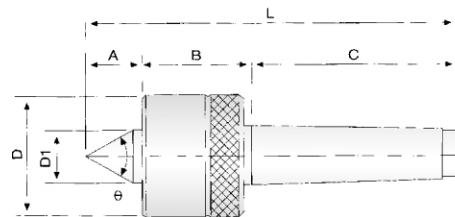
RPM: 1000 - 1800 MT/MK. 5, 6, 7, 80#



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SW

型 LIVE CENTER



1. 心軸使用合金工具鋼之材質，經真空熱處理，使心軸更具耐磨性，硬度較高(HRC60°~62°)。
2. 此頂針適用於重型車床及較重負荷載使用。
3. 車床尾座調整壓力建議5~12 公斤 (參考值)

※ 防水設計

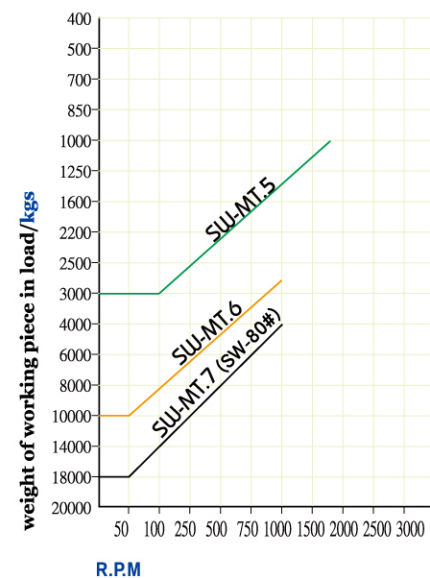
※ 因SW-MT.7(SW-MT.80#)本身重量重，如加工工件重，為了避免有RUNOUT(偏轉/擺)現象產生，建議中間使用輔助器材支撐。

1. Shaft uses alloy steel and hardened through vacuum heat treatment to (HRC 60°~62°).
2. Applicable to heavy duty lathes.

3. The tailstock pressure of lathe adjusts to five to twelve kilograms. (for reference)

※ Waterproof design.

※ Due to the heavy weight for the type SW-MT.7(SW-MT.80#) and also for the gigantic workpiece, need to put a support frame with your workpiece in case of runout while working.



單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	L	Co精度 Accuracy	Max R.P.M	θ	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08060005	SW-MT.5	52	82	135	98	50	269	0.005	1800R.P.M	60°	6.8 kgs	340 x 140 x 125
08060006	SW-MT.6	84	115	190	155	70	389	0.008	1000R.P.M	60°	22 kgs	420 x 185 x 180
08060007	SW-MT.7	106	127	260	196	90	493	0.008	1000R.P.M	60°	42 kgs	530 x 242 x 235
08060008	SW- 80#	106	127	200	196	90	433	0.008	1000R.P.M	60°	40 kgs	530 x 242 x 235

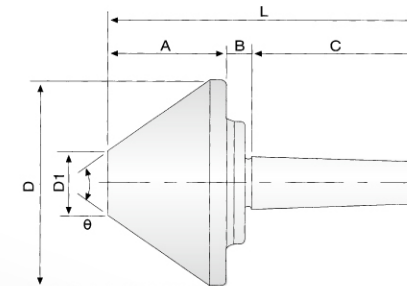
傘型頂針 BULL NOSE CENTER TYPE



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BC

型 LIVE CENTER



1. 傘型頂針頭部使用鉻鉬鋼材質，經熱處理(HRC 60°±1°)。
2. 內部使用錐狀以及滾珠軸承之組合。
3. 適用於較大內孔徑之加工使用。
4. 車床尾座調整壓力建議6~10 公斤。

※ 皆有製作附螺帽系列，歡迎詢問。

1. The tip of bull nose center uses Cr-Mo steel and hardened to (HRC 60°±1°).
2. The center uses a combination of taper roller bearing and ball bearing.
3. Applicable to pipes turning.
4. The tailstock pressure of lathe adjusts to six to ten kilograms (for reference)

※ A nut-type series is also available.

單位/Unit:mm

ORDER NO.	MORES TAPER MT/MK	A	B	C	D	D1	L	Co精度 Accuracy	Max R.P.M	Load weight	θ	G.W. weight kgs	包裝尺寸 L x W x H
08102050	BC50-MT.2	42	23	69	52	13	134	0.003	4000R.P.M	RPM100=200kg	60°	0.72 kgs	205x60x60
08102063	BC63-MT.2	50	15	69	63	13	134	0.003	4000R.P.M	RPM100=200kg	60°	0.94 kgs	195x86x86
08103050	BC50-MT.3	42	23	86	52	13	151	0.003	4000R.P.M	RPM100=200kg	60°	0.84 kgs	205x60x60
08103063	BC63-MT.3	50	15	86	63	13	151	0.003	4000R.P.M	RPM100=200kg	60°	1.08 kgs	195x86x86
08103078	BC78-MT.3	52	18	86	78	15	156	0.003	3300R.P.M	RPM100=400kg	70°	1.56 kgs	195x86x86
08103106	BC106-MT.3	59	16	86	106	25	161	0.003	3000R.P.M	RPM100=500kg	75°	2.66 kgs	220x120x120
08103128	BC128-MT.3	73	12	86	128	40	171	0.003	2000R.P.M	RPM100=500kg	70°	5.00 kgs	140x140x240
08104050	BC50-MT.4	42	23	108	52	13	173	0.003	4000R.P.M	RPM100=200kg	60°	1.13 kgs	205x60x60
08104063	BC63-MT.4	50	15	108	63	13	173	0.003	4000R.P.M	RPM100=200kg	60°	1.38 kgs	195x86x86
08104078	BC78-MT.4	52	18	108	78	15	178	0.003	3300R.P.M	RPM100=400kg	70°	1.88 kgs	195x86x86
08104106	BC106-MT.4	59	16	108	106	25	183	0.003	3000R.P.M	RPM100=500kg	75°	2.96 kgs	220x120x120
08104128	BC128-MT.4	73	12	108	128	40	193	0.003	2000R.P.M	RPM100=500kg	70°	4.84 kgs	140x140x240
08104156	BC156-MT.4	88	12	108	156	45	208	0.003	1900R.P.M	RPM100=800kg	70°	7.68 kgs	170x170x260
08104206	BC206-MT.4	98	12	108	206	81	218	0.005	1500R.P.M	RPM100=1300kg	70°	15.0 kgs	285x285x360
08104258	BC258-MT.4	107	13	108	258	92	228	0.005	1200R.P.M	RPM100=2000kg	80°	22.0 kgs	285x285x360
08105078	BC78-MT.5	52	18	136	78	15	206	0.003	3300R.P.M	RPM100=400kg	70°	4.00 kgs	220x120x120
08105106	BC106-MT.5	59	16	136	106	25	211	0.003	3000R.P.M	RPM100=500kg	75°	3.86 kgs	220x120x120
08105128	BC128-MT.5	73	12	136	128	40	221	0.003	2000R.P.M	RPM100=650kg	70°	5.70 kgs	140x140x240
08105156	BC156-MT.5	88	12	136	156	45	236	0.003	1900R.P.M	RPM100=800kg	70°	8.54 kgs	170x170x260
08105206	BC206-MT.5	98	12	136	206	81	246	0.005	1500R.P.M	RPM100=1600kg	70°	16.0 kgs	285x285x360
08105258	BC258-MT.5	107	13	136	258	92	256	0.005	1200R.P.M	RPM100=2200kg	80°	25.0 kgs	285x285x360
08105306	BC306-MT.5	107	30	136	306	120	273	0.005	1000R.P.M	RPM100=3000kg	90°	37.0 kgs	340x340x360
08106156	BC156-MT.6	88	12	190	156	45	290	0.005	1900R.P.M	RPM100=1200kg	70°	13.0 kgs	285x285x360
08106206	BC206-MT.6	98	12	190	206	81	300	0.005	1500R.P.M	RPM100=2000kg	70°	20.0 kgs	285x285x360
08106258	BC258-MT.6	107	13	190	258	92	310	0.005	1200R.P.M	RPM100=2500kg	80°	29.0 kgs	285x285x360
08106306	BC306-MT.6	107	30	190	306	120	327	0.005	1000R.P.M	RPM100=3000kg	90°	40.0 kgs	340x340x360

傳動頂針系列 TRANSMISSION CENTER

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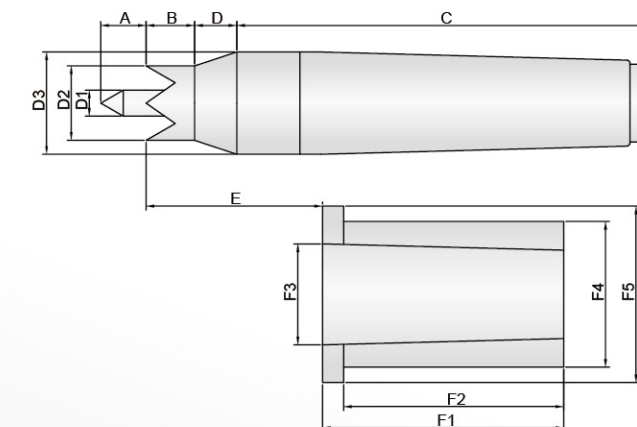


免夾頂針
WORK-DRIVING CENTER

LI-HSUN

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DK 型 WORK-DRIVING CENTER - FIXED UP



1. 此型頂針因機械之結構，故障率低。經深冷熱處理 (HRC60°±1°)
2. 本體端面6T及8T之設計來頂住加工之端面，免用傳動夾，使加工更為方便、速度更快
3. 滾齒機械可適用
4. 精度: 0.008mm

1. Body and center shaft are made of alloy steel with heat and sub-zero treatment.
※ **Hardened : HRC60°±1°.**
2. Driving centers are either with 6 teeth or 8 teeth design for superseding the driving dogs. It supports the workpiece on the surface for easy setup and rapid machining.
3. Applicable for gear hobbing machine.
4. Accuracy : 0.008mm

※由於手工測量，尺寸與實際產品尺寸略有不同，並非瑕疵。

The size is slightly different from the actual product size due to the manual measurement, which is not a defect.

單位/Unit:mm

ORDER NO.	MORSE TAPER MT/MK	A	B	C	D	D1	D2	D3	工作範圍 Working Range
08090015	DK15-MT.4	14	15	128.5	13.5	Φ6	16	31.6	Φ16-Φ25
08090023	DK23-MT.4	14	15	128.5	13	Φ8	23	31.6	Φ23-Φ32
08090032	DK32-MT.4	14	15	128.5	—	Φ8、Φ14	31.6	31.6	Φ32-Φ45

選購附件 (Optional accessory)

套筒 SLEEVE	E	F1	F2	F3	F4	F5
	54.5	74.5	68	31.2	45	54.5

替換式免夾頂針

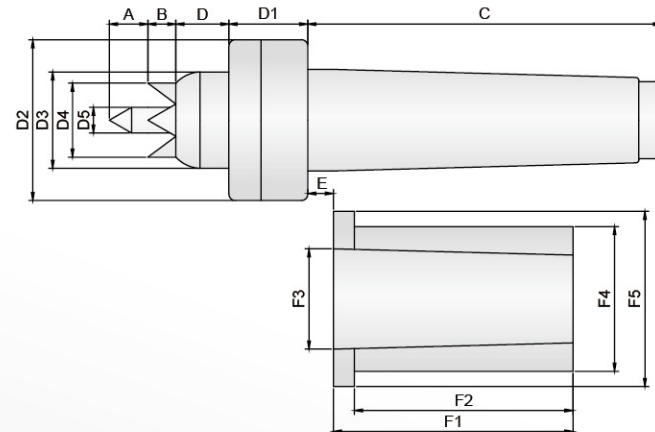
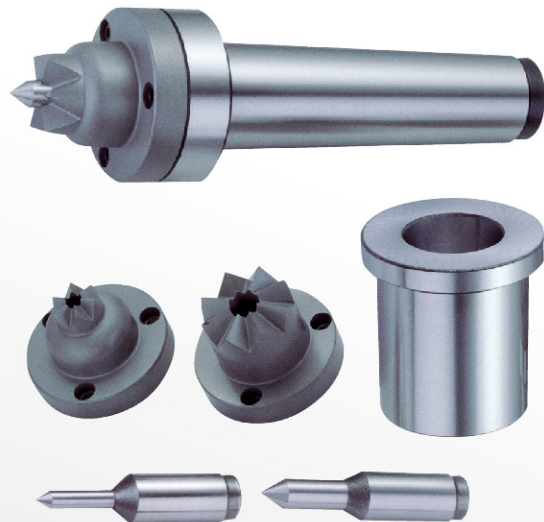
WORK-DRIVING CENTER - CHANGEABLE TIPPED



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DKS

型 WORK-DRIVING CENTER - CHANGEABLE TIPPED



1. 此型頂針因機械之結構，故障率低。經深冷熱處理 (HRC60°±1°)
2. 本體端面6T及8T之設計來頂住加工之端面，免用傳動夾，使加工更為方便、速度更快
3. 滾齒機械可適用
4. 精度: 0.008mm

1. Body and center shaft are made of alloy steel with heat and sub-zero treatment.
※ **Hardened : HRC60°±1°.**
2. Driving centers are either with 6 teeth or 8 teeth design for superseding the driving dogs. It supports the workpiece on the surface for easy setup and rapid machining.
3. Applicable for gear hobbing machine.
4. Accuracy: 0.008mm

※由於手工測量，尺寸與實際產品尺寸略有不同，並非瑕疵。

The size is slightly different from the actual product size due to the manual measurement, which is not a defect.

單位/Unit:mm

DKS301-MT.4	A	B	D	D1	C	D2	D3	D4	D5	E	工作範圍 Working Range
DKS-15 替換頭	12	8	17	24.5	110	50	30	16	6	8	Φ16-Φ25
DKS-23 替換頭	12	8.5	16.5	24.5	110	50	30	23	8	8	Φ23-Φ32
DKS-32 替換頭	12	9	16	24.5	110	50	32	32	10	8	Φ32-Φ45

標準附件 (Standard Accessories)

套筒 SLEEVE	E	F1	F2	F3	F4	F5
	8	74.5	68	31.2	45	54.5

自動式傳動頂針

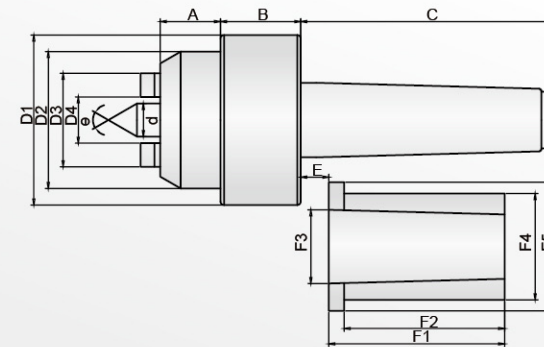
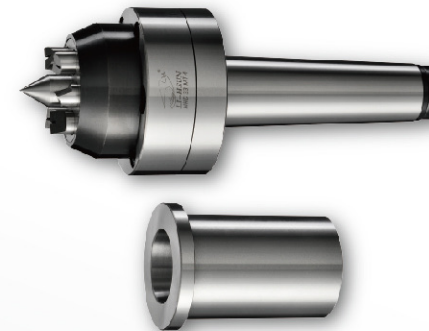
AUTO ADJUSTABLE TRANSMISSION CENTER



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NHD

型 TRANSMISSION CENTER



型號 TYPE	心軸尺寸 Center Shaft Size	工作範圍 Working Range
NHD-31 MT.4	Φ 5	Φ17-Φ27
NHD-32 MT.4	Φ 9	Φ27-Φ41
NHD-33 MT.4/MT.5	Φ14	Φ40-Φ60
NHD-34 MT.4/MT.5	Φ18	Φ54-Φ80

※ 適用車床、CNC車床

1. 適用於端面不平的加工物，加工時，頂針之5T、6T會自動調整受力點，使加工物件能平均受力
2. 內部結構為強力優力膠設計，使頂針有較好的耐用性，不易破碎。在維修方面，也較容易更換。
3. 精度: 0.008mm

※ Suitable for LATHE & CNC LATHE

1. Suitable for the asperities of the workpieces. The auto adjustable transmission center with 5T and 6T design on end surface is able to adjust the stress point so that the workpieces will be done easily.
2. The inside structure of the center is comprised of PU. It is nearly free of break-down and is durable and easy to fix.
3. Accuracy : 0.008mm

※由於手工測量，尺寸與實際產品尺寸略有不同，並非瑕疵。

The size is slightly different from the actual product size due to the manual measurement, which is not a defect.

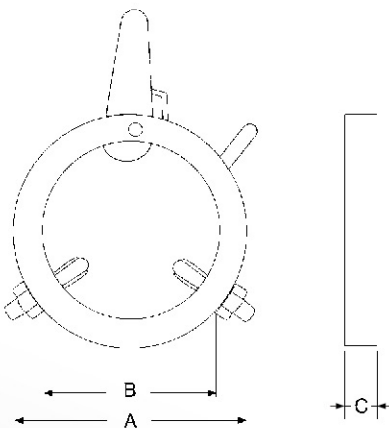
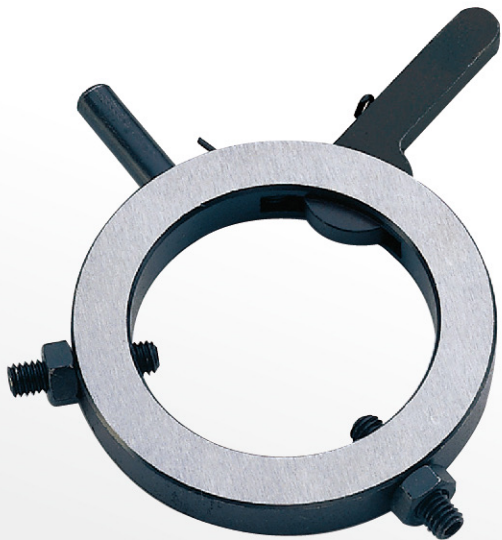
單位/Unit:mm

MORSE TAPER MT/MK	A	B	C	D1	D2	D3	D4	d	θ	套筒 SLEEVE	E	F1	F2	F3	F4	F5
NHD31 MT.4	21	14	109	42	33.5	16.7	6.7	5	60		10	74.5	68	31.2	45	54.5
NHD32 MT.4	20	18	109	52	42	26.5	12.5	9	60		10	74.5	68	31.2	45	54.5
NHD33 MT.4	25	34	109	72	58	39.5	19.5	14	60		10	74.5	68	31.2	45	54.5
NHD34 MT.4	28	42.5	109	82	81.5	53.5	27.5	18	60		10	74.5	68	31.2	45	54.5

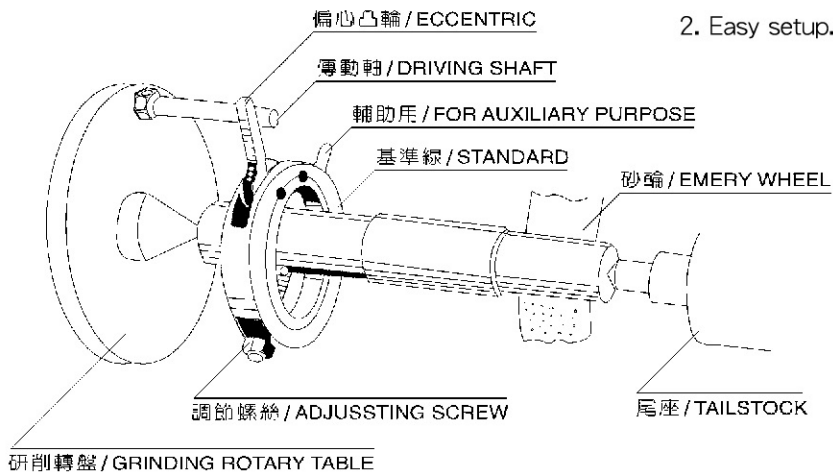
DC 型 DRIVING CENTER

傳動夾 & 套筒
ACCESSORIES

www.lihsun.com



- 1. 適合於圓筒磨床
- 2. 操作輕易簡便
- 1. Suitable for grinding shafts.
- 2. Easy setup.



單位/Unit:mm

ORDER NO.	SPEC.	使用範圍/Range	A	B	C	G.W. WEIGHT kgs
08200013	DC-13	Ø6 - Ø14	36	18	9	0.06 kgs
08200022	DC-22	Ø13 - Ø24	48	28	9	0.08 kgs
08200030	DC-30	Ø20 - Ø33	58	38	11	0.12 kgs
08200040	DC-40	Ø31 - Ø42	68	48	11	0.14 kgs
08200050	DC-50	Ø35 - Ø50	78	58	11	0.16 kgs
08200060	DC-60	Ø40 - Ø62	89	68	11	0.18 kgs
08200080	DC-80	Ø60 - Ø80	119	88	13	0.46 kgs
08200100	DC-100	Ø80 - Ø100	140	109	13	0.54 kgs

轉換套筒



Morse Taper	1x2	1x3	2x3	1x4	2x4	3x4	1x5	2x5	3x5	4x5	4x6	5x6
長度 Length(mm)	89	100	112	124	124	140	156	156	156	167	220	224

延長轉換套筒



Morse Taper	長度 Length(mm)
1x2	160
2x1	158
2x2	175
2x3	194
2x4	220
2x5	254
3x2	196
3x3	215
3x4	240
3x5	275
4x2	221
4x3	240
4x4	265
4x5	300
5x3	275
5x4	300
5x5	335

客製化頂針
CUSTOMIZED CENTERS





● 客製化頂針

依照企業需求，提供豐富且多樣的客製化產品，解決您在工作上的各種問題
回應產業變化更快速，專業技術值得您信賴，歡迎詢問

● 訂製流程

- 1.來圖訂製 (提供規格、尺寸)
- 2.需求評估 (通過電子郵件或電話充分了解客戶的需求和規格)
- 3.提供訂製圖面、報價及交期
- 4.確認技術規格圖面及訂製內容
- 5.排單生產製作、交貨

● Customized Live Centers

We provide all kind of live centers that will definitely fit your need.

Li-hsun company is excelled in special customization

With a customized live center, it would advantage our customers to confront different working situation

● Procedure

1. Customized according to drawings (provide specifications and sizes)
2. Needs evaluation (full understanding of customer's needs and specifications by email or phone)
3. Provide customized drafts, quotations and delivery dates
4. Confirm technical specification drawings and customized content
5. Order production and delivery

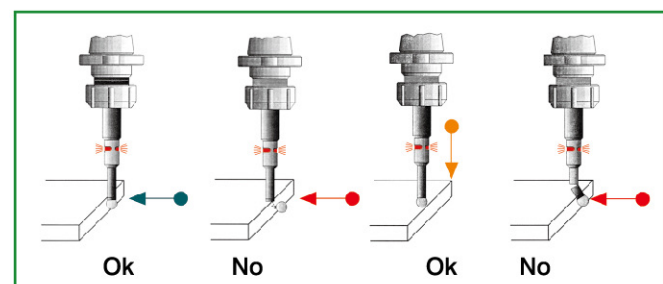
尋邊器 EDGE FINDER

www.lihsun.com



SOE

型 OPTICAL EDGE FINDER (TOUCH POINT SENSOR)



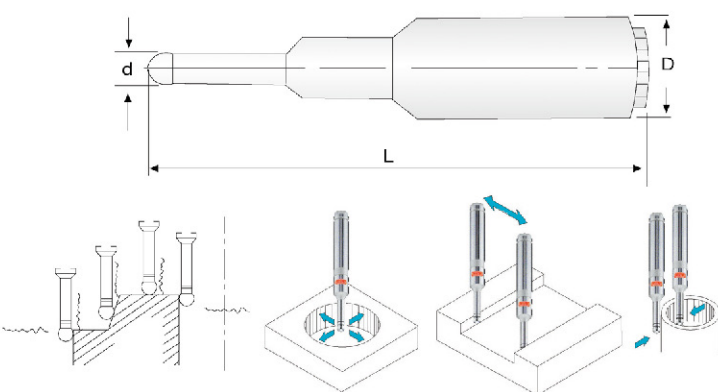
- 產品資訊：
1. 不需迴轉測量。
 2. 精確度0.005m/m。
 3. 附1枚UM5#, 12V鹼性乾電池。

PRODUCT INFORMATION

- Not necessary to rotate while measuring
- Quickly locate work edges
- Save time to find position, for milling machine, jig borers, and other machine tools
- Accuracy : 0.005mm (Is a High Sensible Position Measuring)
- Battery type : UM5#, 12V x 1 pcs

FEATURES

- Uses dry batteries to light the red lamp.
- The scope of application includes edge surface, inside and outside diameters and high efficiency.
- There is a safety spring puller which puts the ball precisely back to the positing when ball breaks away from ball seat.



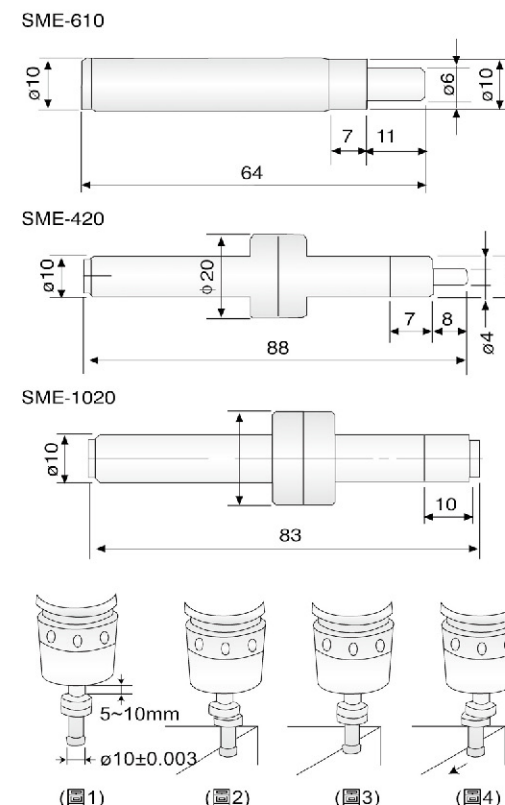
⚠ 請注意 / 光電式尋邊器不適合迴轉使用
Notice to use of optical edge finder, that is not suitably used for rotary.

單位/Unit:mm

ORDER NO.	TYPE	柄徑.D	長度.L	測頭.d	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08420120	SOE-20S	Ø20	120	Ø10	0.3	200 x 72 x 45
08420020	SOE-20L	Ø20	158	Ø10	0.36	200 x 72 x 45
08420021	SOE-20LB	Ø20	158	Ø10	0.36	200 x 72 x 45
08420032	SOE-32L	Ø32	158	Ø10	0.64	200 x 72 x 45
08420033	SOE-32LB	Ø32	158	Ø10	0.64	200 x 72 x 45

SME

型 MACHANICAL EDGE FINDER



● 產品資訊：

- Ø10mm的直柄可安裝於切削夾頭或鑽夾頭上(參考圖1)
- 請以手指輕壓測定子的側邊，使其偏心0.5mm(參考圖2)
- 使其以400-600rpm的速度轉動。
- 如(圖2)所示使測定子與加工物的端面相接，一點一點地碰觸移動，就會變成如(圖3)所示，測定子不再振動，宛如靜止的狀態接著，以更細微的進給來碰觸移動的話，測定子就會如(圖4)所示，開始朝一定的方向滑動。這個滑動起點就是所要尋求的基準位置。
- 加工物本身的端面位置，就是加上測定子半徑5mm的座標位置
- 精度：0.005mm

FEATURES

1. Ø10mm straight shank can be installed directly on milling chuck or drilling chuck. (refer to Fig. 1).
2. Press slightly on edge of sensor unit with hands to keep eccentricity at 0.5mm (refer to Fig. 2).
3. Rotate with speed of 400-600 rpm.
4. Make sensor unit contact to the end face of workpiece shown as Fig. 2. Then, contact and move gradually, it is going to turn into Fig. 3 and sensor unit keeps still. Furthermore, if fine feed is started, then sensor unit will move according to a specific direction. The start point of this movement is the basis position to look for.
5. The position of end face of the workpiece is the coordinate position of sensor unit plus radius 5mm.
6. Accuracy: 0.005mm

Steel:Cr-Mo, Alloy Steel (鉻鉬鋼) HRC:58°

單位/Unit:mm

ORDER NO.	TYPE	G.W. weight kgs	包裝尺寸 L x W x H
08400610	SME-610	0.04	95 x 26 x 26
08400420	SME-420	0.07	95 x 26 x 26
08401020	SME-1020	0.07	95 x 26 x 26

Material by Stainless Steel(不鏽鋼) HRC:60°

單位/Unit:mm

ORDER NO.	TYPE	G.W. weight kgs	包裝尺寸 L x W x H
08410420	SME-420ST	0.07	95 x 26 x 26
08411020	SME-1020ST	0.07	95 x 26 x 26

TN型：具有不倒磁之特性塗層處理，硬度HV 2500°

TN Type: Coated surface with nonmagnetic characteristic, the hardness is HV 2500°

單位/Unit:mm

ORDER NO.	TYPE	G.W. weight kgs	包裝尺寸 L x W x H
08401100	TN-10	0.08	120 x 45 x 25
08401410	TN-410	0.08	120 x 45 x 25

● 注意事項

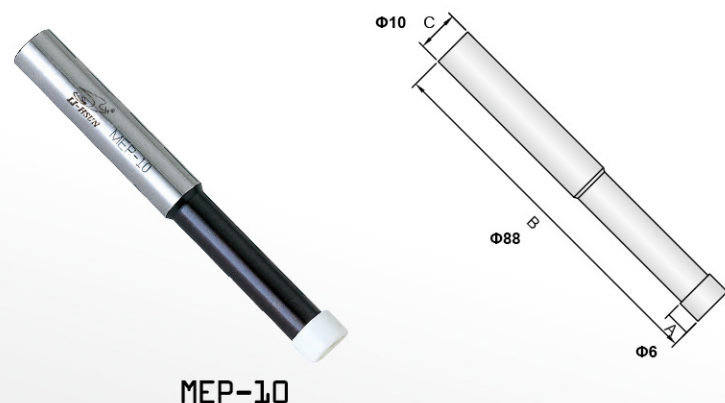
1. 請勿使用其彎曲或勉強拖拉。
2. 勿使滑動面沾附異物飛塵。
3. 使用時，轉速請勿超過600rpm。
4. 不適何在橫式的機器上使用。

Cautions

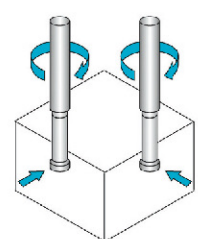
1. Do not use the bend part or to drag or pull with force.
2. Never let impurities or foreign things stain on the slide face.
3. While using, be sure the speed not over 600rpm.
4. Never apply it on machine of horizontal type.

MEP

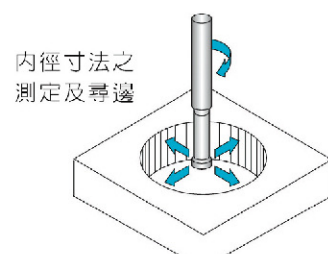
型 CERAMIC EDGE FINDER



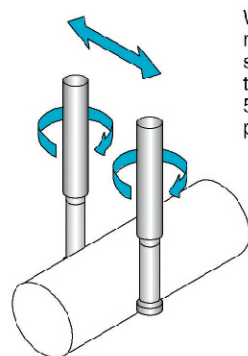
- (1) 先把巡邊器回轉後，慢慢靠近測定物。
Turn the Edge Sensor facing to workpiece, then approach to workpiece slowly.
- (2) 測定端子的振動到停下來時徐徐移動出去。
Once the sensor touches the workpiece, the sensor block moves backwards.
- (3) 再細微的傳出時，急速的偏心的時點，就是測定值。移送測定端子(10mm/m)的半徑5mm時主軸與加工物之端面就一致。
Workpiece position can be calculated by measuring the backward distance of the sensor block. Assuming the moving distance is 10 mm., the spindle center line is in 5 mm position. Move the sensor out of workpiece along with the workpiece edge.



基準位置之設置
set up the standard position



內徑寸法之測定及尋邊
measure the internal diameter



溝幅之測定

※MEP 型：具有不導磁之特性，前端使用全陶瓷之材質

※精度：0.005mm

※MEP TYPE: The mep type is nonmagnetic, and the front tip wholly made of ceramic.

※Accuracy: 0.005mm

Ceramic[陶瓷] HV:1350°

單位/Unit:mm

ORDER NO.	TYPE	G.W. weight kgs	包裝尺寸 L x W x H
08420010	MEP-10(W)	0.06	120 x 45 x 25
08420010	MEP-10(B)	0.06	120 x 45 x 25

Z軸設定器 Z AXIAL PRESET GAUGE

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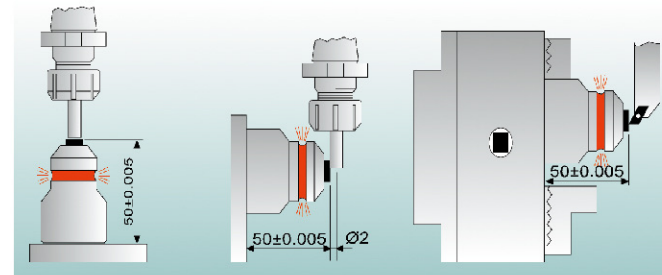


ZOP-50

型 Z AXIAL PRESET GAUGE (OPTICAL TYPE)



OPTICAL TYPE



ZOP-50

產品資訊：

- 高度50mm容易計算
- 磁性底座設計，可供側面探測。
- 紅燈亮時，四周都可看見，沒有盲點。
- 精度：0.005mm

※ 電池：LR44/A76/G13×2枚

FEATURES

- Height : 50mm
- Base built-in magnets for easy setup
- The red lamp lights-up when touched
- Height can be micro adjusted and audited by gauge block
- Can be used vertically or horizontally
- Accuracy : within 0.005mm
- ※ Battery type : LR44 / A76 / G13 x 2 pcs

使用方法

1. 探測面下方有微調機構，調整高度請用平行塊規比測。
2. 高精度產品，不適用游標卡尺檢測精度。
3. 快速進刀至燈亮時，請輕微後退至燈熄，再慢速前進至燈亮，以確實掌握精度。
4. 側面探測時，請以刀刃之最高點接觸探測面。

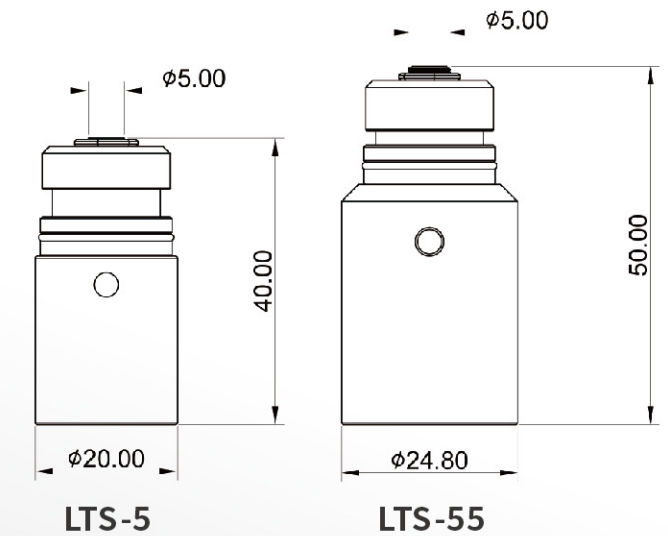
- The bottom of ZOP-50 has adjustable device, using ground parallels while adjust the height.
- High precision products, it's not suitable inspect accuracy with calipers
- Please feed quickly and the light will on, and move slightly back a little more until light off and feed slightly again until light on, to make sure the accuracy
- While testing the side-surface, please touch the top of surface of ZOP-50

單位/Unit:mm

ORDER NO.	TYPE	HEIGHT	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08420550	ZOP-50	50±0.005	0.64 kgs	110 x 100 x 80

LTS

型 LED TYPE HIGH-PRECISION MANUAL Z AXIS TOOL SETTER



產品資訊

- 重複定位精度：0.001mm
- 總移動行程：2mm
- 接觸力：1.0~1.5N
- 接觸面材質：鎢鋼
- 防水防塵等級：IP67
- 電池續航力：連續燈亮250小時
- 電池規格：DC3V LR44/SR44*2

Specification

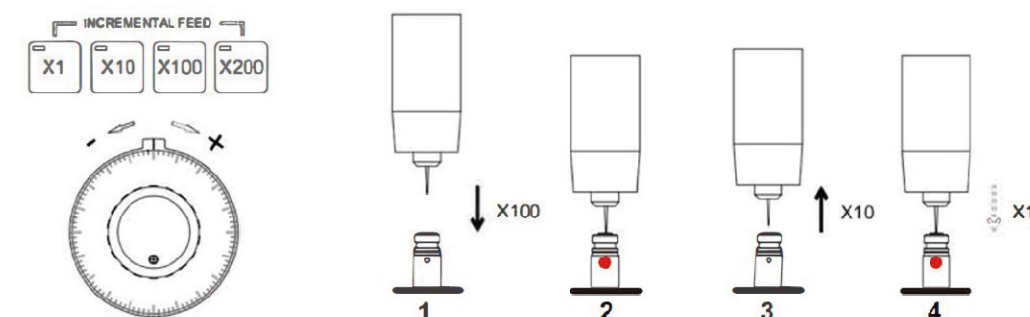
- Repeatability : 0.001mm
- Total Stroke : 2mm
- Contact Force : 1.0~1.5N
- Contact Material : Carbide Tungsten HRA90.5
- Ingres Protection : IP67
- LED Continues ON Life Time : About 250 hours
- Batteries : DC3V LR44/SR44*2

單位/Unit:mm

※ 若長期不使用產品，建議將電池移除後再進行保存，避免電池變質膨脹導致產品損壞。

If the product is not used for an extended period, it is recommend to remove the batteries before storing the product to prevent damage caused by battery deterioration and swelling.

測量方法 Measuring Method



- 將產品放置在工作平台上，將主軸沿Z方向往下移動，接觸感測頭的鎢鋼接觸面直到LED燈亮為止。此時往上緩慢移動些距離(直到燈滅)，再以最慢的速度往下移動直到燈亮後停止，此時的Z軸座標，可以做為刀長量測、原點座標，磨耗補正的參考。
- Place the BTS product on the workpiece. Move the spindle downward along the Z-axis at speed X100, until it touches the tungsten carbide surface and the LED turns ON. At this point, move the spindle away at speed X10 until the LED turns OFF. Next, move the spindle downward at speed X1, and stop when the LED turns ON again. At this time, the Z-axis coordinate can be used for tool length measurement.

Z軸設定器附錶型
Z AXIAL PRESET GAUGE (INDICATOR TYPE)



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立式CNC加工中心機用對刀儀
TOOL SETTER FOR CNC MACHINE CENTER



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ZIP-50/50A

型 Z AXIAL PRESET GAUGE (INDICATOR TYPE)

專利在案 (PATENT REGISTERED)



ZIP-50



ZIP-50A

ZOV-50

型



ZOV-50

● 產品資訊：

1. 在電腦銑床/車床上設定刀長用。
2. 設計高度: 50 ± 0.005mm。
3. 量側面大，操作容易。
4. 彈簧力較小，可避免小銑刀或鑽頭斷裂。
5. 用研磨過的平行版即可簡單設定。
6. ZIP-50A：平行精度及各方面使用靈敏、精度更好。

FEATURES

1. For setting tool length on machining centers / lathe centers.
2. Setting height : 50 ± 0.005mm
3. Large measuring surface and easy to operate.
4. Low spring force to avoid breakage of small end mill and drill.
5. Easy to be calibrated by a ground parallel or gauge block.
6. ZIP-50A : Better parallelism, sensitivity, and precision for use.

單位/Unit:mm

ORDER NO.	TYPE	HEIGHT	G.W. WEIGHT kgs	包裝尺寸 L x W x H
08420551	ZIP-50	50	1.08kgs	110 x 100 x 80
08420552	ZOV-50	50	1.66kgs	180 x 100 x 70
08420553	ZIP-50A	50	1.22kgs	110 x 100 x 80

LT-20

型 TOOL SETTER FOR CNC MACHINE CENTER (WITH OVER TRAVEL SIGNAL)



Item	LT20
觸發位置(從靜止)/Pretravel Dist.	≈ 0.5mm
總行程/Stroke	12mm
過行程接點形式/Output Mode	B接點 NC(常閉) A : normally open(NO) B:NC is optional
防護等級/Ingress Protection	IP68 (IP6X , IPX8)
重複定位精密度/Repeatability	0.001mm (operating speed 50-200mm/min)
接觸力/Contact Force	2.5 to 3.5N Z direction
接觸面直徑/Contact Surface Diameter	20mm
接觸面材質/Contact Surface	鎢鋼 HRA 90.5 (Carbide tungsten HRA 90.5+ AlTiCrN Coating)
軸承種類/Bearing Type	鋼球核心 Steel ball core
接點壽命/Contact Lifetime	5百萬次 5 million times
接點開關形式/Contact Rating	DC 24V 最大允許電流100mA (24V less than 100mA)
保護管長度/Protective Tube Length	3.0M 不鏽鋼 最小彎曲半徑R20 (3.0M Stainless steel, minimum bending radius R20)
纜線長度/Cable Length	5.0M 耐油 最小彎曲半徑R7 (5.0M Oil-resistant, minimum bending radius R7)
LED燈號/Signal	平時為暗 運作時亮 (Default: LED OFF / Triggered: LED ON)
傳輸類型/Transfer Type	接線式 Wired type
過行程開關位置(從靜止) /Overtravel switch position (from still/standstill)	6.0mm

LT-1220

型



Item	LT1220
觸發位置(從靜止)/Pretravel Dist.	≈ 0mm
總行程/Stroke	5.0mm
過行程接點形式/Output Mode	B接點 NC(常閉) A : normally open(NO) B:NC is optional
防護等級/Ingress Protection	IP67*2
重複定位精密度/Repeatability	0.001mm (operating speed 50-200mm/min)
接觸力/Contact Force	1.4 to 2.0N Z direction
接觸面直徑/Contact Surface Diameter	20mm
接觸面材質/Contact Surface	鎢鋼 HRA 90.5 (Carbide tungsten HRA 90.5+ AlTiCrN Coating)
軸承種類/Bearing Type	研磨軸承 Grinding core
接點壽命/Contact Lifetime	3百萬次 3 million times
接點開關形式/Contact Rating	DC 24V 最大允許電流100mA (24V less than 100mA)
保護管長度/Protective Tube Length	2.5M 不鏽鋼 最小彎曲半徑R20 (2.5M Stainless steel, minimum bending radius R20)
纜線長度/Cable Length	3.0M 耐油 最小彎曲半徑R7 (3.0M Oil-resistant, minimum bending radius R7)
LED燈號/Signal	平時為暗 運作時亮 (Default: LED OFF / Triggered: LED ON)
傳輸類型/Transfer Type	接線式 Wired type
過行程開關位置(從靜止) /Overtravel switch position (from still/standstill)	2.5mm

拉桿螺栓 PULL STUDS

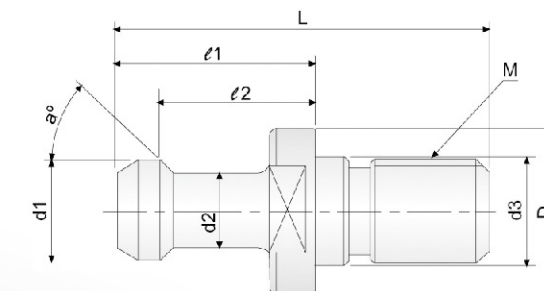
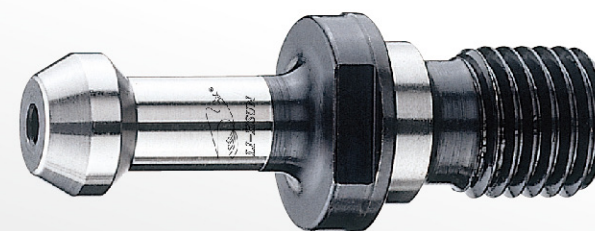


拉桿螺栓 PULL STUDS

BT

標準型

FOR MAS 403



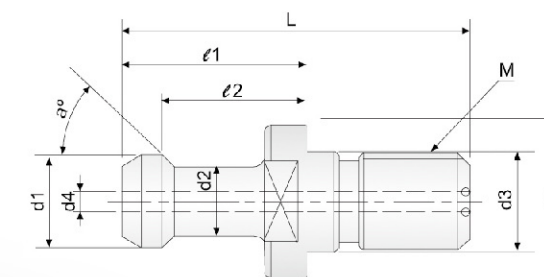
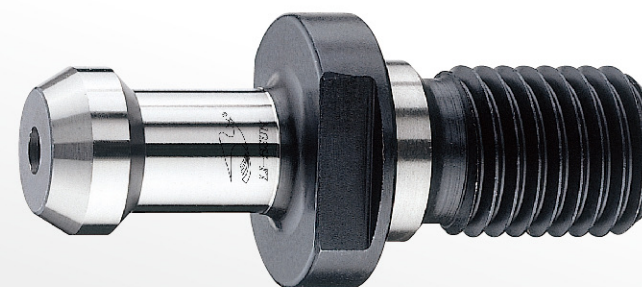
單位/Unit:mm

規格TYPE	a°	L	l1	l2	D	d1	d2	d3	M	備註/REMARK
BT0x45°	45	43	23	18	16.5	11	7	12.5	M12	
BT0x60°	60	43	23	18	16.5	11	7	12.5	M12	
BT0x90°	90	43	23	18	16.5	11	7	12.5	M12	
BT0x45°	45	60	35	28	23.0	15	10	17.0	M16	
BT0x60°	60	60	35	28	23.0	15	10	17.0	M16	
BT0x90°	90	60	35	28	23.0	15	10	17.0	M16	
BT6x45°	45	90	45	35	38.0	23	17	25.0	M24	
BT6x60°	60	90	45	35	38.0	23	17	25.0	M24	
BT6x90°	90	90	45	35	38.0	23	17	25.0	M24	

BT

水孔型

FOR MAS 403



單位/Unit:mm

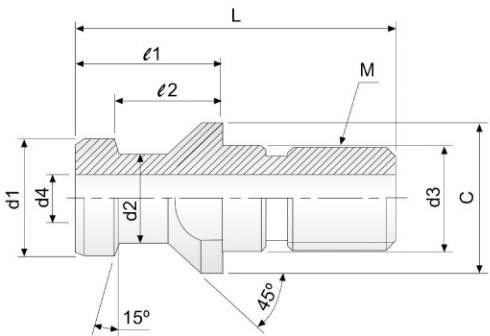
規格/TYPE	a°	L	l1	l2	D	d1	d2	d3	d4	M	備註/REMARK
BT40x45°W	45	60	35	28	23	15	10	17	7.0	M16	
BT40x60°W	60	60	35	28	23	15	10	17	7.0	M16	
BT40x90°W	90	60	35	28	23	15	10	17	7.0	M16	
BT50x45°W	45	80	45	35	38	23	17	25	11.5	M24	
BT50x60°W	60	80	45	35	38	23	17	25	11.5	M24	
BT50x90°W	90	80	45	35	38	23	17	25	11.5	M24	



DIN A

型

FOR DIN 69872A



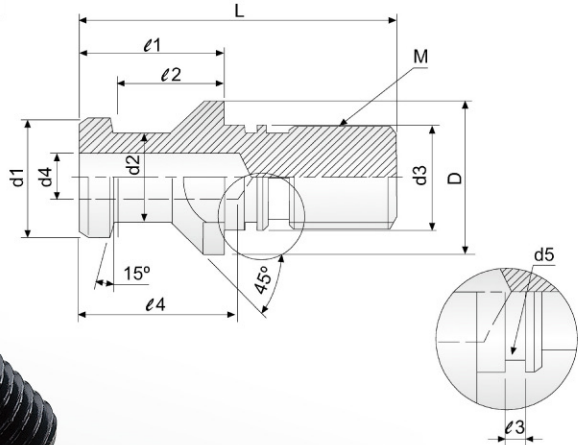
單位/Unit:mm

規格/TYPE	L	l1	l2	D	d1	d2	d3	d4	M	備註/REMARK
DIN30-A	44	24	19	17	13	9	13	-	M12	
DIN40-A	54	26	20	23	19	14	17	7.0	M16	
DIN40-A-L	54	29	23	23	19	14	17	7.0	M16	
DIN50-A	74	34	25	36	28	21	25	11.5	M24	

DIN B

型

FOR DIN 69872B



• 不附油封 Without O-ring

單位/Unit:mm

規格/TYPE	L	l1	l2	l3	l4	D	d1	d2	d3	d4	M	備註/REMARK
DIN30-B	44	24	19	1.4	-	17	13	9	13	-	M12	
DIN40-B	54	26	20	1.9	27	23	19	14	17	7.0	M16	
DIN50-B	74	34	25	3.0	37	36	28	21	25	11.5	M24	

鑽夾頭 DRILL CHUCK



一體式鑽夾頭

INTEGRATED KEYLESS DRILL CHUCKS



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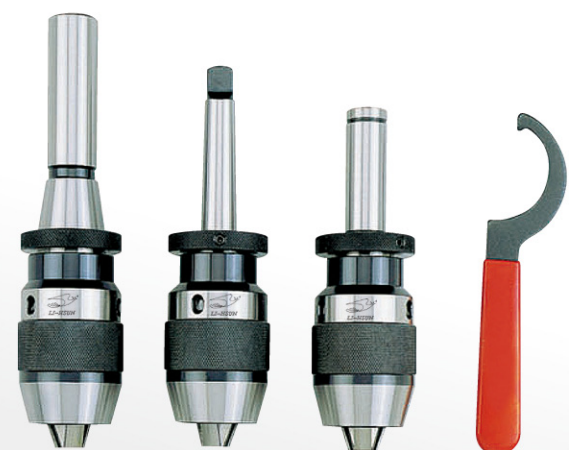
XHSP型鑽夾頭

XHSP TYPE KEYLESS DRILL CHUCK HEADS



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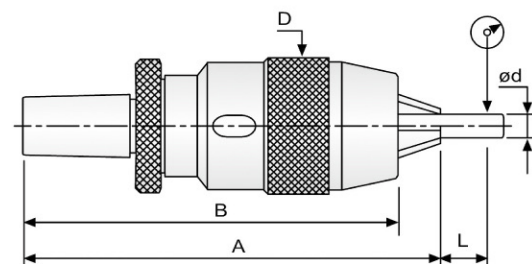
INT 型



- 一體式主軸更優於傳統設計。
- 主要特點有：
 - 結構緊密。
 - 能防止夾頭脫落。
 - 操作安全。
- 把傳統結構中柄與夾頭連接產生誤差減少到最小。
- 台灣專利號碼: No.75900 美國專利號碼: No.5275516

- TYPE:INT-C Integrated Type Keyless Drill Chucks
- The main-shaft is of integrated type, which is much more superior than the traditional design. The major features are as follows.
- 1. Extremely rigid construction.
- 2. The accumulative tolerances can be reduced to a minimum, since the traditional mechanism requiring and arbor to connect the Drill chucks which will generate the accumulative tolerances. The integrated type keyless Drill chuck is designed to solve this problem totally.
- 3. Prevent the Drill chucks from falling out.
- 4. Extremely safe in operation.
- TAIWAN PAT. NO. 75900 USA PAT. NO. 5275516

精度與扭矩表
Run-out Accuracy & Torque Inspection Table



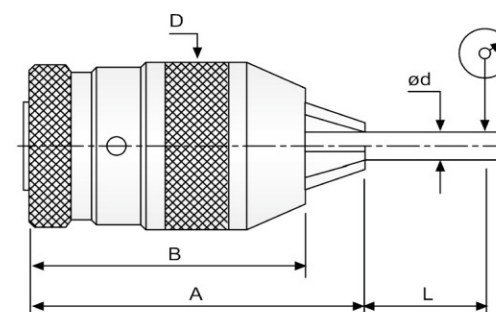
型號/TYPE	d	L	跳動/RUN-OUT	扭矩/TORQUE
INT-3	3	35	0.05	45
INT-8	3	35	0.05	160
	6	50		
INT-13	5	55	0.05	400
	10	75		
	13	75		
INT-16	5	55	0.05	480
	10	80		
	16	80		

單位/Unit:mm								
型號/TYPE	夾持能力/CLAMPING	錐孔或直柄類型	D	A	B	重量WT(g)	QTY Pcs/Cu-Ft	淨/毛重NW/GW(Kgs)
INT-3	0.5~3.175 [1/64"~1/8"]	MT1-C	25.0	127.5	122.5	160	20/0.83	4 / 5
		JC1/2"-C	25.0	107.0	102.0	150	20/0.83	4 / 5
		JC12-C	25.0	107.0	102.0	150	20/0.83	4 / 5
		JC20-C	35.0	157.0	149.0	520	20/0.83	11/12
INT-8	0.5~8.0 [1/64"~5/16"]	JC3/4"-C	35.0	141.0	133.0	500	20/0.83	10/11
		R8-C	50.5	207.0	196.0	1500	20/0.83	30/31
		MT2-C	50.5	184.0	172.0	110	20/0.83	22/23
INT-13	0.5~13.0 [1/64"~1/2"]	MT3-C	50.5	201.0	190.0	1250	20/0.83	25/26
		MT4-C	50.5	227.0	216.0	1580	20/0.83	32/33
		JC20-C	50.5	164.0	153.0	1100	20/0.83	22/23
		JC3/4-C	50.5	164.0	153.0	1100	20/0.83	22/23
		JC25-C	50.5	174.0	163.0	1250	20/0.83	25/26
		JC1-C	50.5	174.0	163.0	1250	20/0.83	25/26
		JC32-C	50.5	185.0	173.0	1450	20/0.83	29/30
		JC1-1/4-C	50.5	185.0	173.0	1450	20/0.83	29/30
		R8-C	56.0	211.0	198.0	1850	20/0.83	37/38
		MT3-C	56.0	207.0	194.0	1520	20/0.83	30/31
INT-16	3.0~16.0 [1/8"~5/8"]	MT4-C	56.0	232.0	219.0	1850	20/0.83	37/38
		JC20-C	56.0	165.0	152.0	1450	20/0.83	29/30
		JC3/4-C	56.0	165.0	152.0	1450	20/0.83	29/30
		JC25-C	56.0	175.0	162.0	1500	20/0.83	30/31
		JC1-C	56.0	175.0	162.0	1500	20/0.83	30/31
		JC32-C	56.0	197.0	184.0	1720	20/0.83	35/36
		JC1-1/4-C	56.0	197.0	184.0	1720	20/0.83	35/36
		JC1-1/4-C	56.0	197.0	184.0	1720	20/0.83	35/36

XHSP 型



精度與扭矩表
Run-out Accuracy & Torque Inspection Table



- 針對強扭矩場合的特殊設計和製造
- 先選的檢測儀器保證了優良的精度要求，夾緊力是其他同類產品的兩倍
- 配有鎖緊板手，防止在使用過程中瞬間轉向改變而導致鑽頭脫落
- 特別適合於CNC中心機和銑床使用

- TYPE:XHSP Keyless Drill Chucks
- 1. Special design & manufacture against for super heavy torque (Clamping capacity) use.
- 2. Owing to inspecting strictly & with excellent RUN-OUT accuracy and quality guaranteed the gripping power is double than the general brands.
- 3. Avoid the drill dropped when used in instantaneous change of direction and equipped with spanner for tightening perfect safety.
- 4. Especially suitable for CNC machining center & milling machine use.

單位/Unit:mm				
型號/TYPE	d	L	跳動/RUN-OUT	扭矩/TORQUE
6XHSP	3	35	0.05	80
	6	35		
8XHSP	3	35	0.05	160
	8	50		
10XHSP	3	35	0.05	260
	10	60		
13XHSP	5	55	0.05	400
	10	75		
	13	75		
16XHSP	5	55	0.05	480
	10	80		
	16	80		

型號/TYPE	夾持能力/CLAMPING	錐孔或直柄類型	D	A	B	重量WT(g)	QTY Pcs/Cu-Ft	淨/毛重NW/GW(Kgs)
6XHSP	0.5~6.5 [1/64"~1/4"]	B12	34.0	69	61	320	8/0.6	26/27
		J1	34.0	69	61	320	8/0.6	26/27
		B10	34.0	69	61	320	8/0.6	26/27
8XHSP	0.5~8.0 [1/64"~5/16"]	J2S	34.0	69	61	320	40/0.6	13/14
		B10	34.0	69	61	320	40/0.6	13/14
		J1	34.0	69	61	320	40/0.6	13/14
10XHSP	0.5~10.0 [1/64"~3/8"]	B12	34.0	69	61	320	40/0.6	13/14
		J33	43.0	92	81	700	40/0.6	28/29
		J2	43.0	92	81	700	40/0.6	28/29
		J2S	43.0	92	81	700	40/0.6	28/29
		B12	43.0	92	81	700	40/0.6	28/29
13XHSP	0.5~13.0 [1/64"~1/2"]	B16	43.0	92	81	700	40/0.6	28/29
		J6	51.5	103	92	1030	30/0.6	31/32
		J2	51.5	103	92	1035	30/0.6	31/32
		J33	51.5	103	92	1035	30/0.6	31/32
		B16	51.5	103	92	1030	30/0.6	31/32
16XHSP	3.0~16.0 [1/8"~5/8"]	J6	58.0	108	95	1450	24/0.6	35/36
		J33	58.0	108	95	1450	24/0.6	35/36
		B16	58.0	108	95	1450	24/0.6	35/36
		B18	58.0	108	95	1450	24/0.6	35/36
		J3	58.0	108	95	1450	24/0.6	35/36
扳手/KEY	8XHSP							
扳手/KEY	10XHSP							
扳手/KEY	13XHSP							
扳手/KEY	16XHSP							

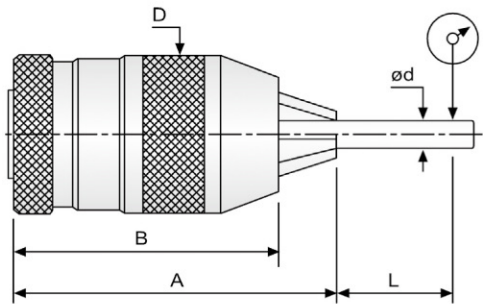
XH 型



- 適用於銑床、鑽床及重型鑽加工。
- 高精度超強鑽夾頭。
- 剛性好，扭距大。

- Suitable for milling & drilling machine and heavy duty drilling use.
- High precision super drill chucks.
- Good rigidity allows high torque.

精度與扭距表
Run-out Accuracy & Torque Inspection Table



單位/Unit:mm				
型號/TYPE	d	L	跳動/RUN-OUT	扭矩/TORQUE
6XHSP	3	35	0.05	80
	6			
8XHSP	3	35	0.05	160
	8			
10XHSP	3	35	0.05	260
	10	60		
13XHSP	5	55	0.05	400
	10			
	13	75		
16XHSP	5	55	0.05	480
	10			
	16	80		

型號/TYPE	夾持能力/CLAMPING	錐孔或直柄類型	D	A	B	重量WT(g)	QTY Pcs/Cu-Ft	淨/毛重NW/GW(Kgs)
6XH	0.5~6.5 [1/64"~1/4"]	J1	34.0	69	61	320	8/0.6	26/27
		B10	34.0	69	61	320	8/0.6	26/27
		B12	34.0	69	61	320	8/0.6	26/27
8XH	0.5~8.0 [1/64"~5/16"]	J1	34.0	69	61	340	40/0.6	14/15
		J2S	34.0	69	61	340	40/0.6	14/15
		B10	34.0	69	61	340	40/0.6	14/15
10XH	0.5~10.0 [1/64"~3/8"]	B12	43.0	92	81	700	40/0.6	28/29
		J2S	43.0	92	81	700	40/0.6	28/29
		J2	43.0	92	81	700	40/0.6	28/29
		J33	43.0	92	81	700	40/0.6	28/29
13XH	0.5~13.0 [1/64"~1/2"]	B12	51.5	103	92	1030	30/0.6	31/32
		B16	51.5	103	92	1030	30/0.6	31/32
		J2	51.5	103	92	1030	30/0.6	31/32
		J6	51.5	103	92	1035	30/0.6	31/32
		J33	51.5	103	92	1030	30/0.6	31/32
16XH	3.0~16.0 [1/8"~5/8"]	J6	58.0	108	95	1370	24/0.6	33/34
		B16	58.0	108	95	1370	24/0.6	33/34
		B18	58.0	108	95	1365	24/0.6	33/34
		J3	58.0	108	95	1340	24/0.6	33/34
		J33	58.0	108	95	1340	24/0.6	33/34

各式鑽頭研磨機
DRILL BIT SHARPENER
MACHINE



DM TYPE 鑽頭研磨機

DRILL BIT SHARPENER MACHINE

DM-213
DM-320
DM-1226



DM-213專利號碼

ZL 200520111362.4
M 279443
Nr 202008009443.7



專利項目 Patented Features

- | | |
|----------------------|---|
| 1. 鑽頭鎖緊裝置有軸承 (夾具組) | 1. Drill tightened design with bearing device. |
| 2. 雙軸承研磨座 | 2. Double-bearing grinding unit (reduces wear). |
| 3. 可調靜點座 | 3. Adjustable trimming angle. |
| 4. 可調式先端角 (85°~140°) | 4. Adjustable Axial angles (85°~140°). |

標準附件 Standard Accessories ※CBN 高速鋼鑽頭專用 (HSS : High Speed Drill) / SDC 鎢鋼鑽頭專用 (Carbide Drill)

DM-213	1. ER20 筒夾 2.5mm-13mm (12pcs) 2. 鑽石砂輪 CBN #200 3. 六角扳手 4mm、5mm 各 1	1. ER20 collets, 2.5mm-13mm (12pcs) 2. Diamond wheel CBN #200 1 pcs 3. 4mm, 5mm Hexagon wrench 1 pcs each.
DM-320	1. ER25 筒夾 3mm-20mm (18 pcs) 2. 鑽石砂輪 CBN#200 3. 六角扳手 4mm、6mm 各 1	1. ER25 collets, 3.0mm-20mm (18pcs) 2. Diamond wheel CBN #200 1 pcs 3. 4mm, 6mm Hexagon wrench 1 pcs each.
DM-1226	1. ER40 筒夾 12mm-26mm (15 pcs) 2. 鑽石砂輪 CBN#150 3. 六角扳手 4mm、6mm 各 1	1. ER40 collets, 12mm-26mm (15pcs) 2. Diamond wheel CBN #150 1 pcs 3. 4mm, 6mm Hexagon wrench 1 pcs each.

選購附件 Optional Accessories

DM-213	1. 鑽石砂輪 CBN#400 (4mm ↓ 專用) 2. 鑽石砂輪 SDC#200、#400 3. ER20 筒夾 3.5mm-12.5mm (10 pcs)	1. Diamond wheel CBN #400 (For 4mm ↓) 2. Diamond wheel SDC #400 3. ER20 collets, 3.5-12.5mm (10pcs)
DM-320	1. 鑽石砂輪 SDC#200	1. Diamond wheel SDC#200
DM-1226	1. 鑽石砂輪 SDC#200 2. ER40 筒夾 8mm-11mm、27mm-30mm (8 pcs)	1. Diamond wheel SDC #200 2. ER40 collects, 8mm-11mm、27mm-30mm (8 pcs).

型號	DM-213	DM-320	DM-1226
研磨範圍	Drill Diameter 2mm - 13mm	3mm - 20mm	12mm - 26mm
先端角	Point Angle 85° ~ 140°	85° ~ 140°	85° ~ 140°
電源	Power Supply AC 110 / 50HZ AC 220 / 60HZ	AC 110 / 50HZ AC 220 / 60HZ	AC 110 / 50HZ AC 220 / 60HZ
馬達	Motor 150W	450W	450W
轉速	R.P.M 4500rpm	4000rpm	4000rpm
重量	Weight 10.5kgs	21kgs	29kgs
包裝尺寸	Dimensions 305 x 172 x 180mm	480 x 260 x 240mm	470 x 260 x 235mm

MD TYPE 3斜面-長刃鑽頭研磨機

3 SLANT DRILL BIT SHARPENER MACHINE



MD213專利號碼

ZL 200900174158.5
M369817



專利項目 Patented Features

- | | |
|--------------------|--|
| 1. 鑽頭鎖緊裝置有軸承 (夾具組) | 1. Drill tightened design with bearing device. |
| 2. 可調靜點座 | 2. Adjustable trimming angle. |
| 3. 可調式後斜角 | 3. Adjustable secondary clearance angle |

標準附件 Standard Accessories ※CBN 高速鋼鑽頭專用 (HSS : High Speed Drill) / SDC 鎢鋼鑽頭專用 (Carbide Drill)

MD-213	1. ER20 筒夾 2.5mm-13mm (12pcs) 2. 鑽石砂輪 CBN #200 3. 六角扳手 4mm、5mm 各 1	1. ER20 collets, 2.5mm-13mm (12pcs) 2. Diamond wheel CBN #200 1 pcs 3. 4mm, 5mm Hexagon wrench 1 pcs each.
MD-1226	1. ER40 筒夾 12mm-26mm (15 pcs) 2. 鑽石砂輪 CBN#150 3. 六角扳手 4mm、6mm 各 1	1. ER40 collets, 12mm-26mm (15pcs) 2. Diamond wheel CBN #150 1 pcs 3. 4mm, 6mm Hexagon wrench 1 pcs each.

選購附件 Optional Accessories

MD-213	1. 鑽石砂輪 CBN#170、#400、#600 2. 鑽石砂輪 SDC#170、#200、#400、#600 3. ER20 筒夾 3.5mm-12.5mm (10 pcs)	1. Diamond wheel CBN#170、#400、#600 2. Diamond wheel SDC#170、#200、#400、#600 3. ER20 collets, 3.5-12.5mm (10pcs).
MD-1226	1. 鑽石砂輪 SDC#200 2. ER40筒夾 27mm-30mm	1. Diamond wheel SDC #200. 2. ER40 collects 27mm-30mm

型號	MD-213	MD-1226
研磨範圍	Drill Diameter 2mm - 13mm	12mm - 26mm
先端角	Point Angle 140°	140°
電源	Power Supply AC 110 / 50HZ AC 220 / 60HZ	AC 110 / 50HZ AC 220 / 60HZ
馬達	Motor 150W	450W
轉速	R.P.M 4500rpm	4000rpm
重量	Weight 10.5kgs	28kgs
包裝尺寸	Dimensions 305 x 172 x 180mm	470 x 260 x 235mm

SG TYPE 短刃鑽頭研磨機

DRILL BIT SHARPENER MACHINE



SG313專利號碼

ZL 200820153366.2
Japan第3151952號
M356596
Nr 202008013817.5

專利項目 Patented Features

1. 鑽頭鎖緊裝置有軸承 (夾具組)
2. 可調靜點座
3. 可調式後斜角
1. Drill tightened design with bearing device.
2. Adjustable trimming angle.
3. Adjustable secondary clearance angle

標準附件 Standard Accessories ※CBN 高速鋼鑽頭專用 (HSS : High Speed Drill) / SDC 鎢鋼鑽頭專用 (Carbide Drill)

SG-313	1. ER20 筒夾 3mm-13mm (11pcs) 2. 鑽石砂輪 CBN #250 3. 六角扳手 4mm、5mm 各 1	1. ER20 collets, 3mm-13mm (11pcs) 2. Diamond wheel CBN #250 1 pcs 3. 4mm, 5mm Hexagon wrench 1 pcs each.
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選購附件 Optional Accessories

SG-313	1. 鑽石砂輪 CBN#400(5mm ↓ 專用) 2. 鑽石砂輪 SDC#250 3. ER20 筒夾 3.5mm-12.5mm(10 pcs)	1. Diamond wheel CBN#400 (For 5mm ↓). 2. Diamond wheel SDC#250 3. ER20 Collets, 3.5-12.5mm (10pcs).
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型號	SG-313
研磨範圍	Drill Diameter 3mm – 13mm
先端角	Point Angle 140°
電源	Power Supply AC 110 / 50HZ AC 220 / 60HZ
馬達	Motor 150W
轉速	R.P.M 4500rpm
重量	Weight 13kgs
包裝尺寸	Dimensions 345 x 175 x 200mm

PD TYPE 薄板鑽頭研磨機

PORTABLE SHEET DRILL BIT SHARPENER MACHINE

專利在案 Patent pending



* 只要一個砂輪就可磨兩個角度
One wheel is capable of grinding two angles.

專利項目 Patented Features

1. 雙軸承研磨座。
2. 鑽頭鎖緊設計裝置有軸承。
3. 可調靜點座。
1. Double-bearing grinding unit (reduces wear).
2. Drill tightened design with bearing device.
3. Adjustable trimming angle.

標準附件 Standard Accessories ※CBN 高速鋼鑽頭專用 (HSS : High Speed Drill) / SDC 鎢鋼鑽頭專用 (Carbide Drill)

PD-316	1. ER 筒夾 3mm-16mm (15pcs) 2. 鑽石砂輪 CBN 3. 六角扳手 4mm、6mm 各 1	1. ER collets, 3mm-16mm (15pcs) 2. Diamond wheel CBN. 3. 4mm, 6mm Hexagon wrench 1 pcs each.
PD-1226	1. ER40 筒夾 12mm-26mm (15pcs) 2. 鑽石砂輪 CBN 3. 六角扳手 4mm、6mm 各 1	1. ER40 collets, 12mm-26mm (15pcs) 2. Diamond wheel CBN. 3. 4mm, 6mm Hexagon wrench 1 pcs each.

選購附件 Optional Accessories

PD-316	1. 鑽石砂輪	1. Diamond wheel SDC.
PD-1226	1. 鑽石砂輪	1. Diamond wheel SDC.

型號	PD-316	PD-1226
研磨範圍	Drill Diameter 3mm – 16mm	12mm – 26mm
先端角	Point Angle 165~180°	165~180°
電源	Power Supply AC 110 / 50HZ AC 220 / 60HZ	AC 110 / 50HZ AC 220 / 60HZ
馬達	Motor 450W	450W
轉速	R.P.M 4000rpm	4000rpm
重量	Weight 21kgs	28kgs
包裝尺寸	Dimensions 480 x 260 x 240mm	480 x 260 x 240mm

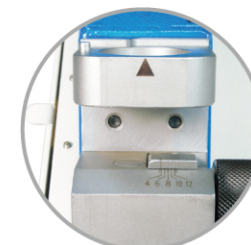
銑刀研磨機及切斷機 ENDMILL SHARPENER & CUTTING-OFF MACHINE

www.lhsun.com



GH TYPE 銑刀研磨機

ENDMILL SHARPENER MACHINE



放大圖 Magnified Part

固定檔塊
(硬化處理，避免校正底座磨損)
Fixed Block
(Harden treatment to protect the alignment base)

定位調整扭
Alignment Knob

定位座
Alignment Base

定位檔塊
Alignment Block

2. 研磨後斜角 20°
NO.2 FOR SCREW RADIAL
ANGLE 20°

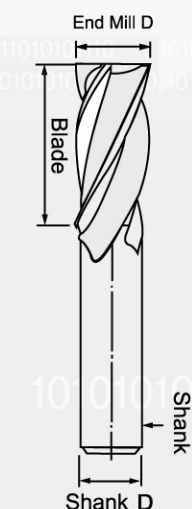
3. 平面角 6°此橢圓形孔
允許夾具軸向移動研磨所
有端銑刀面
NO.3 FOR CUTTING
ANGLE 6. THIS OVAL
SHAPED HOLE ALLOWS
HOLDER UNIT TO MOVE
ON AXIS TO GRIND ALL
SURFACE OF END MILL.

1. 供端銑刀底溝角 30°
NO.1 FOR END MILL
FLAT SLOT ANGLE 30°

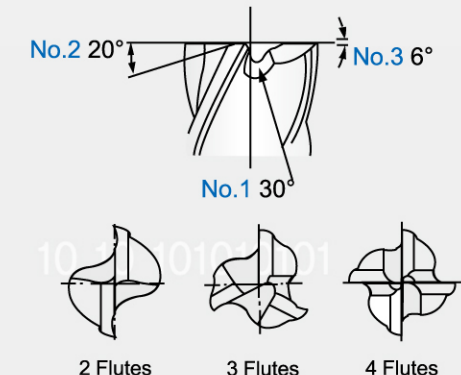
研磨2.3及4刃端銑刀，精密、效率、易操作，縮短製程時間，研磨直徑

GH413- 4-13mm, GH1225-12-25mm

For End Mill Re-sharpening, 2,3 and 4 Flutes Precision, Efficiency, Easy Operation, Short Processing Time, Grinding Diameter from GH413- 4-13mm, GH1225-12-25mm.



1. 高效率、高品質研磨滑程(滑率)，好的研磨效果。
High Efficiency, High Quality Grinding Slip, Good Grinding Results.
2. 品質保證 0.02mm。
Quality Assurance: 0.02mm.
3. 容易操作，供緊急的方便用具，快速。
Easy Operation, and Fast for Convenience.





GH-413專利號碼

ZL 200720150355.4
ZL 200720140706.3
Japan第3138310號
M321829號
M325182號
US7,473,163B1號
Nr 202007015258.2

專利項目 Patented Features

1. 鑽頭鎖緊裝置有軸承 (夾具組)
2. 可調式刀口倒角
1. Drill tightened design with bearing device.
2. Adjustable cutting angle

標準附件 Standard Accessories ※CBN 高速鋼鑽頭專用 (HSS : High Speed Drill) / SDC 鎢鋼鑽頭專用 (Carbide Drill)

GH-413	1. ER20 筒夾 4.0mm-13mm (10pcs) 2. 鑽石砂輪 SDC #300(4-5mm)、#300(6-13mm) 3. 六角扳手 4mm *1 4. 2,4 夾頭、3 刀夾頭各 1 組	1. ER20 collets, 4.0mm-13mm (10pcs) 2. Diamond wheel SDC #300(4-5mm)、#300(6-13mm) 3. 4mm Hexagon wrench 1 pcs each. 4. 2,4 flutes chuck*1 set、3 flutes chuck*1 set
GH-1225	1. ER40 筒夾 12mm、16mm、18mm、20mm、22mm、25mm (6pcs) 2. 鑽石砂輪 CBN#150、SDC#150 3. 六角扳手 4mm *1 4. 2,4 夾頭、3 刀夾頭各 1 組	1. ER40 collets, 12mm、16mm、18mm、20mm、22mm、25mm (6pcs) 2. Diamond wheel CBN#150、SDC#150 3. 4mm Hexagon wrench 1 pcs. 4. 2,4 flutes chuck*1 set、3 flutes chuck*1 set

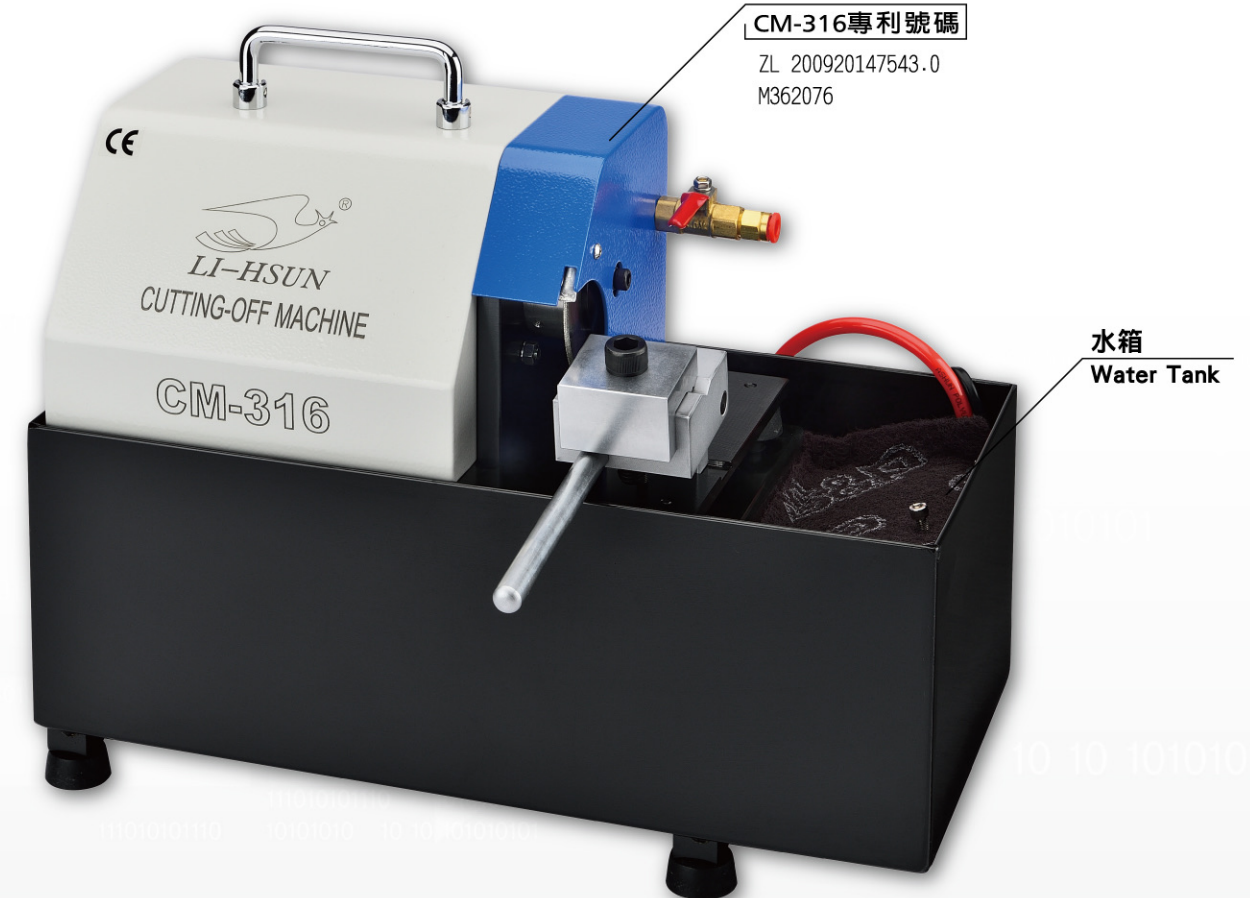
選購附件 Optional Accessories

GH-413	1. 鑽石砂輪 CBN#300(4-5mm)、#300(6-13mm)、#300(4-13mm,2T) 2. 鑽石砂輪 SDC#300(4-13mm,2T)	1. Diamond wheel CBN#300(4-5mm)、#300(6-13mm)、#300(4-13mm,2T) 2. Diamond wheel SDC#300(4-13mm,2T)
GH-1225	1. 鑽石砂輪 CBN#150(12-25mm,2T) 2. 鑽石砂輪 SDC#150(12-25mm,2T)	1. Diamond wheel CBN#150(12-25mm,2T) 2. Diamond wheel SDC#150(12-25mm,2T)

型號	GH-413	GH-1225
研磨範圍	Drill Diameter 4mm – 13mm	12mm – 25mm
先端角	銑刀端面角 6° Third Angle 6° 銑刀後斜角 20° Primary Angle 20° 銑刀底溝角 30° Second Angle 30°	
電源	Power Supply AC 110 / 50HZ AC 220 / 60HZ	AC 110 / 50HZ AC 220 / 60HZ
馬達	Motor 450W	1000W
轉速	R.P.M 6000rpm	4500rpm
重量	Weight 17kgs	30kgs
包裝尺寸	Dimensions 310 x 260 x 290mm	360 x 290 x 340mm

CM-316 簡易型切斷機

CUTTING-OFF MACHINE



CM-316專利號碼

ZL 200920147543.0
M362076

標準附件 Standard Accessories ※CBN 高速鋼鑽頭專用 (HSS : High Speed Drill) / SDC 鎢鋼鑽頭專用 (Carbide Drill)

CM-316	1. 鑽石砂輪 SDC #100 2. 六角扳手 4mm、5mm、10mm 各 1 3. 把手 *1	1. Diamond wheel SDC #100 2. 4mm, 5mm, 10mm Hexagon wrench 1 pcs each. 3. Handle 1 set
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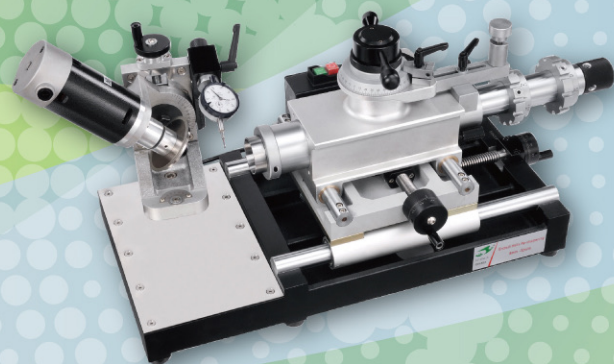
選購附件 Optional Accessories

CM-316	1. 鑽石砂輪 CBN#80、#100 2. 鑽石砂輪 SDC#80 3. 水箱	1. Diamond wheel CBN#80、#100 2. Diamond wheel SDC#80 3. Water Tank
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型號	CM-316
切斷範圍	Capacity 3mm – 16mm
電源	Power Supply AC 110 / 50HZ AC 220 / 60HZ
馬達	Motor 600W
轉速	R.P.M 6000rpm
重量	Weight 13.5kgs
包裝尺寸	Dimensions 340 x 210 x 210mm

螺旋角修磨機 ENDMILL HELIX RE-SHARPENING MACHINE

www.lhsun.com



EH-832 螺旋角修磨機 Endmill Helix Re-sharpening Machine



標準配件 STANDARD ACCESSORIES

斜度研磨裝置 Taper grinding device	
10,12 等份分度盤 One Indexing plate 10,12 divisions	
使用工具一套 One set of operating tools	
操作書 One operating instruction manual	
砂輪 Grinding	SDC (1.5 mm , Ø8-12 mm) SDC (2.0 mm , Ø12-32 mm) 鎢鋼專用 Carbide Only
C5 筒夾 Collet	Ø12 , Ø16 , Ø20 , Ø 25 , Ø32 mm , 直徑 Diameter Ø50 mm
刀桿 Holder / 筒夾 Collet	C20-SSK10-80L , × 1 pcs (Ø6 , Ø8 , Ø10 mm)

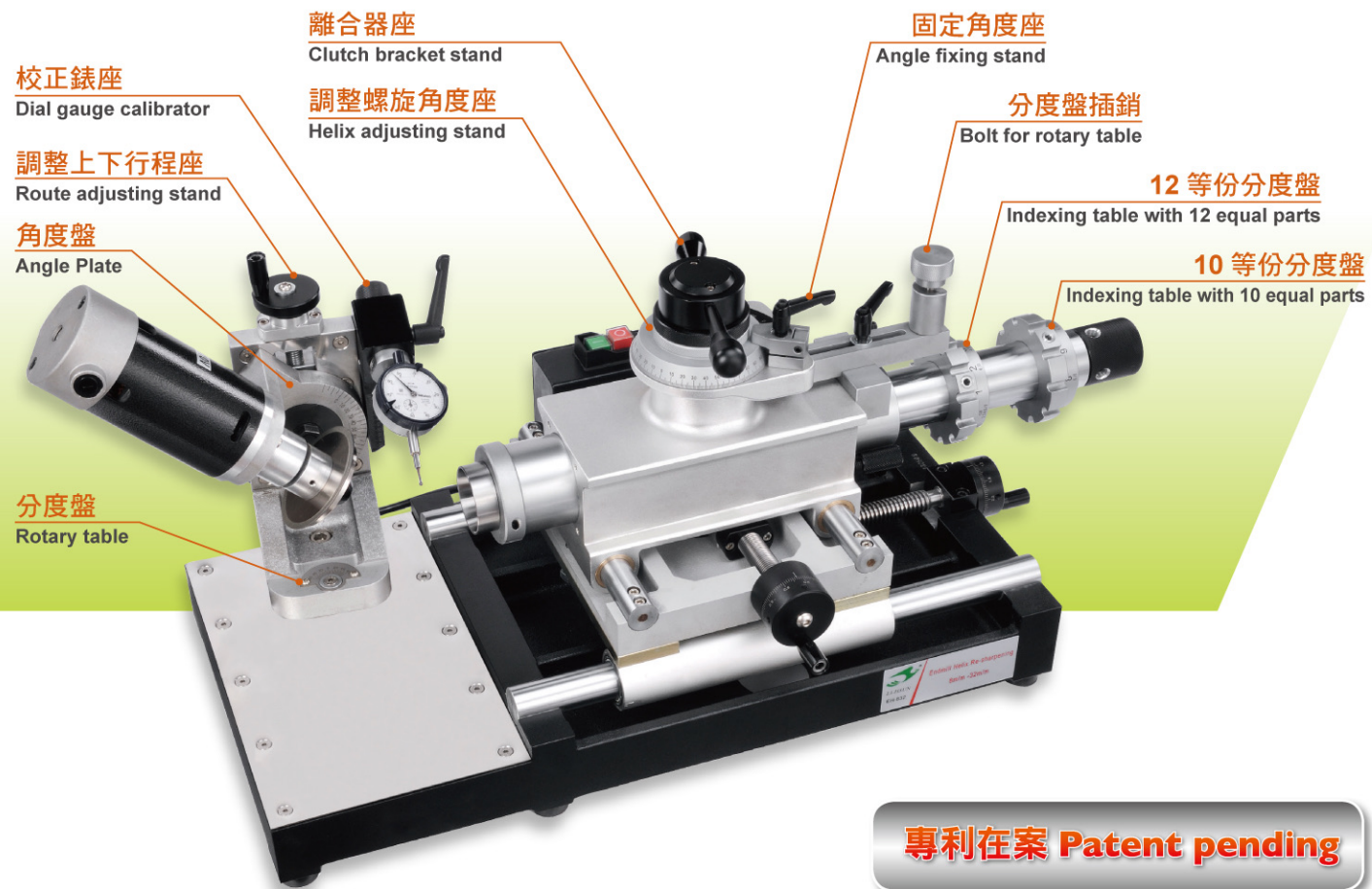
特殊附件 OPTIONS

砂輪 Grinding	CBN(1.5 mm , Ø8-12 mm) CBN(2.0 mm , Ø12-32 mm) HSS 專用 HSS Only
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機械特性 MACHINE FEATURES

- EH-832 精密刀具 & 溝槽磨床是一部多功能，而且容易操作的機器，所有側銑刀、面銑刀、殼形銑刀、粗銑刀、端銑刀、螺絲攻、倒角刀，2 刃、3 刃，銑刀螺旋角可研磨 (2,3,4,5,6 刃)……等皆能研磨。
The universal tool & cutter grinder Model EH-832 is versatile in operation without requiring special skills. All milling cutters, endmills , shell endmills , staggered tooth cutters, rough endmills , countersinks (2 flutes, 4 flutes)and the angle of endmill helix can sharpen 2flutes,3flutes,4 flutes, 5flutes, 6 flutes.
- 小量或中批量的高速鋼或碳化鎢刀具、刀具修磨皆很適合在 EH832 上完成。
The Model EH-832 is designed to sharpen HSS and carbide toolings in small and medium quantities.
- 刀具只要一次夾持，即可研磨端面、側面、溝槽。
In one chucking operation, the machine can perform the grinding of the rake angle of the flute, clearance angle on the periphery and the end of the tool.
- 螺旋角度的設定可以很快完成。
A few seconds set up time for helix angle.
- 研磨螺旋刀具時，因為主軸的螺旋運動不會產生間隙，所以特別適合研磨高精度的碳化鎢刀具。
Due to the backlash free operation, spiral toothed, solid carbide or carbide tipped milling cutters can be ground with high accuracy thus far only achieved by CNC grinders.
- 機器的底座和滑板是一體成型，所以穩定性高、堅固耐用。
The heavy duty compound slides and one piece cast-iron base provide extra rigidity and minimize vibration.

MEMO



機械規格 SPECIFICATIONS

刀具直徑 Tool diameter	Ø8-Ø32mm
刀具的螺旋長度 Spiral length with workhead spindle	160mm
工作台的前後行程 Longitudinal travel of workhead	150mm
工作台的左右行程 Cross travel of workhead	130mm
砂輪頭的上下行程 vertical movement of wheel head	50mm
砂輪頭的傾斜角度 Tilting angle of wheel head	± 90°
心軸的內孔斜度 Workhead spindle	C5
左螺旋及右螺旋的溝槽、前端角、二番角皆能研磨 Spiral flute & axial relief grinding Infinitely variable, left & right hand	
螺旋角 Helix angle	0° - 90°
砂輪孔徑 Grinding wheel Bore	19.06mm
砂輪最大直徑 Grinding wheel diameter	Max. 90mm
砂輪馬達 Grinding motor	0.25KW
砂輪迴轉方向 Grinding wheel direction	正轉 Clockwise
砂輪轉速 Grinding spindle spds	4800 R.P.M.(250w-300w)
機器淨重 Net weight	57kgs
機器外觀尺寸 Dimensions	860×430×500mm
電源 Power supply	AC110/AC220 50/60Hz

・ 本公司隨時進行研究改善的工作，因此本型錄內所規定尺寸驗設計特性，得以變更，不另行通知。
Specifications and design characteristics are subject to change without prior notice.

CE證書 / PATENT CERTIFICATE



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CERTIFICATE OF COMPLIANCE

REGISTERED NR:
AVM1584CNF0220 of 11 February 2020

**Certificate of document compliance, upon voluntary request,
 according to the following European Directives**
MACHINERY DIRECTIVE 2006/42/EC
&
LOW VOLTAGE DIRECTIVE 2014/35/EU

Reference of Applicant	Date of application	Internal Order	Report nr	Date of issue	Expiry date
TW-PD-052/20	07/02/2020	TW-PD-052/20	MB052/TW/20	11/02/2020	12/02/2025

It is certified, on the basis of an exclusively documentary analysis, carried out on the basis of a voluntary request, that the documents produced by the manufacturer of the product mentioned below, comply with the provisions of the European Directives and Standards in the specific case of relevance as described below.

Applicant:	JU JENN INDUSTRY CO., LTD.
Product:	Wo. 71, (n. 351, Lingyang Rd., Cingphue Dist., Taichung City 34643, Taiwan, R.O.C.
Type of examination	Pass and Fail Re-Sharpening Machine
Technical file number	DOCUMENTARY EXAM
Representative Model:	JUJENN 2020-B1
Serial NO:	1225
Series Model:	1225, 413, 316
Directives and Standards	ANNEX I of Machinery Directive 2006/42/EC EN ISO 12100:2010, EN 62841-1:2015, EN ISO 13849-1:2015

This Certificate of conformity is based on the documentary evaluation of the Technical File (JUNN 2020-B1 of JU JENN INDUSTRY CO., LTD.) of the above-mentioned product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of VERICERT s.r.l.

This is to certify that the analysis performed, through the document analysis of the entire technical file, has found documentary compliance with the essential requirements of the Machinery Directive, Low Voltage Directive and Standards.

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VERICERT srl
 Via L. Masotti, 5 - 48124 Fornace Zaratini (RA)
 Tel. 0544505101 - Fax 0544 401220
 e-mail info@vericert.it
 C.F./P.IVA 03507000402

Luca L. Masotti **Luca L. Masotti**

SGS

SGS Reference No: EZ/2010/30017C

Page 1 of 1

VERIFICATION OF COMPLIANCE

Verification Report No.	:	EZ/2010/30017C
Representative Model	:	1225
Series Model(s)	:	413 and 316
Product Name	:	Fast End Mill Re-Sharpening Machine
Applicant	:	JU JENN INDUSTRY CO., LTD.
Address of Applicant	:	No.40, Lin Hae Rd., Ching-Shui Town, Taichung, Taiwan, R.O.C.
TCF Number	:	JUJENN-2010-B1
Date of Issue	:	June 9, 2010
Date of Expiry	:	June 9, 2015
Applicable Standards	:	EN ISO 12100:2010+A1:2009, EN ISO 12100:2-2003+A1:2009, EN ISO 14121-1: 2007, ISO / TR 14121-2: 2007, EN 61209-1: 2009

Conclusion

Based upon a review of the worksheets and the Technical Construction File, the apparatus is deemed to meet the requirements of the above standards and hence fulfill the requirements of:

Machinery Directive 2006/42/EC

Note: This verification is only valid for the equipment and configuration described and in conjunction with the technical data detailed above.

The TCF mark as shown below can be used, under the responsibility of the manufacturer, after completion an EC Declaration of Conformity and compliances with all relevant EC Directives.

Authorized Signatory:





SGS TAIWAN LTD.
Jason Lin
Technical Manager

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No. 151, Wu Kong Road, Woei Industrial Estate, Tainan County, Taiwan
 台灣檢驗科技股份有限公司 (886) 7 2789-3933 (886) 7 2789-2038

台灣檢驗技術服務部 151 號 吳功路 台南工業區 台南市 台灣 88 721 1000

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CERTIFICATE OF COMPLIANCE

REGISTERED NR:
AVM1585CNF0220 of 11 February 2020

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 according to the following European Directives
 MACHINERY DIRECTIVE 2006/42/EC
 &
 LOW VOLTAGE DIRECTIVE 2014/35/EU**

Reference of Applicant	Date of application	Internal Order	Report nr	Date of issue	Expiry date
TW-DP-053/20	07/02/2020	TW-DP-053/20	MB053/TW/20	11/02/2020	12/02/2025

It is certified, on the basis of an exclusively documentary analysis, carried out on the basis of a voluntary request, that the documents provided by the manufacturer of the product mentioned below, comply with the provisions of the European Directives and Standards in the specific case of relevance as described below.

Applicant:	JU JENN INDUSTRY CO., LTD. No. 21, Lin 351, Lingzong Rd., Gueishuei Dist., Taichung City 43643, Taiwan, R.O.C.
Product:	Fast drill re-Sharpening Machine
Type of examination	DOCUMENTARY EXAM
Technical File number	JU220-2020-A1
Representative Model:	1226
Serial NO:	20201226001
Series Model:	1226, 1230, 320, 313, 213
Directives and Standards	ANNEX I of Machinery Directive 2006/42/EC EN ISO 12100:2010; EN 62841-1:2015; EN ISO 13849-1:2015

This Certificate of conformity is based on the documentary evaluation of the Technical File (JUJENN 2020-A1) by JU JENN INDUSTRY CO., LTD.) of the above-mentioned product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of VERICERT s.r.l.

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This certificate can be used by holder in connection with the EC Declaration of Conformity, indicating conformity according to Machinery Directive. This Certificate cannot be used alone to demonstrate the conformity according to Machinery Directive.

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VERICERT srl
 Via A. Masotti, 5 - 48124 Fornace Zaratini (RA) - Italia
 Tel. 0544/651981 - Fax 0544/467220
 e-mail: info@vericert.it
 Capienza: Reg. Imp. JA 03507000492
[Signature] **TEC. COORDINATOR**

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SGS Reference No: EZ/2010/30016C

Page 1 of 1

VERIFICATION OF COMPLIANCE

Verification Report No.	: EZ/2010/30016C
Representative Model	: 1226
Series Model(s)	: F20, 313 and 213
Product Name	: Fast Drill Re-Sharpening Machine
Applicant	: JU JENN INDUSTRY CO., LTD.
Address of Applicant	: No.40, Lin Hae Rd., Ching-Shui Town, Taichung, Taiwan, R.O.C.
TCF Number	: JUJENN-2010-A1
Date of Issue	: June 9, 2010
Date of Expiry	: June 9, 2015
Applicable Standards	: EN ISO 12100-1:2003+A1:2009, EN ISO 12100-2:2003+A1:2009, EN ISO 14121-1: 2007, ISO / TR 14121-2: 2007, EN 61209-1: 2009

Conclusion

Based upon a review of the worksheets and the Technical Construction File, the apparatus is deemed to meet the requirements of all relevant standards and hence fulfill the requirements of:

Machinery Directive 2006/42/EC

Note: This verification is only valid for the equipment and configuration described and in conjunction with the technical data detailed above.

The CE mark as shown below can be used, under the responsibility of the manufacture, after completion an EC Declaration of Conformity and compliance with all relevant EC Directives.

Authorized Signatory:





SGS TAIWAN LTD.
Jason Lin
Technical Manager

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台灣檢驗科技股份有限公司
11049-21 2239-2933
11049-21 2239-2933

No. 126, Wu Kong Road, Wuku Industrial Zone, Taichung County, Taiwan.
www.sgsltd.com

台北轉運工廠區五路126號
www.sgsltd.com

各國專利		PATENT
Country國別	Patent Item 專利名稱	Patent No.專利號碼
China大陸	CH-213鑽頭研磨機 CH-213 Drilling Head Grinding Machine	ZL 2005 2 0111362.4
Taiwan台灣	CH-213鑽頭研磨機 CH-213 Drilling Head Grinding Machine	新型M279443號
Germany德國	CH-213鑽頭研磨機 CH-213 Drilling Head Grinding Machine	Nr 20 2008 099 443.7
China大陸	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	ZL 2007 2 0150335.4
China大陸	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	ZL 2007 2 0140706.3
Japan日本	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	登錄第3138310號
Taiwan台灣	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	新型M321829號
Taiwan台灣	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	新型M325182號
USD美國	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	專利號數 US7,473,163B1號
Germany德國	GH-413銑刀研磨機 GH-413 End Mill Grinding Machine	Nr 202007 015 258.2
China大陸	SG鑽頭研磨機 SG Drilling Head Grinding Machine	ZL 2008 2 0153366.2
Japan日本	SG鑽頭研磨機 SG Drilling Head Grinding Machine	登錄第3151952號
Taiwan台灣	SG鑽頭研磨機 SG Drilling Head Grinding Machine	新型M356569號
Germany德國	SG鑽頭研磨機 SG Drilling Head Grinding Machine	Nr 20 2008 013 817.5
China大陸	三斜面鑽頭研磨機 3-Slant Milling Tool Type Drilling Head Grinding Machine	ZL 2009 0 0174158.5
Taiwan台灣	三斜面鑽頭研磨機 3-Slant Milling Tool Type Drilling Head Grinding Machine	新型M369817號
China大陸	圓棒裁斷機 Cutting-off Machine	ZL 2009 20147543.0
Taiwan台灣	圓棒裁斷機 Cutting-off Machine	新型M362076號