

倍速特BEST

放電加工機

BEST EDM



ISO 9001:2000

雙頭放電加工機

TWIN HEADS EDM

BEST-K2000H2

BEST-K2500H2

BEST-K3000H2

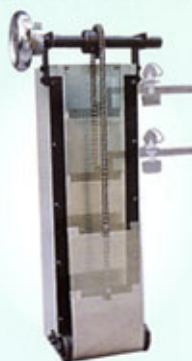


倍速特事業有限公司



機械特性 MECHANICAL FEATURES

Patent:Level Controller (專利產品)



1. 旋轉式油位閥門及安全油位開關，操做安全更有保障 (專利產品)
2. FC-35鑄材，使用不變形，精度永久如新。
3. XYZ三軸採精密滾珠螺桿，操作輕巧。
4. 與CNC同等級特殊機體結構。加裝伺服馬達與控制器即可成為自動化機器，價值非凡。
5. 加工頭固定板內藏4個防火感應器。獨創氣體滅火器與多孔式噴管，永久安全免於火災恐懼。
6. Z軸採雙滑軌軸承座，永保軸向精度。

Double roller linear guider

Z軸採雙滑軌軸承座



1. Fluid level control using revolving valve and safety switch for additional safety requirements.
2. FC-35 casting ensures high durability from deformation, and lifetime accuracy.
3. High precision ball screw on X,Y,Z axes for extremely smooth traverse.
4. Outstanding mechanical structure of CNC grade. Only servo motor and control required to perform automatic operation for addition value.
5. Electrode holder plate fitted with 4 built-in anti-fire sensors. Together with exclusive air extinguisher and multiple-hole flushing pipe to ensure high safety.
6. Double roller linear guider on Z axis gives high axial accuracy.

電器箱特性 ELECTRONICAL FEATURES

1. 使用8051單晶片整體設計，穩定耐用
2. 10段定深可程式
3. 10段加工條件可程式
4. 10段加工參數 (隨電流值改變)
5. 10組加工深度條件組合記憶
6. 1/2中心鍵
7. 絕對值 / 相關值顯示功能
8. 公制 / 英制顯示功能
9. 加工深度設定值、最深值、現在值顯示功能
10. 機械使用總時間
11. 可歸零機械使用區間時間
12. 自動尋邊裝置
13. 鏡面加工
14. 鎢鋼特殊加工
15. 電極消耗自動補償
16. 雙速排渣系統
17. 防積碳裝置
18. 均勻修底裝置
19. 加工進行中，斷電記憶系統
20. 可直接加裝PNC移位系統

1. CPU 8051 adopted for complete design.
2. 10 steps depth program
3. 10 steps machining program
4. 10 steps machining data with current
5. 10 sets machining data in memory bank
6. 1/2 center key
7. ABS / INC
8. mm / inch
9. X · Y · Z / EDM
10. Machine life counter
11. Internal machining time counter
12. Auto positioning END & FACE
13. Mirror finish
14. Special metal machining (Tungsten Carbide)
15. Auto compensation for electrode wear
16. Two speed flushing
17. Smart Antic-ARC
18. Smooth surface finish
19. Memory for power interrupt in machining
20. Direct connection with PNC control



BEST-200+ZNC 30A



BEST-300+ZNC 30A



BEST-300+ZNC 30A

(附:12" LCD螢幕、旋臂面板)
(With:12"LCD monitor . cantilever panel)



選配OPTION
12" LCD螢幕
旋臂面板
12"LCD monitor
cantilever panel



BEST-300+PNC 30A

(附:12" LCD螢幕、旋臂面板)
(With:12"LCD monitor . cantilever panel)

BEST-230+ZNC 30A
BEST-348+ZNC 50A



BEST-340+ZNC 50A



選配OPTION

(單軸 Z axis = 400mm)

BEST-348S+ZNC 50A





選配OPTION

(單軸 Z axis = 400mm)

BEST-448+ZNC 75A
BEST-450+ZNC 75A



BEST-560+ZNC 75A



選配OPTION

液晶螢幕 12"LCD monitor



BEST-570+ZNC 100A
BEST-680+ZNC 100A



BEST-230+ PNC 30A
BEST-348+ PNC 50A

BEST-340+ PNC 50A

可自動位移及細修
AUTO POSITIONING AND FINE FINISH

選配 OPTION
選配 12" LCD monitor

BEST - 850+PNC 100A
BEST-1060+PNC 100A
(螢幕 Monitor)

BEST-448+ PNC 75A
BEST-450+ PNC 75A

BEST-1200+PNC 100A
BEST-1500+PNC 100A
(螢幕 Monitor)

BEST-560+ PNC 75A
(螢幕 Monitor)

BEST-570+ PNC 100A
BEST-680+ PNC 100A
(螢幕 Monitor)



BEST-230+CNC 30A
BEST-348+CNC 50A



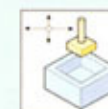
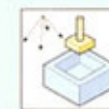
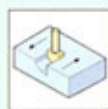
BEST-448+CNC 75A
BEST-450+CNC 75A



BEST-340+CNC 50A



BEST-560+CNC 75A

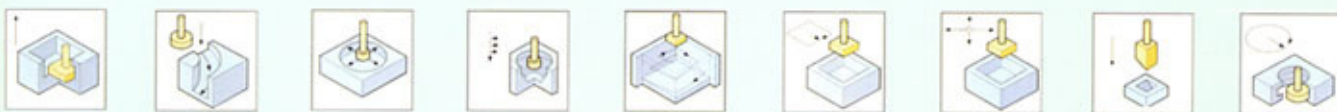




BEST - 850+CNC 100A
BEST-1060+CNC 100A



BEST-1200+CNC 100A
BEST-1500+CNC 100A





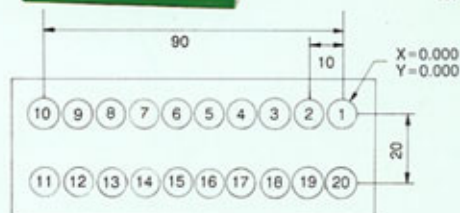
電器箱特性 *ELECTRONICAL FEATURES*

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20. Direct connection with PNC control



選配 OPTION 液晶螢幕 LCD monitor



單位 unit:mm

程式說明 OPERATION EXAMPLE

CAVITY1 (步驟1)	CAVITY2 →10(步驟2)
STEP 1 G90 M00 S99 X=+0,000(ABS) Y=+0,000(ABS) COUNT=1	STEP 2 G91 M00 S99 X=-10,000(INC) Y=+0,000(INC) COUNT=9
CAVITY 10→11(步驟3)	CAVITY 11→20(步驟4)
STEP 3 G91 M00 S99 X=+0,000(INC) Y=-20,000(INC) COUNT=1	STEP 4 G91 M09 S99 X=+10,000(INC) Y=+0,000(INC) COUNT=9(END)

REMARKS: (備註:)

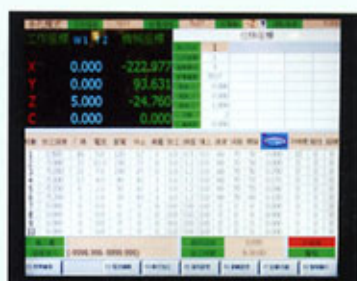
- * G90 = ABSOLUTE MOTION, 絕對值
- * G91 = INCREMENT MOTION 增量值
- * M00 = CONTINUE STEP, 程式繼續
- * M09 = PROGRAM END 程式結束
- * S99 = MOTION SPEED (1 to 99) 位移速度
- * COUNT = REPEAT COUNTER (1 to 99) 增量值位移重複次數



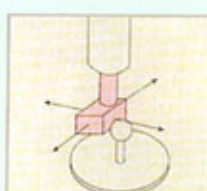
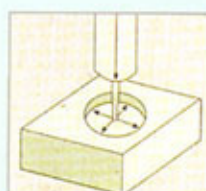
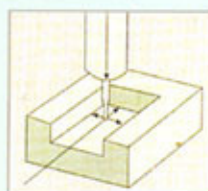
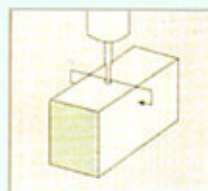
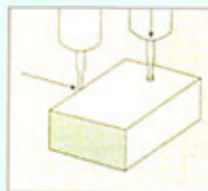
- | | |
|-----------------|--|
| 1.座標顯示區 | 1.Coordinate display reference |
| 2.手動模式工作區及修改區 | 2.Manual mode reference |
| 3.自動模式工作區 | 3.Auto mode working reference |
| 4.加工參數顯示及修改區 | 4.Parameters conditions |
| 5.功能鍵顯示區 | 5.Functions keys display reference |
| 6.F1 - F10 功能鍵 | 6.F1 - F10 function keys |
| 7.抽油碼達開關 | 7.Pump key |
| 8.油位偵測開關 | 8.Fluid level detective key |
| 9.防火偵測開關 | 9.Fire detective keys |
| 10.警報開關 | 10.Alarm key |
| 11.手動/自動切換 | 11.Manual/Auto mode function keys |
| 12.上下左右鍵 | 12.UP/DOWN, LEFT/RIGHT square key |
| 13.數字鍵 | 13.Key pad |
| 14.上下頁鍵 | 14.Page up and Page down |
| 15.BKSP : 刪除前一字 | 15.BKSP : delete the previous characters |
| 16.ESC : 放棄動作 | 16.ESC |
| 17.DEL : 刪除 | 17.DEL |

特性說明 OUTSTANDING FEATURES

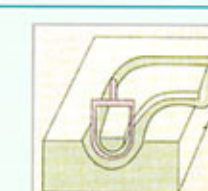
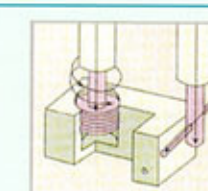
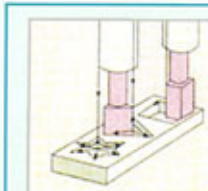
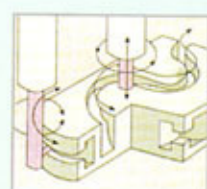
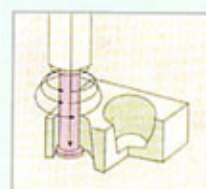
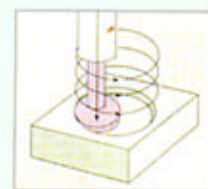
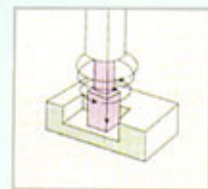
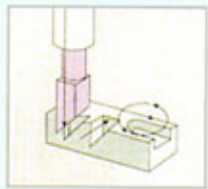
- 重複定位精度，可達小於 $1\mu\text{m}$ 。
- 加工真圓度及不規則形狀原軌跡，可達小於 $1\mu\text{m}$ 。
- 加工前後可在螢幕上做模擬加工，確保加工精度及防止誤加工發生。
- 可三軸同時進行放電加工。
- 採用超薄型電漿式顯示器。體積小、亮度高，沒有螢幕干擾現象，使用壽命長。
- 具超低消耗功能。
- Repeated positioning accuracy $< 1\mu\text{m}$
- Sparking roundness accuracy $< 1\mu\text{m}$
- With simulative function to prevent machining failure
- Three axes can be driven simultaneously
- Equipped with slim plasma screen, compact and durable
- Electrode wear rate $< 1\%$



尋邊及中心點 *EDGE AND CENTER FINDING*



加工路徑 *EROSION ROUTE*



需加裝C軸
C AXIS IS REQUIRED

機台規格 SPECIFICATIONS OF MACHINE BODY

Description		BEST-200	BEST-230	BEST-300	BEST-340	BEST-348	BEST-348S	BEST-448
行程 Travel	mm	X=300 Y=200 Z=200	X=300 Y=200 Z=180 Z1=200	X=400 Y=300 Z=200 Z1=200	X=400 Y=300 Z=200 Z1=250	X=400 Y=300 Z=200 Z1=250	X=400 Y=300 Z=400	X=450 Y=350 Z=200 Z1=250
工作台尺寸 Work table	mm	280×550	300×600	320×650	360×700	360×700	360×700	400×750
電極荷重 Max. electrode weight	mm	80	80	80	120	120	120	120
工件荷重(圓中) Max. workpiece weight	kg	500	600	600	1000	800	800	1000
最大工件尺寸 Max. workpiece	kg	730×470×430	760×490×380	850×540×480	950×580×450	950×580×450	950×580×450	1050×650×560
油槽外徑尺寸 Work tank	mm	920×520×380	950×540×380	1040×590×420	1140×640×420	1140×640×420	1140×640×420	1240×720×420
油箱外徑尺寸 Dielectric fluid reservoir	mm	800×1120×380	1000×1200×450	900×1260×380	900×1500×420	1200×1200×400	1200×1200×400	900×1500×420
油箱容積 Dielectric capacity	ltr	260	420	340	430	430	430	430
機器總重 Machine weight	kg	780	900	950	1200	1150	1150	1400

BEST-450	BEST-450S	BEST-560	BEST-570	BEST-680	BEST-850	BEST-1060	BEST-1200	BEST-1500
X=500 Y=400 Z=200 Z1=300	X=500 Y=400 Z=400	X=600 Y=500 Z=250 Z1=300	X=700 Y=500 Z=250 Z1=350	X=800 Y=600 Z=250 Z1=350	X=800 Y=500 Z=450	X=1000 Y=600 Z=450	X=1200 Y=700 Z=500	X=1500 Y=800 Z=600
450×850	450×850	550×1000	700×1200	700×1300	700×1200	700×1200	900×1500	900×1700
180	180	200	250	250	250	250	300	300
1200	1200	1500	2000	2500	4000	4000	4500	5000
1150×700×600	1150×700×600	1350×800×600	1700×920×720	1800×940×720	1700×900×700	2000×1000×700	2000×1100×750	2500×1200×750
1380×760×520	1380×760×520	1580×870×550	1900×1000×600	2000×1020×650	2100×1050×660	2400×1150×660	2500×1200×750	3000×1300×750
1000×1600×430	1000×1600×430	1000×2000×480	1300×2200×520	1300×2200×520	2100×3000×450	1200×3000×450	1250×3600×530	1350×4000×530
550	550	800	1200	1200	950	1300	2000	2500
1550	1550	2100	3800	4000	4500	4800	6000	7500

雙頭機規格 TWIN HEADS EDM

規格 ITEM	機型 MODEL	BEST-K2000	BEST-K2000H2	BEST-K2500	BEST-K2500H2	BEST-K3000	BEST-K3000H2
行程 Travel	mm	X=2000 Y=1000 Z=550	X=1100×2 Y=1000×2 Z=550×2	X=2500 Y=1000 Z=550	X=1500×2 Y=1000×2 Z=550×2	X=3000 Y=1000 Z=550	X=2000×2 Y=1000×2 Z=550×2
工作台尺寸 Work table	mm	2000×1000	2000×1000	2000×1000	2000×1000	3000×1050	3000×1050
電極荷重 Max. electrode weight	kg	400	400x2	400	400x2	450	450x2
最大工件尺寸 Max. workpiece	mm	2500×1400×850		3000×1600×850		3400×1700×1050	
油槽外徑尺寸 Work tank	mm	3000×1500×800		3500×1600×850		4000×1700×850	
油箱外徑尺寸 Dielectric fluid reservoir	mm	4200×1500×550		5000×1600×550		5500×1800×550	
油箱容積 Dielectric capacity	liter	2800		3800		4700	
機械尺寸 Dimensions	mm	4200×3500×3200		4600×3600×3200		5200×4600×3300	
		5000×3500×3200 (H2)		5400×3600×3200 (H2)		6000×4600×3300 (H2)	
機器總重 Machine weight	kg	12400	13800	12800	14300	15500	17200

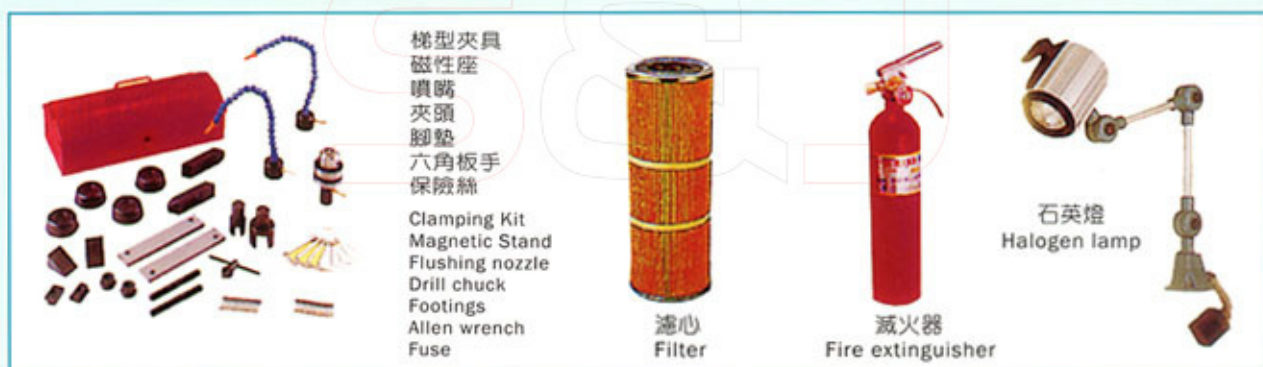
規格 SPECIFICATIONS

電器箱規格 SPECIFICATIONS OF POWER SUPPLY

規格 SPECIFICATIONS	電流 CURRENT	30A	50A	75A	100A	200A
電源電壓 Input voltage		3 PHASE AC 200/346/415/220/380/440V				
電源容量 Input power		4KVA	6KVA	8KVA	12KVA	25KVA
最大輸出電流 Max.output		30A	50A	75A	100A	200A
加工電壓 No load voltage		DC 100/150/200V				
最小放電時間 Min.On Time		1 μ s				
最小休止時間 Min.Off Time		1 μ s				
最大加工時間 Max.cutting speed (mm ³ /min)		300	420	550	800	1500
最細表面粗度 Best fine finish		<0.2 μ m				
最小電極消耗比 Min.wear rate		<0.3%				

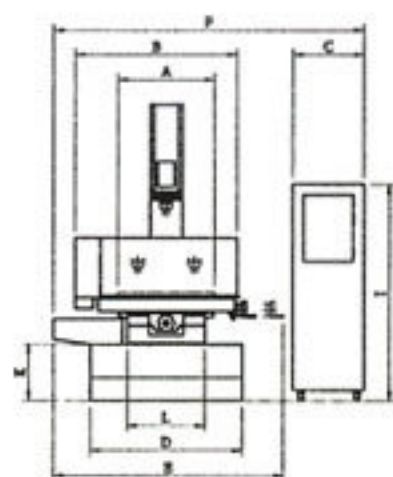
配件 ACCESSORIES

標準配件 STANDARD ACCESSORIES

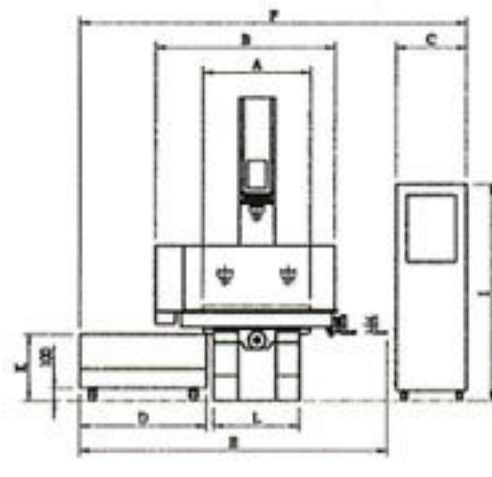


特殊配件 OPTIONAL ACCESSORIES

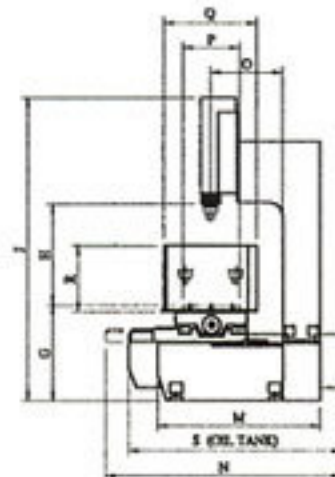




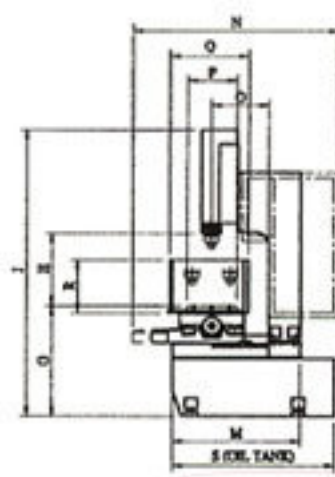
BEST-230,348



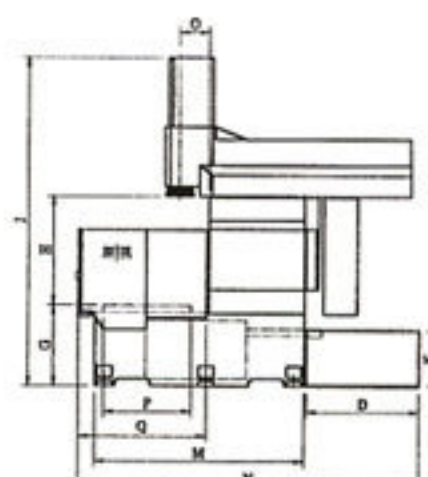
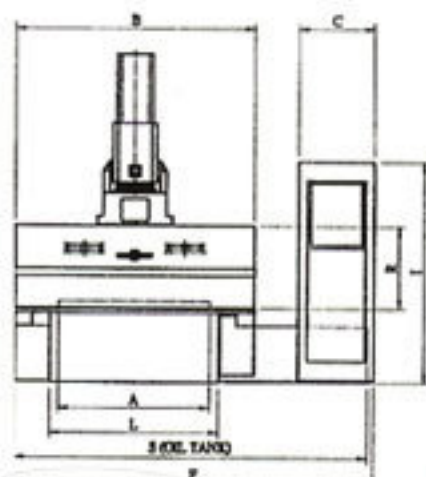
BEST-340,448,450,560,570,680



BEST-200,300



BEST-850,1060,1200,1500



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
BEST-200	550	920	480	800	1450	-	750	500	-	2040	400	450	860	1350	365	280	520	380	1120
BEST-300	650	1040	480	900	1680	-	780	500	-	2330	400	520	1000	1620	440	320	590	420	1260
BEST-230	600	950	540	1000	1500	2100	810	420	1700	2140	450	600	900	1450	370	300	540	380	1200
BEST-340	700	1140	540	900	2100	2700	810	510	1700	2260	520	600	1100	1500	480	360	640	420	1500
BEST-348	700	1140	540	1200	1790	2390	820	510	1700	2320	400	600	1100	1550	480	360	640	420	1200
BEST-448	750	1240	540	900	2360	2960	740	600	1700	2250	520	680	1300	1700	550	400	720	420	1500
BEST-450	850	1380	540	1000	2450	3050	780	650	1700	2440	530	680	1300	1750	570	450	760	520	1600
BEST-560	1000	1580	540	1000	2650	3250	830	650	1700	2490	580	750	1550	2100	640	550	870	550	2000
BEST-570	1200	1900	540	1300	3300	3900	850	790	1700	2770	620	1050	1850	2400	780	700	1000	600	2200
BEST-680	1300	2000	540	1300	3400	4000	850	790	1700	2770	620	1050	1850	2480	800	700	1020	650	2200
BEST-850	1200	2200	600	900	-	3100	650	850	1780	2650	450	1340	1670	3050	270	700	1050	660	3000
BEST-1060	1200	2400	600	1200	-	3300	650	850	1780	2650	450	1340	1670	3050	270	700	1150	660	3200
BEST-1200	1500	2500	600	1250	-	3600	780	900	1780	3100	540	1650	1800	3250	270	900	1200	750	3600
BEST-1500	1700	3000	600	1250	-	4000	780	900	1780	3300	540	1850	2000	3550	270	900	1300	750	4000



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