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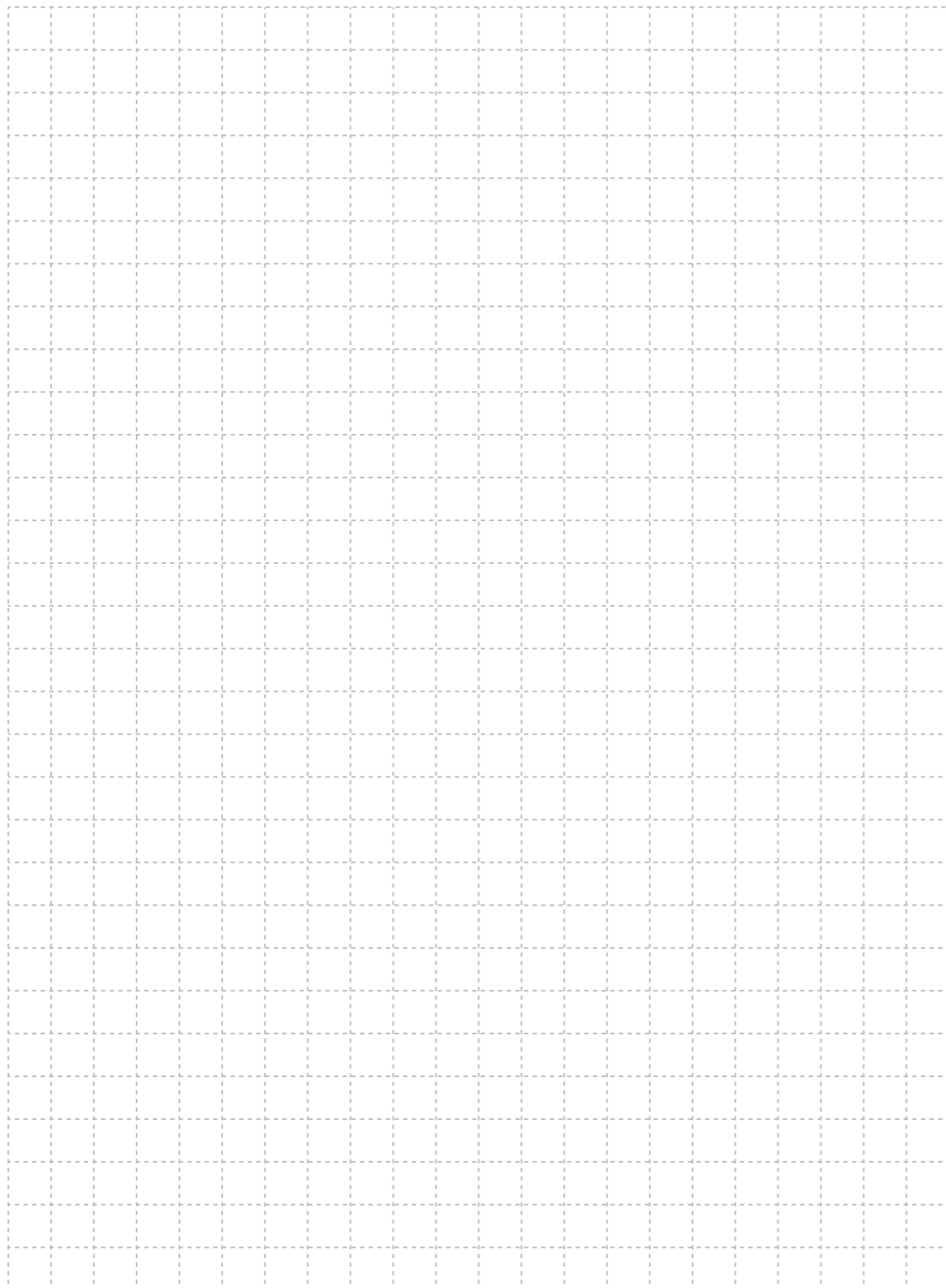
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**CASTEK**  
SUPER EDM DRILL



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## How To Select Our Machine

### From travel (Model)

200x200 mm	MD20A
300x200 mm	SD16K / SD22K / FD22K
400x250~400x300 mm	SD24K / SD4030
500x400~600x400 mm	SD5030 / SD6040
>600x400 mm	Customized machine / PD02

### From hole size (Generator)

<0.2 mm	MD15A
0.2~1.5 mm	MD15A / SD25A / HCD50A
1.5~3.0 mm	SD25A / HCD50A
3.0~6.0 mm	SD boost 50A / HCD50A
0.3/0.5/1.0/1.5 mm	PD02

### From function (Option)

Thread tapping	Tapping device
Fast drill	HCD power
Small hole	MD20A
Drilling Carbide	Carbide circuit and device
Multi-Angles	Tilting head / indexer
Big workpiece	PD02 / customized machine

## Model Introduction

### PD02

Portable head, small, but powerful as standard machine.



### Specification

Item	Model	PD02	Unit
X, Y travel	Manual	-	mm
Z travel (electrode length)	DC Servo	260 (300)	mm
W axis travel	Manual	0-100	mm
Head weight		20	KG
Machine size		600x600	mm
Net weight		100	KG
Filtering system		10	Liter
Input voltage		110V or 220V single phase with PE	
MAX power consumption		1.2KW	
MAX machining current		12A	
Drilling capability		0.3mm, 0.5mm, 1.0mm, 1.5mm	

### Standard Accessories

1. cotton filter x 1 pc
2. ceramic guide 1.0mm x 1 pc
3. electrode holder 0330 x 1 pc
4. brass tube 1.0mm x 300mm x 20 pcs
5. With high pressure pump (pneumatic) x1, FRL set x1

# Model Introduction

## SD22K / SD24K



Model Introduction

Model Introduction

### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 1.0mm x 400mm x 20 pcs	10. 45L filtering system
5. working light x 1pc	11. With paper filer x1, circulation pump x1,
6. linear scale 5 um X, Y axis	high pressure pump (pneumatic) x1, FRL set x1

### Standard Function

1. two-axis digital display, Z axis digital display including ADC (option)
# ADC means Auto depth control
2. built-in parameters (memory)
3. EDGE function
4. inch/mm function

### Specification

Item	Model	SD22K	SD24K	Unit
X, Y travel	Manual	300x200	400x250	mm
Z travel (electrode length)	DC Servo	360 (400)		mm
W axis travel	Manual	25-300		mm
Table size	Flat	450x208	450x260	mm
MAX workpiece size		680x500	830x570	mm
MAX workpiece weight		250		KG
Machine size		1200x1200	1500x1200	mm
Net weight		650+100	700+100	KG
Filtering system		45		Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz		
MAX power consumption		2.5KW / 3KW		
MAX machining current		SD 25A / SD boost 50A		
X Y Linear scaler		Fagor 5um		
Linear system		Dovetail way & Ballscrew		
Port		- - -		
Drilling capability	0.1-0.3	○		
	0.3-1.5	◎		
	1.5-3.0	◎		
	3.0-6.0	○ / ◎ Boost 50A		
	M2-M8	Option		

### Optional Accessories

1. 4th axis control / indexer	6. Auto electrode changer
2. SD boost power 50A	7. Submerged tank (SD22K)
3. HCD power 50A	
4. Carbide circuit and device	
5. Thread tapping device M3-M8 (M2-M8)	

## Model Introduction

### FD22K

HCD power inside, faster generator



Model Introduction

Model Introduction

#### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 1.0mm x 400mm x 20 pcs	10. high pressure pump (pneumatic) x1, FRL set x1
5. working light x 1pc	
6. linear scale 5 um X, Y axis	

#### Standard Function

1. two-axis digital display, Z axis digital display including ADC (option)
# ADC means Auto depth control
2. built-in parameters (memory)
3. EDGE function
4. inch/mm function

#### Specification

Item	Model	FD22K	Unit
X, Y travel	Manual	300x200	mm
Z travel (electrode length)	DC Servo	360 (400)	mm
W axis travel	Manual	25-300	mm
Table size	Bar	300x245	mm
MAX workpiece size		690x550	mm
MAX workpiece weight		250	KG
Machine size		1200x1200	mm
Net weight		650+100	KG
Filtering system		45	Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz	
MAX power consumption		5KW	
MAX machining current		HCD 50A	
X Y Linear scaler		Fagor 5um	
Linear system		Dovetail way & Ballscrew	
Port		- - -	
Drilling capability	0.1-0.3	○	
	0.3-1.5	◎	
	1.5-3.0	◎	
	3.0-6.0	◎	

#### Optional Accessories

1. 4th axis control / indexer
2. Carbide circuit and device
3. Auto electrode changer

## Model Introduction

### SD16K

Long span of X Y linear guide way, for big workpiece



Model Introduction

Model Introduction

#### Standard Accessories

- |                                      |   |
|--------------------------------------|---|
| 1. paper filter x 1 pc               | 7. workpiece jig x 1 set                      |
| 2. ceramic guide 1.0mm x 1 pc        | 8. pad for magnetic tool x 1 pc               |
| 3. electrode holder 0330 x 1 pc      | 9. start kits and tool x 1 set                |
| 4. brass tube 1.0mm x 400mm x 20 pcs | 10. 45L filtering system                      |
| 5. working light x 1pc               | 11. With paper filer x1, circulation pump x1, |
| 6. linear scale 5 um X, Y axis       | high pressure pump (pneumatic) x1, FRL set x1 |

#### Standard Function

- two-axis digital display, Z axis digital display including ADC (option)  
# ADC means Auto depth control
- built-in parameters (memory)
- EDGE function
- inch/mm function

#### Specification

Item	Model	SD16K	Unit
X, Y travel	Manual	300x200	mm
Z travel (electrode length)	DC Servo	360 (400)	mm
W axis travel	Manual	25-300	mm
Table size	Flat	435x220	mm
MAX workpiece size		620x400	mm
MAX workpiece weight		250	KG
Machine size		1200x1400	mm
Net weight		770+100	KG
Filtering system		45	Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz	
MAX power consumption		2.5KW / 3KW	
MAX machining current		SD25A / SD boost 50A	
X Y Linear scaler		Fagor 5um	
Linear system		Flat & V way & Ballscrew	
Port		---	
Drilling capability	0.1-0.3	○	
	0.3-1.5	◎	
	1.5-3.0	◎	
	3.0-6.0	○ / ◎ Boost 50A	
	M2-M8	Option	

#### Optional Accessories

- 4th axis control / indexer
- Auto electrode changer
- Tilting head, B axis
- Submerged tank
- SD boost power 50A / HCD Power 50A
- Carbide circuit and device
- Thread tapping device M3-M8 (M2-M8)

# Model Introduction

## SD4030 / SD5040 / SD6040



Model Introduction

Model Introduction

### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 1.0mm x 400mm x 20 pcs	10. 45L filtering system
5. working light x 1pc	11. With paper filer x1, circulation pump x1,
6. linear scale 5 um X, Y axis	high pressure pump (pneumatic) x1, FRL set x1

### Standard Function

1. two-axis digital display, Z axis digital display including ADC (option)
# ADC means Auto depth control
2. built-in parameters (memory)
3. EDGE function
4. inch/mm function

### Specification

Item	Model	SD4030	SD5040	SD6040	Unit
X, Y travel	Manual	400x300	500x400	600x400	mm
Z travel (electrode length)	DC Servo	360 (400)			mm
W axis travel	Manual	50-400			mm
Table size	Bar	450x335	600x435	600x435	mm
	Flat	450x395	625x420	625x420	
MAX workpiece size		680x500			mm
MAX workpiece weight		500			KG
Machine size		1600x1650	1600x1750	1600x1750	mm
Net weight		1300+100	1400+100	1400+100	KG
Filtering system		45			Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz			
MAX power consumption		2.5KW / 3KW			
MAX machining current		SD 25A / SD boost 50A			
X Y Linear scaler		Fagor 5um			
Linear system		linear guideway and ballscrew			
Port		- - -			
Drilling capability	0.1-0.3	○			
	0.3-1.5	◎			
	1.5-3.0	◎			
	3.0-6.0	○ / ◎ Boost 50A			
	M2-M8	Option			

### Optional Accessories

1. 4th axis control / indexer	5. Thread tapping device M3-M8 (M2-M8)
2. Tilting head, B axis	6. Auto electrode changer
3. SD boost power 50A / HCD Power 50A	7. Submerged tank (SD4030)
4. Carbide circuit and device	



## Model Introduction

### SD22KS / SD24KS

Touch panel and position assistant



Model Introduction

Model Introduction

#### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 1.0mm x 400mm x 20 pcs	10. 45L filtering system
5. working light x 1pc	11. With paper filer x1, circulation pump x1,
6. linear scale 5 um X, Y axis	high pressure pump (pneumatic) x1, FRL set x1

#### Standard Function

1. Three-axis digital display	6. LAN, USB port support
2. Built-in parameters	7. Graphic color management
3. EDGE function	8. Position assistant
4. Auto-depth control	
5. NC/ISO, DXF drawing support	

#### Specification

Item	Model	SD22KS	SD24KS	Unit
X, Y travel	Manual	300x200	400x250	mm
Z travel (electrode length)	DC Servo	360 (400)		mm
W axis travel	Manual	25-300		mm
Table size	Flat	450x208	450x260	mm
MAX workpiece size		680x500	830x570	mm
MAX workpiece weight		250		KG
Machine size		1200x1200	1500x1200	mm
Net weight		650+100	700+100	KG
Filtering system		45		Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz		
MAX power consumption		2.5KW / 3KW		
MAX machining current		SD 25A / SD boost 50A		
X Y Linear scaler		Fagor 5um		
Linear system		Dovetail way & Ballscrew		
Port		USB / LAN		
Drilling capability	0.1-0.3	○		
	0.3-1.5	◎		
	1.5-3.0	◎		
	3.0-6.0	○ / ◎ Boost 50A		
	M2-M8	Option		

#### Optional Accessories

1. 4th axis control/ indexer	6. Remote controller with XY axis AC servo motors
2. SD boost power 50A	7. Submerged tank (SD22KS)
3. HCD power 50A	
4. Carbide circuit and device	
5. Thread tapping device M3-M8 (M2-M8)	

# Model Introduction

## SD4030SN

Touch panel and position assistant with X,Y servo motors



Model Introduction

Model Introduction

### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 1.0mm x 400mm x 20 pcs	10. 70L filtering system
5. working light x 1pc	11. With paper filer x1, circulation pump x1,
6. linear scale 5 um X, Y axis, XY servo motor	high pressure pump (pneumatic) x1, FRL set x1

### Standard Function

1. Three-axis digital display	6. LAN, USB port support
2. Built-in parameters	7. Graphic color management
3. EDGE function	8. Position assistant with auto-moving
4. Auto-depth control	
5. NC/ISO, DXF drawing support	

### Specification

Item	Model	SD4030SN	Unit
X, Y travel	AC Servo	400x300	mm
Z travel (electrode length)	DC Servo	360 (400)	mm
W axis travel	Manual	50-400	mm
Table size	Bar	450x335	mm
	Flat	450x395	
MAX workpiece size		825x645	mm
MAX workpiece weight		500	KG
Machine size		1600x1650	mm
Net weight		1350+100	KG
Filtering system		70	Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz	
MAX power consumption		2.5KW / 3KW	
MAX machining current		SD25A / SD boost 50A	
X Y Linear scaler		Fagor 5um	
Linear system		linear guideway and ballscrew	
Port		USB / LAN	
Drilling capability	0.1-0.3	○	
	0.3-1.5	◎	
	1.5-3.0	◎	
	3.0-6.0	○ / ◎ Boost 50A	
	M2-M8	Option	

### Optional Accessories

1. 4th axis control/ linear W axis or angular B axis	5. Thread tapping device M3-M8 (M2-M8)
2. SD boost power 50A / HCD Power 50A	6. Submerged tank
3. Remote controller	7. Rotary table 1 axis, C axis
4. Carbide circuit and device	8. Rotary and Tilting table 2 axis, A and C axis

## Model Introduction

### FD22KNC / SD16KNC / SD22KNC / SD24KNC

Compact NC controller



SD22KNC CE



70L filtering

#### Standard Accessories

- |  |   |
|--|---|
| 1. paper filter x 1 pc                   | 7. workpiece jig x 1 set                      |
| 2. ceramic guide 0.5, 1.0mm x 1 pc       | 8. pad for magnetic tool x 1 pc               |
| 3. electrode holder 0330 x 1 pc          | 9. start kits and tool x 1 set                |
| 4. brass tube 0.5, 1.0mm x400mm x 60 pcs | 10. 70L filtering system                      |
| 5. working light x 1pc                   | 11. With paper filer x1, circulation pump x1, |
| 6. linear scale 5 um X, Y axis           | high pressure pump (pneumatic) x1, FRL set x1 |

#### Standard Function

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. Three-axis digital display         | 6. Translate and transmission program |
| 2. Built-in parameters (memory)       |                                       |
| 3. Auto EDGE function (one direction) |                                       |
| 4. Auto depth control (INC/ABS)       |                                       |
| 5. 3000 line program                  |                                       |

#### Specification

Item	Model	FD22KNC	SD16KNC	SD22KNC	SD24KNC	Unit
X, Y travel	AC Servo	300x200			400x250	mm
Z travel (electrode length)	DC Servo	360 (400)				mm
W axis travel	Manual	25-300				mm
Table size	Flat	300x245B	435x220F	450x208F	450x260F	mm
MAX workpiece size		690x550	620x400	680x500	830x570	mm
MAX workpiece weight		250				KG
Machine size		1200x1200	1400x1350	1450x1350	1450x1350	mm
Net weight		650+100	820+100	700+100	750+100	KG
Filtering system		70				Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz				
MAX power consumption		5KVA	2.5KW / 3KW			
MAX machining current		HCD50A	SD 25A / SD boost 50A			
X Y Linear scaler		Fagor 5um				
Linear system		Hard way and ball screw				
Port		RS232				
Drilling capability	0.1-0.3	○	○			
	0.3-1.5	◎	◎			
	1.5-3.0	◎	◎			
	3.0-6.0	◎	○ / ◎ Boost 50A			
	M2-M8	-	Option			

#### Optional Accessories

- |  |                             |
|--|-----------------------------|
| 1. 4th axis control/ linear W axis     | 6. Auto electrode changer   |
| 2. SD boost power 50A                  | 7. Submerged tank (SD22KNC) |
| 3. HCD power 50A                       |                             |
| 4. Carbide circuit and device          |                             |
| 5. Thread tapping device M3-M8 (M2-M8) |                             |

## Model Introduction

### SD4030NC / SD5040NC / SD6040NC

Compact NC controller



Model Introduction

Model Introduction

#### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 0.5, 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 0.5, 1.0mm x400mm x 60 pcs	10. 70L filtering system
5. working light x 1pc	11. With paper filer x1, circulation pump x1,
6. linear scale 5 um X, Y axis	high pressure pump (pneumatic) x1, FRL set x1

#### Standard Function

1. Three-axis digital display	6. Translate and transmission program
2. Built-in parameters (memory)	
3. Auto EDGE function (one direction)	
4. Auto depth control (INC/ABS)	
5. 3000 line program	

#### Specification

Item	Model	SD4030NC	SD5040NC	SD6040NC	Unit
X, Y travel	AC Servo	400x300	500x400	600x400	mm
Z travel (electrode length)	DC Servo	360 (400)			mm
W axis travel	Manual	50-400			mm
Table size	Bar	450x335	600x435	600x435	mm
	Flat	450x395	625x420	625x420	
MAX workpiece size		680x500			mm
MAX workpiece weight		500			KG
Machine size		1600x1650	1600x1750	1600x1750	mm
Net weight		1300+100	1400+100	1400+100	KG
Filtering system		70			Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz			
MAX power consumption		2.5KW / 3KW			
MAX machining current		SD 25A / SD boost 50A			
X Y Linear scaler		Fagor 5um			
Linear system		linear guideway and ballscrew			
Port		RS232			
Drilling capability	0.1-0.3	○			
	0.3-1.5	◎			
	1.5-3.0	◎			
	3.0-6.0	○ / ◎ Boost 50A			
	M2-M8	Option			

#### Optional Accessories

1. 4th axis control/ linear W axis or angular B axis	5. Auto electrode changer
2. SD boost power 50A / HCD Power 50A	6. Submerged tank
3. Carbide circuit and device	7. Rotary table 1 axis, C axis
4. Thread tapping device M3-M8 (M2-M8)	8. Rotary and Tilting table 2 axis, A and C axis

# Model Introduction

## SDNC16K

CNC controller



Model Introduction

Model Introduction

### Standard Accessories

1. paper filter x 1 pc	7. workpiece jig x 1 set
2. ceramic guide 0.5, 1.0mm x 1 pc	8. pad for magnetic tool x 1 pc
3. electrode holder 0330 x 1 pc	9. start kits and tool x 1 set
4. brass tube 0.5, 1.0mm x400mm x 60 pcs	10. 70L filtering system
5. working light x 1pc	11. With paper filer x1, circulation pump x1,
6. linear scale 1 um X, Y axis	high pressure pump (pneumatic) x1, FRL set x1

### Standard Function

1. Three-axis digital display	6. LAN and USB port
2. Built-in parameters	7. Color management of hole condition
3. Auto EDGE function	
4. Auto Depth control with auto compensate	
5. NC, DXF, cut- files, G code, G code support	

### Specification

Item	Model	SDNC16K	Unit
X, Y travel	AC Servo	300x200	mm
Z travel (electrode length)	DC Servo	360 (400)	mm
W axis travel	Manual	25-300	mm
Table size	Flat	435x220	mm
MAX workpiece size		620x400	mm
MAX workpiece weight		250	KG
Machine size		1450x1340	mm
Net weight		820+100	KG
Filtering system		70	Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz	
MAX power consumption		2.5KW / 3KW	
MAX machining current		SD25A / SD boost 50A	
X Y Linear scaler		Fagor 1um	
Linear system		Flat & V way & Ballscrew	
Port		USB / LAN	
Drilling capability	0.1-0.3	○	
	0.3-1.5	◎	
	1.5-3.0	◎	
	3.0-6.0	○ / ◎ Boost 50A	
	M2-M8	Option	

### Optional Accessories

1. 4th axis control/ linear W axis, Rotary table 1 axis, C axis	5. Auto electrode changer
2. SD boost power 50A / HCD Power 50A	6. Submerged tank
3. Carbide circuit and device	
4. Thread tapping device M3-M8 (M2-M8)	

## Model Introduction

### SDNC4030 / SDNC5040 / SDNC6040

CNC controller



SDNC6040 with AEC16



#### Standard Accessories

- |  |   |
|--|---|
| 1. paper filter x 1 pc                   | 7. workpiece jig x 1 set                      |
| 2. ceramic guide 0.5, 1.0mm x 1 pc       | 8. pad for magnetic tool x 1 pc               |
| 3. electrode holder 0330 x 1 pc          | 9. start kits and tool x 1 set                |
| 4. brass tube 0.5, 1.0mm x400mm x 60 pcs | 10. 70L filtering system                      |
| 5. working light x 1pc                   | 11. With paper filer x1, circulation pump x1, |
| 6. linear scale 1 um X, Y axis           | high pressure pump (pneumatic) x1, FRL set x1 |

#### Standard Function

- |  |                                       |
|--|---------------------------------------|
| 1. Three-axis digital display                  | 6. LAN and USB port                   |
| 2. Built-in parameters                         | 7. Color management of hole condition |
| 3. Auto EDGE function                          |                                       |
| 4. Auto Depth control with auto compensate     |                                       |
| 5. NC, DXF, cut- files, G code, G code support |                                       |

#### Specification

Item	Model	SDNC4030	SDNC5040	SDNC6040	Unit
X, Y travel	AC Servo	400x300	500x400	600x400	mm
Z travel (electrode length)	DC Servo	360 (400)			mm
W axis travel	Manual	50-400			mm
Table size	Bar	450x335	600x435	600x435	mm
	Flat	450x395	625x420	625x420	
MAX workpiece size		680x500			mm
MAX workpiece weight		500			KG
Machine size		1600x1650	1600x1750	1600x1750	mm
Net weight		1300+100	1450+100	1450+100	KG
Filtering system		70			Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz			
MAX power consumption		2.5KW / 3KW			
MAX machining current		SD 25A / SD boost 50A			
X Y Linear scaler		Fagor 1um			
Linear system		linear guideway and ballscrew			
Port		USB / LAN			
Drilling capability	0.1-0.3	○			
	0.3-1.5	◎			
	1.5-3.0	◎			
	3.0-6.0	○ / ◎ Boost 50A			
	M2-M8	Option			

#### Optional Accessories

- |                                     |                               |
|-------------------------------------|-------------------------------|
| 1. 4th axis control/ linear W axis, | 4. Carbide circuit and device |
| Rotary table 1 axis, C axis         | 5. Auto electrode changer     |
| 2. SD boost power 50A               | 6. Submerged tank (SDNC4030)  |
| 3. HCD Power 50A                    |                               |

## Model Introduction

### MD20A / MD20ANC / MDNC20A

special designed for small holes



#### Standard Accessories

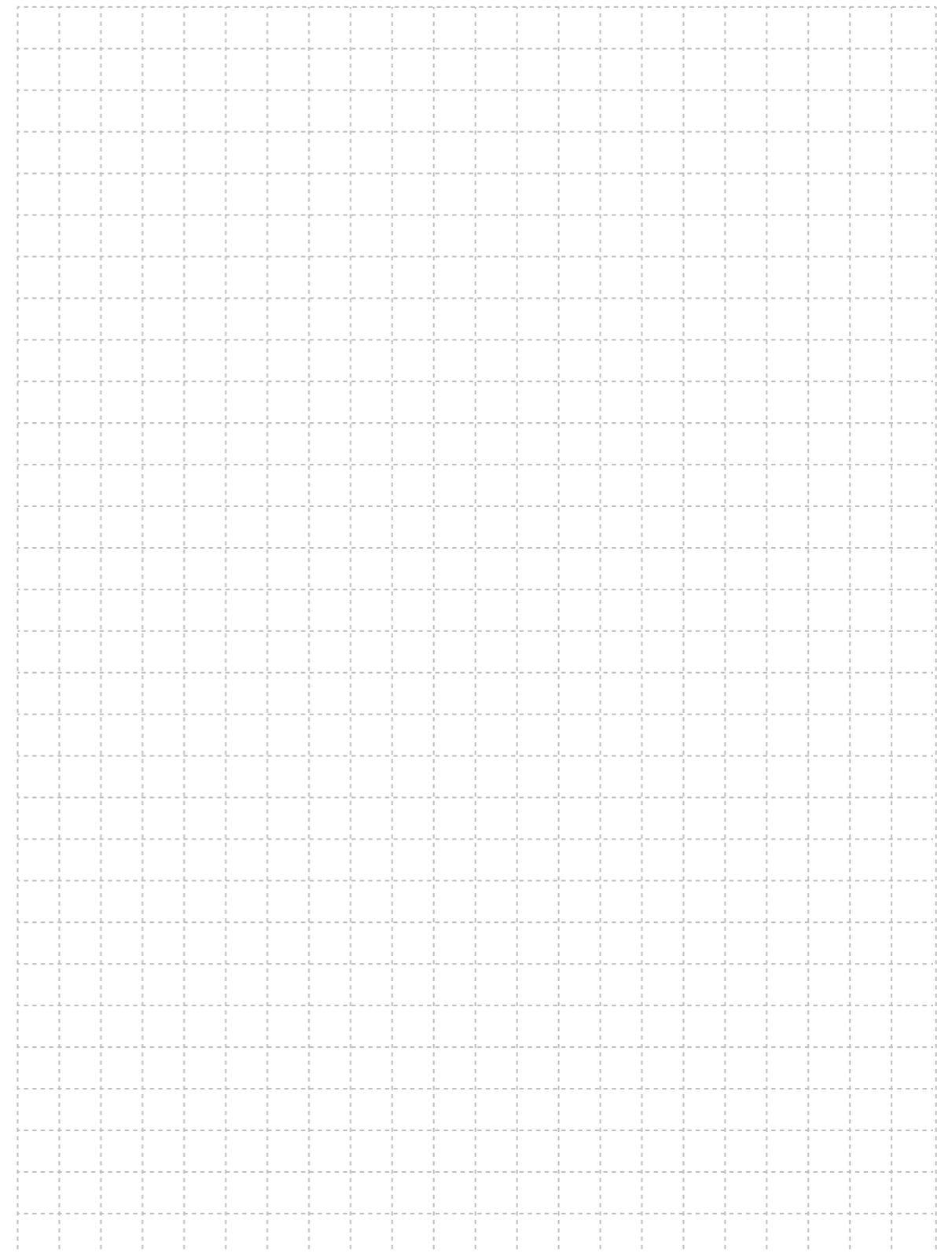
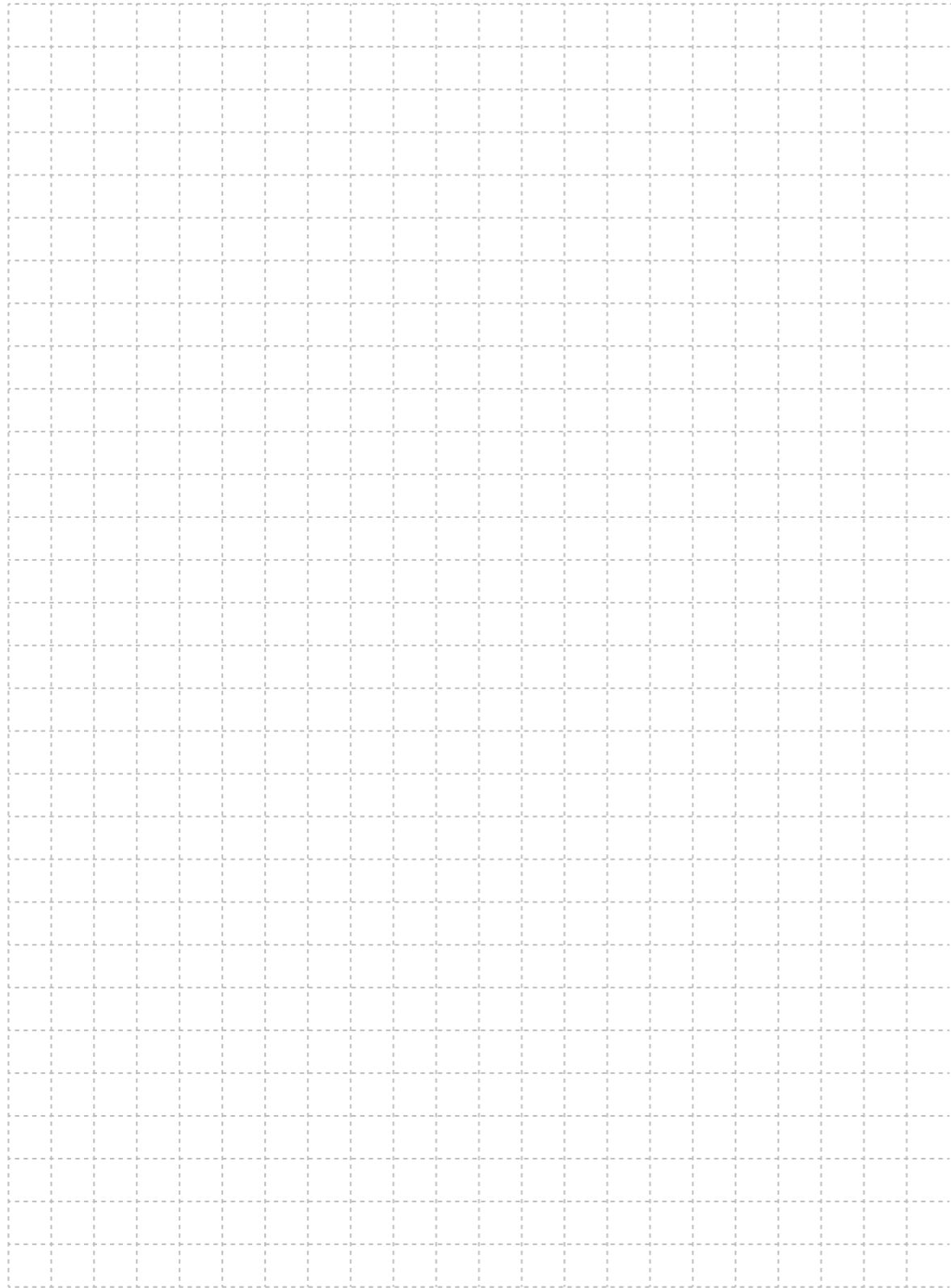
- |                                     |   |
|-------------------------------------|---|
| 1. paper filter x 2 pc              | 8. pad for magnetic tool x 1 pc   |
| 2. ceramic guide 0.2mm x 1 pc       | 9. start kits and tool x 1 set  |
| 3. electrode holder 0115 x 1 pc     | 10. 40L filtering system x 2 sets, FRL set x1                                   |
| 4. brass tube 0.2mm x200mm x 20 pcs | 11. With paper filer x1, circulation pump x1, high pressure pump (pneumatic) x1 |
| 5. working light x 1pc              | 12. Carbide circuit and device  |
| 6. linear scale 5 um X, Y axis      |   |
| 7. workpiece jig x 1 set            |   |

#### Standard Function

- |  |                     |
|--|---------------------|
| 1. two-axis digital display, Three-axis digital display including ADC (optional) | 3. EDGE function    |
| # ADC means Auto depth control   | 4. inch/mm function |
| 2. built-in parameters (memory)  |                     |

#### Specification

Item	Model	MD20A	MD20ANC	MDNC20A	Unit
X, Y travel	Manual / AC servo	200x200			mm
Z travel (electrode length)	DC Servo	260 (300)			mm
W axis travel	Manual	15-150			mm
Table size	Flat	225x225			mm
MAX workpiece size		425x380			mm
MAX workpiece weight		50			KG
Machine size		1600x1350			mm
Net weight		750			KG
Filtering system		40+40			Liter
Input voltage		Local voltage, 3 Phases with PE, 50~60Hz			
MAX power consumption		1.5KW			
MAX machining current		MD 15A			
X Y Linear scaler		Fagor 5um / CNC Fagor 1um			
Drilling capability	0.1-0.3	◎			
	0.3-1.5	◎			
	1.5-3.0	○			
	3.0-6.0	---			





## Controller Introduction

### P Panel (manual machine)

#### Standard Function

1. two-axis digital display, Z axis digital display including ADC (option)

# ADC means Auto depth control

2. built-in parameters (memory)

3. EDGE function

4. inch/mm function

#### Optional Accessories

1. Remote controller

6. Indexer C axis

2. Thread tapping device M3-M8 (M2-M8)

3. Carbide circuit and device

4. Auto electrode changer

5. Tilting head (manual)

### S Panel (manual machine)

Touch panel

#### Standard Function

1. Three-axis digital display

6. LAN, USB port support

2. Built-in parameters

7. Graphic color management

3. EDGE function

8. Position assistant

4. Auto-depth control

5. NC/ISO, DXF drawing support

#### Optional Accessories

1. XY axis with servo motors and position moving function

2. Thread tapping device M3-M8 (M2-M8)

3. Carbide circuit and device

4. Tilting head (manual)

5. Indexer C axis

## Controller Introduction

### NC controller

#### Standard Function

- |   |                                       |
|---|---------------------------------------|
| 1. Three-axis digital display                           | 6. Translate and transmission program |
| 2. Built-in parameters (memory)                         |                                       |
| 3. EDGE function (one direction)                        |                                       |
| 4. Auto-depth control (INC/ABS)                         |                                       |
| 5. NC, DXF, cut- files support, up to 3000-line program |                                       |

#### Optional Accessories

- |  |
|--|
| 1. 4th axis control, Linear W axis / Angular B axis              |
| 2. Thread tapping device M3-M8 (M2-M8)                           |
| 3. Carbide circuit and device                                    |
| 4. Auto electrode changer 16 pcs and middle support arm          |
| 5. Indexer C axis, Rotary and Tilting table 2 axis, A and C axis |

### CNC controller

Touch panel

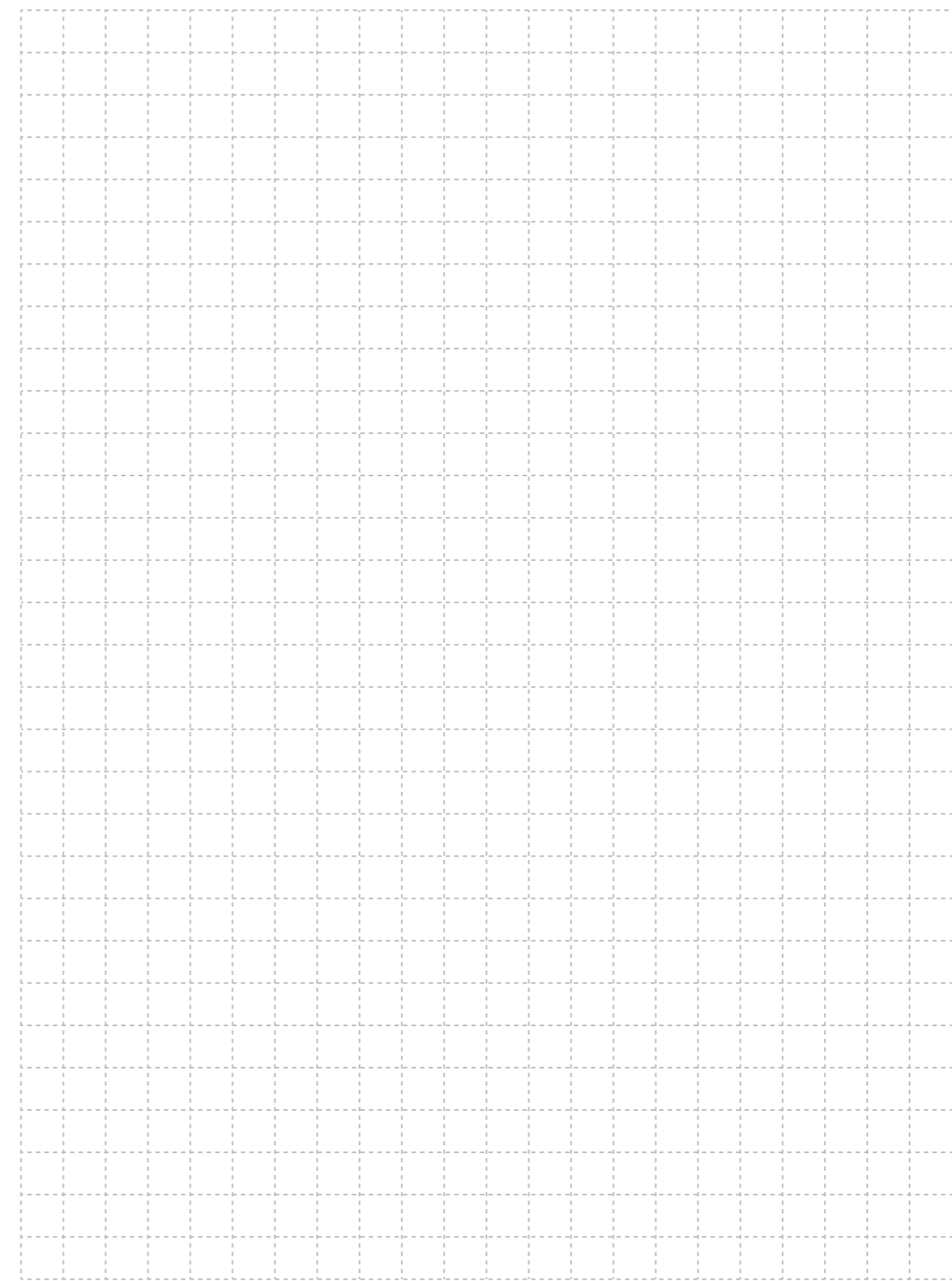
#### Standard Function

- |  |                             |
|--|-----------------------------|
| 1. Three-axis digital display              | 6. LAN and USB port         |
| 2. Built-in parameters                     | 7. Graphic color management |
| 3. EDGE function                           |                             |
| 4. Auto Depth control with auto compensate |                             |
| 5. NC, DXF, cut- files, GM code support    |                             |

#### Optional Accessories

- |   |
|---|
| 1. 4th axis control, Linear W axis / Angular B axis     |
| 2. Carbide circuit and device                           |
| 3. Auto electrode changer 16 pcs and middle support arm |
| 4. Indexer C axis                                       |

	<b>P</b>	<b>S</b>	<b>NC</b>	<b>CNC</b>
DRO	2 axis	3 axis	3 axis	3 axis
ADC	option	standard	standard	auto compensate
Parameters	memory	memory with save/load/lock function	memory	memory
EDGE function	One axis	One axis	Auto one axis	Auto edge
Program	---	NC, DXF, wire cut- files offset / scaling / mirror / rotate / filter Read Only	NC, DXF, cut- files	NC, DXF, cut- files GM code
PORT	---	USB / LAN	RS232	USB / LAN
System upgrade	---	Update patch for System, EDM parameter and language	---	---



## Generator Introduction

### Generator For Standard And Option

	SD16K	SD22K	SD24K	FD22K	SD4030	SD5040	SD6040	MD20A
SD25A	○	○	○	---	○	○	○	✓
SD50A	✓	✓	✓	---	✓	✓	✓	---
HCD50A	✓	✓	✓	○	✓	✓	✓	---
MD15A	---	---	---	---	---	---	---	○

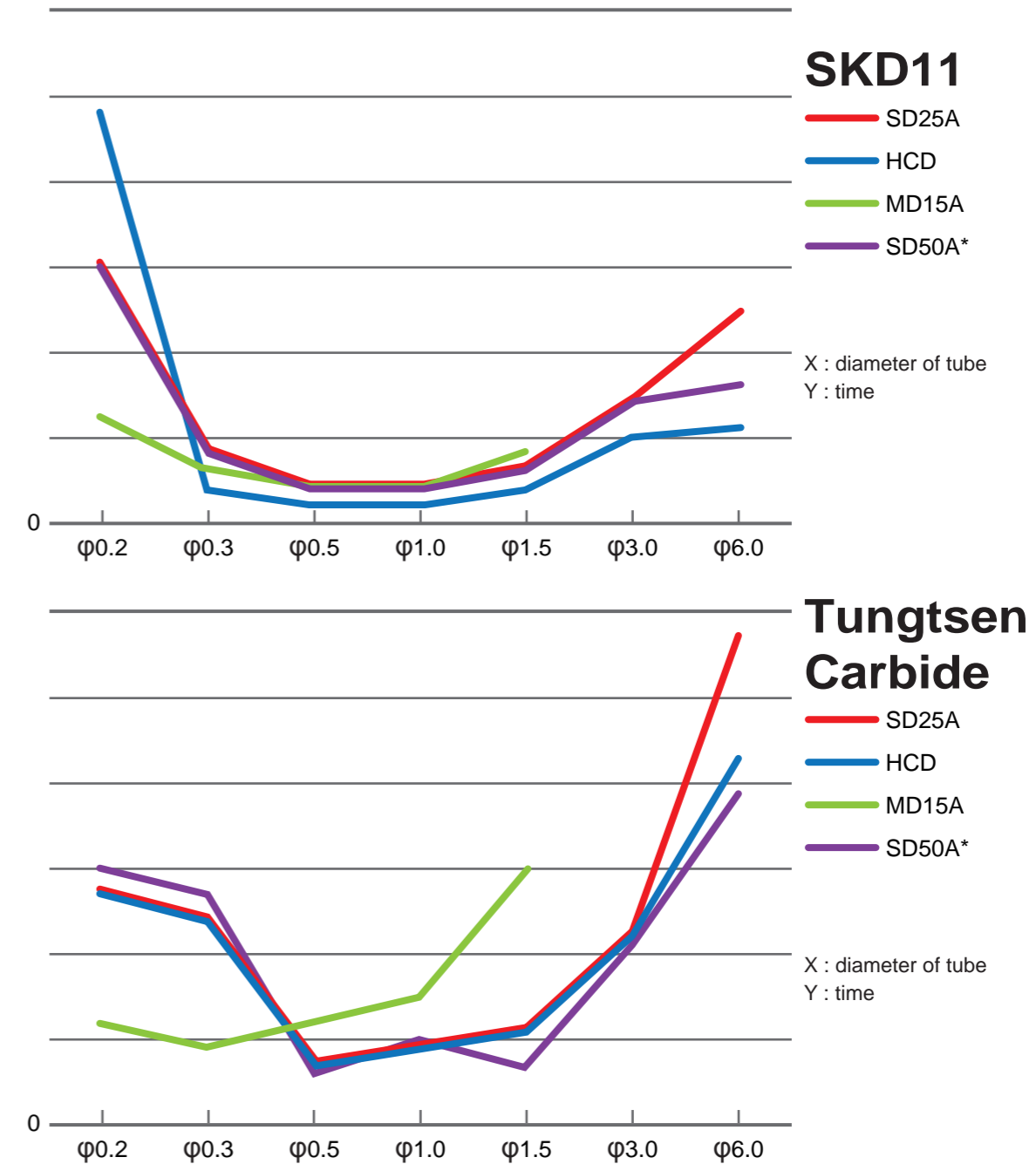
○: Standard    ✓: option

### Drill Capacity

	SD25A	SD50A Boost power	HCD50A	MD15A
0.1-0.3 mm	○	○	△	◎
0.3-1.5 mm	○	○	◎	○
1.5-3.0 mm	○	○	◎	---
3.0-6.0 mm	△	○	◎	---
M2-M6	○	○	---	---
M8	△	○	---	---

△: Good    ○: Fast    ◎: Very fast

### Reference Machining Time

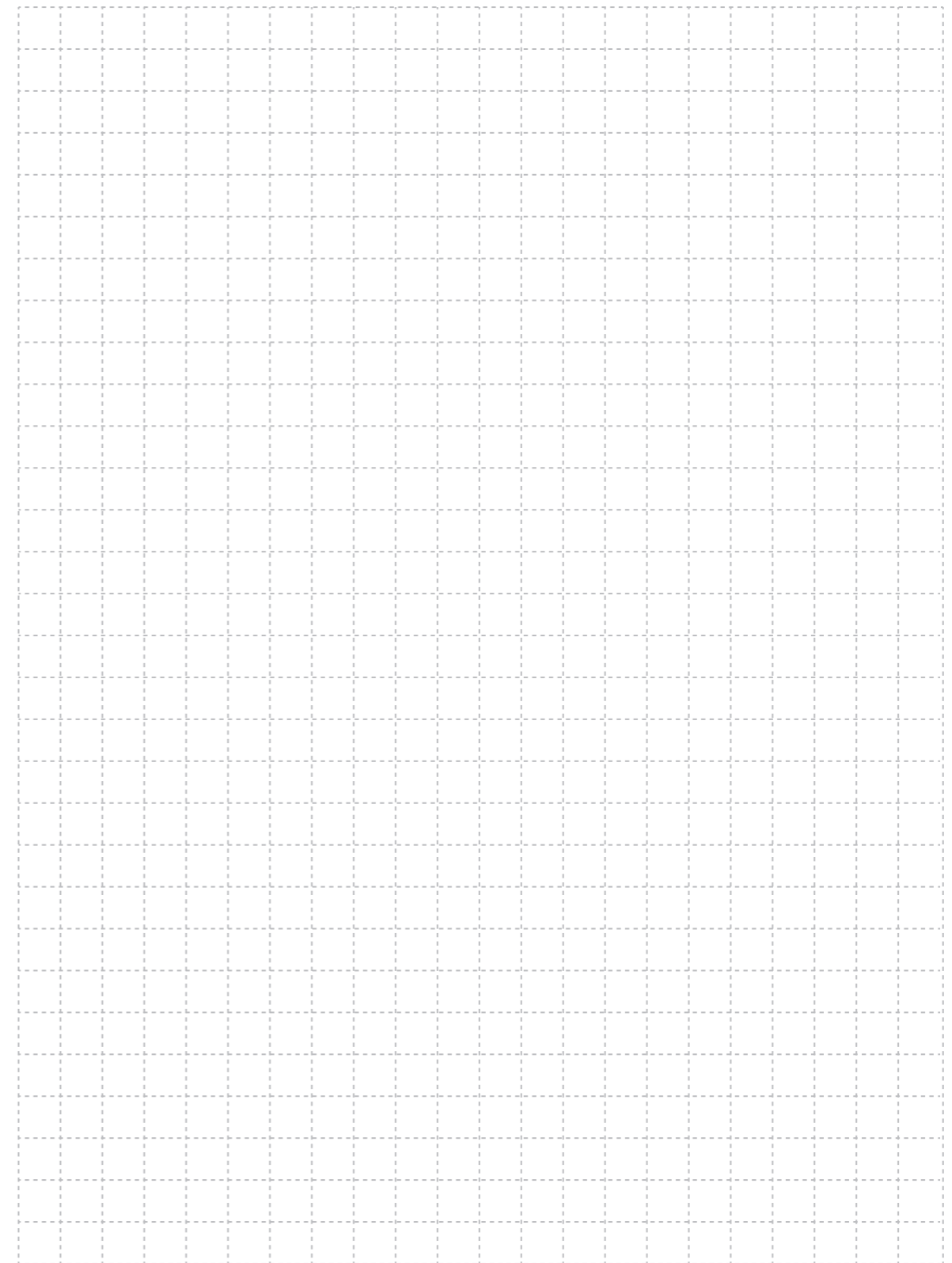
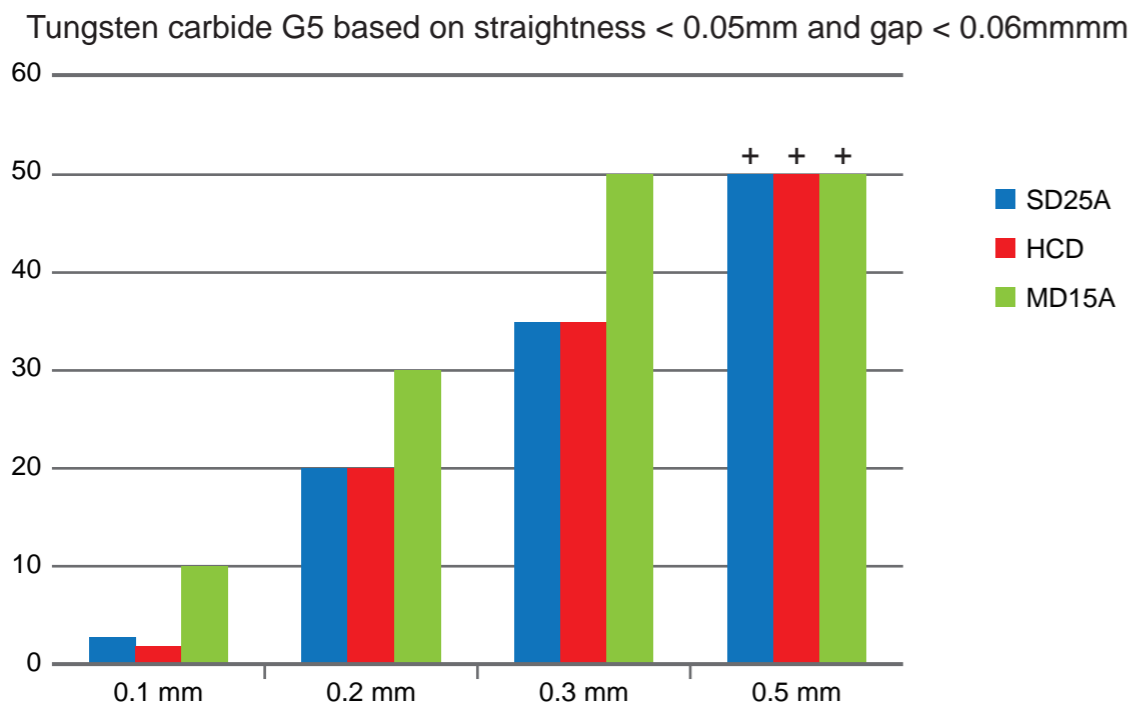
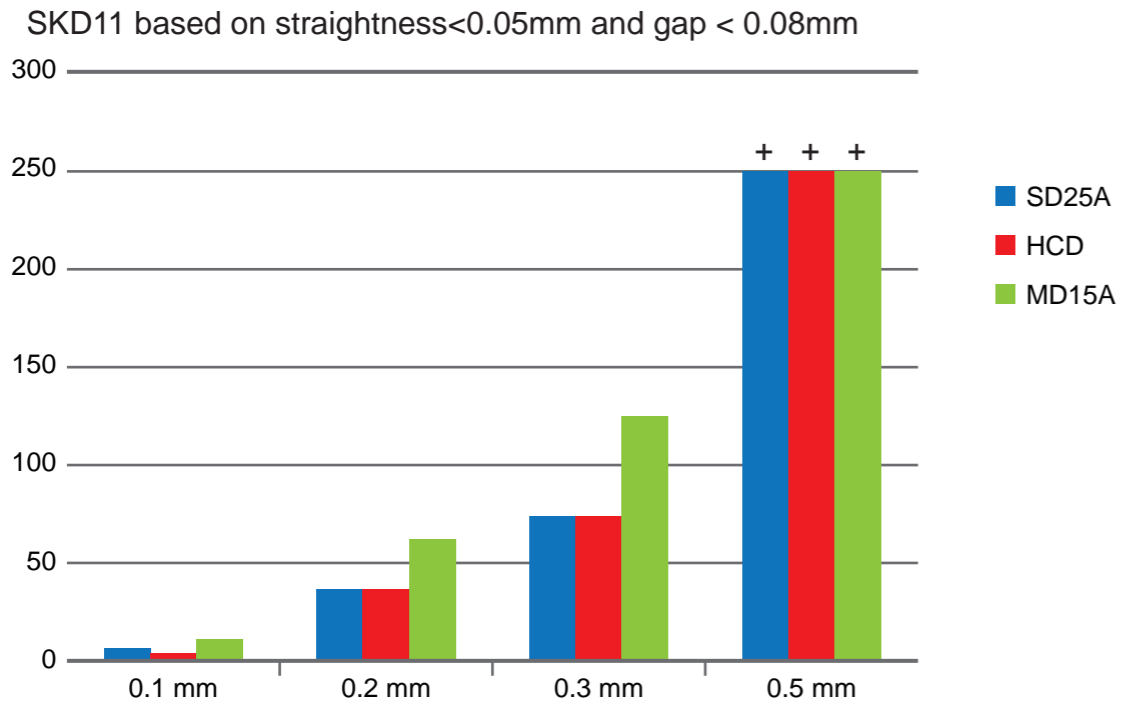


\*BOOST on

Depend on different workpieces, depth, tubes and solutions

## Generator Introduction

### Reference Drilling Depth



## Optional Accessories

### High Speed EDM Thread Tapping Device

Directly tapping, without drilling hole first.  
Specially good at harden steal, tungsten carbide.

	SD16K	SD22K	SD24K	FD22K	SD4030	SD5040	SD6040	MD20A
SD25A	○	○	○	---	○	○	○	---
SD50A	✓	✓	✓	---	✓	✓	✓	---

This option is with SD power only:  
○: Good for M2~M6    ✓: Good for M2~M8    --- : No option

### Reference Tapping Time

Tapping Size	M3	M4	M5	M6	M8
Workpiece Thinckness					
SKD11 Harden 25mm (MIN: SEC)	07:10	16:00	17:00	27:30	30:00
CARBIDE G5 10mm (MIN: SEC)	09:00	20:00	24:10	34:00	36:50



### Auto Electrode Changer (16PCs)



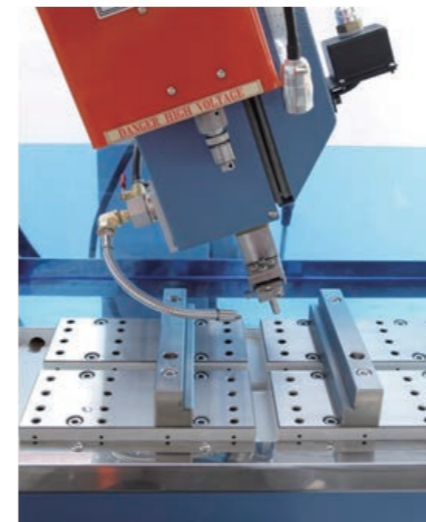
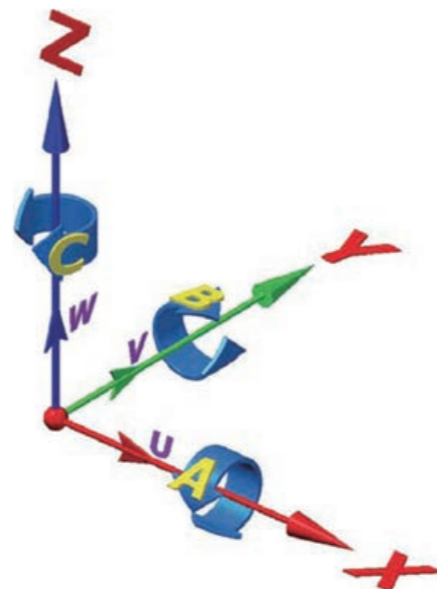
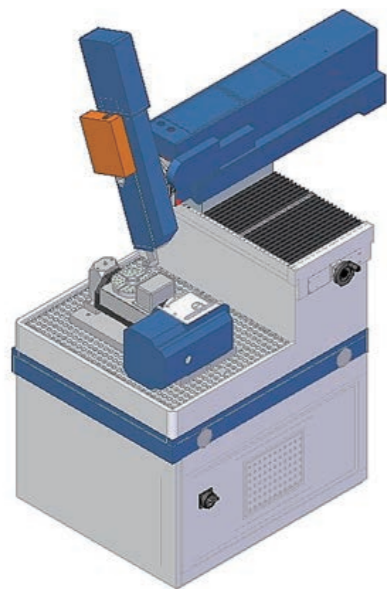
AEC 16pcs with middle support arm.

### Remote Control For Manual Machine

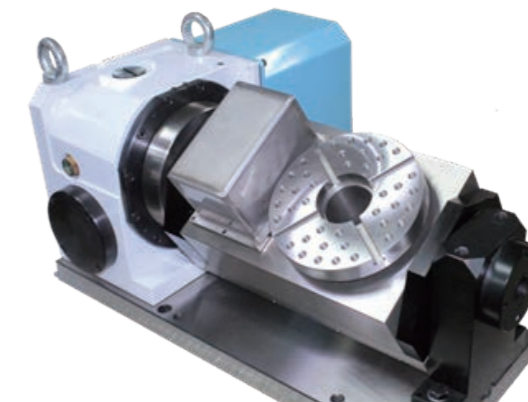


## Optional Accessories

### Multi-Axes



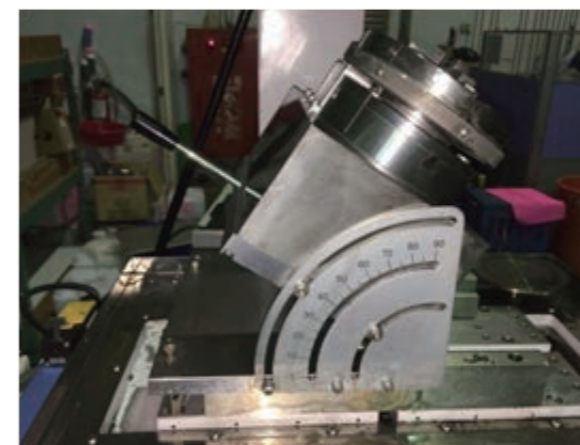
**Tilting head B axis**  
(manual or programmable)



**Rotary and Tilting table 2 axis, A and C axis**  
(two axis programmable)

Standard Machine	Manual	NC/CNC
Z axis	Auto	Auto
X axis	Manual	Auto
Y axis	Manual	Auto
W axis	Manual	Manual

Option	W axis	Tilting Head B axis		Rotary Table C axis		Rotary and Tilting Table 2 axis
A axis	-	---		Manual	---	Auto
B axis	-	Auto	Manual	---	Manual	---
C axis	-	---		Auto		Auto
W axis	Auto	---		---		---



**Rotary table C axis  $\phi 150\text{mm}$**  (excluding adaptor and chuck)  
 $\phi 160$  chuck possible

## Optional Accessories

### Customized Machine

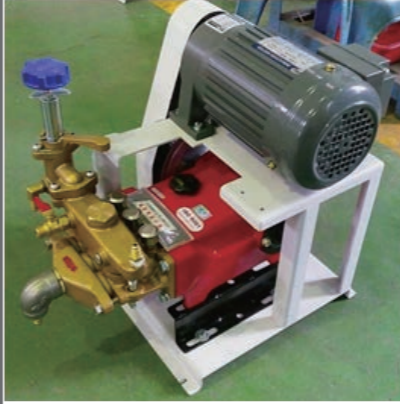
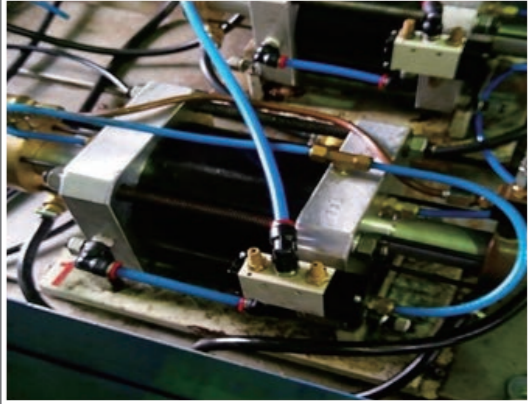


**SD16030NC**



**SDNC6040**  
with extra height 300mm  
(350-700mm)

### High Pressure Pump

	ELECTRICAL PUMP	AIR PUMP
Picture		
Model	SD / FD	SD / FD
Size	<0.2 mm	△
	0.2-1.5	○
	1.5-3.0	○
	3.0-6.0	⊙
	Tapping	⊙
N.W.	24KG	12KG
Dimension	50x30x40 cm	40x20x20 cm
Note		



# Optional Accessories

## Filtering System



**FLT45**  
 Standard filtering system 45L  
 Circulation Pump 1 set  
 Paper filter SUS 1 PC  
 High pressure pump 1 set



**FLT70**  
 Filtering system 70L  
 Circulation Pump 1 set  
 Paper filter SUS 1 PC  
 High pressure pump 1 set



**FLT70W/O**  
 Filtering system 70L Oil/water  
 Oil/water separate tank 1 set  
 Circulation Pump 2 sets  
 Paper filter SUS 1 PC  
 Paper filter (oil) 1 PC  
 High pressure pump 2 sets



<b>AFS100</b>		
Auto Filtering system 100L	Water	Oil/water
with auto conductivity controller and oil		
Oil/water separate tank	----	1 set
Circulation Pump	1 set	2 sets
Paper filter SUS	1 set	2 sets
High pressure pump	1 set	2 sets
Resin Tank	1 set	1 set



**WFLT50**  
 wire-cut level filtering system 50L  
 Circulation Pump 1 set  
 Paper filter 340mm 1 set  
 Cotton filter 1 set  
 High pressure pump 1 set  
 Manual resin system 1 set



**WFLT50 AFS**  
 wire-cut level filtering system 50L  
 with auto conductivity control  
 Circulation Pump 1 set  
 Paper filter 340mm 1 set  
 Cotton filter 1 set  
 High pressure pump 1 set  
 Auto conductivity control 1 set  
 Chiller option  
 Resin tank option



**WFLT100 Oil/water**  
 wire-cut level Auto filtering system 100L  
 with auto conductivity controller and oil  
 Oil/water separate tank 1 set  
 Circulation Pump 4 sets  
 Paper filter 340mm 5um 2 sets  
 Cotton filter 1 um 2 sets  
 High pressure pump 2 sets  
 Auto conductivity control 1 set  
 Resin tank option

Optional Accessories

Optional Accessories

## Optional Accessories

### SPARE Parts



#### High precision electrode holder

EH0330	holding range	0.3~3.0mm	
EH0115	holding range	0.1~1.5mm	
ER11	holding range	3~6mm	(M3~M6)
ER16	holding range	3~8mm	(M3~M8)

#### Electrode tubes

0.03-0.05	rods 0.03-0.05
0.08~6.0	copper tube 0.08~6.0mm
0.8~6.0	coreless copper/brass tube 0.8~6.0mm
M2~M8	Tapping electrode M2~M8

#### Guides

0.03-0.1	Diamond guides 0.03-0.1mm
0.05~6.0	ceramic guide 0.05~6.0mm
M2~M8	tapping guide M2~M8

## Samples

### Tapping



**Workpiece** tungsten carbide  
**Size** M3 M4 M5 M6 M8

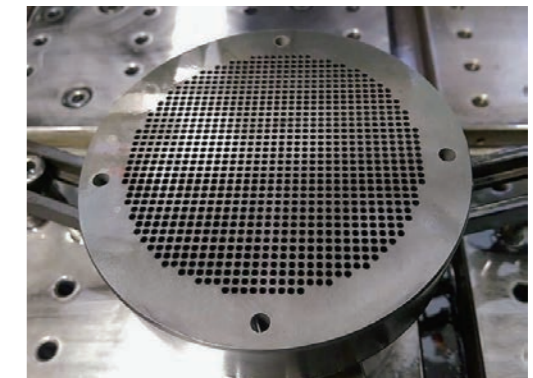


**Workpiece** Harden Steel  
**Size** M2 M3 M4 M5 M6 M8

### Application



**Workpiece** inconel  
**Size** φ1.0 x 35mm



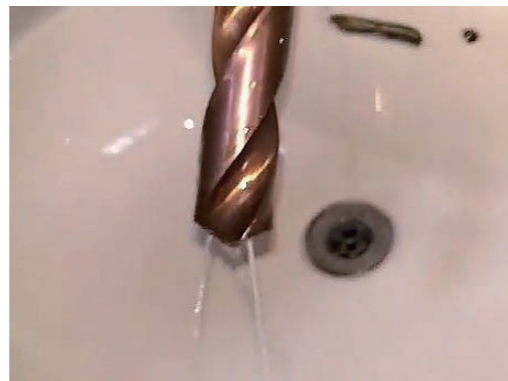
**Workpiece** tungsten carbide  
**Size** 1093- φ1.6 x 28mm

**Samples**

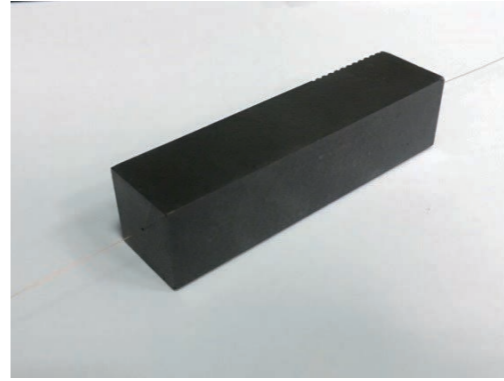
**Deep Hole 100 times depth/hole ratio**



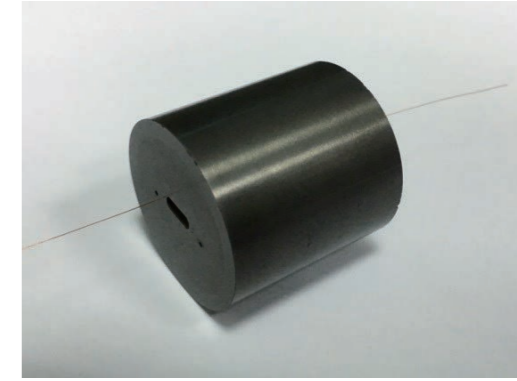
**Workpiece reamer**  
Size 6 -  $\phi$ 1.0mm



**Workpiece tungsten carbide**  
Size 2 -  $\phi$ 1.0mm



**Workpiece tungsten carbide**  
Size  $\phi$ 0.5 x 77mm



**Workpiece tungsten carbide**  
Size  $\phi$ 0.2 x 31mm



**Workpiece nozzle**  
Size  $\phi$ 0.2mm



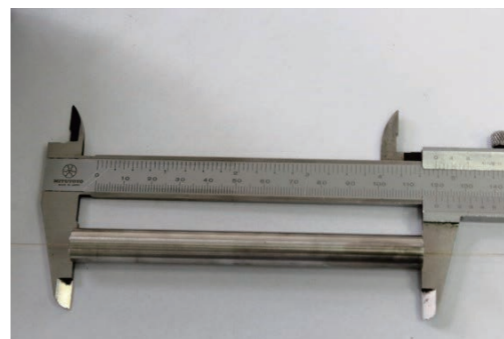
**Workpiece cutting tools**  
Size 4 -  $\phi$ 1.2mm



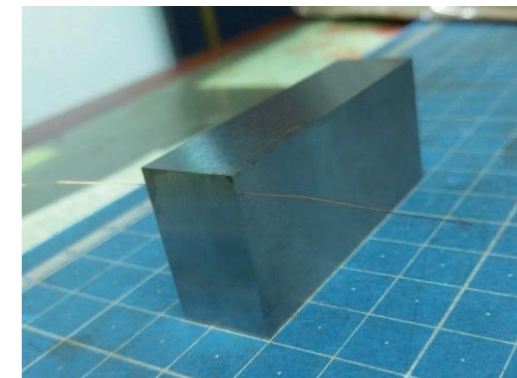
**Workpiece tungsten carbide**  
Size  $\phi$ 0.1 x 13mm



**Workpiece R1 cutting tool**  
Size  $\phi$ 0.2 x 37mm

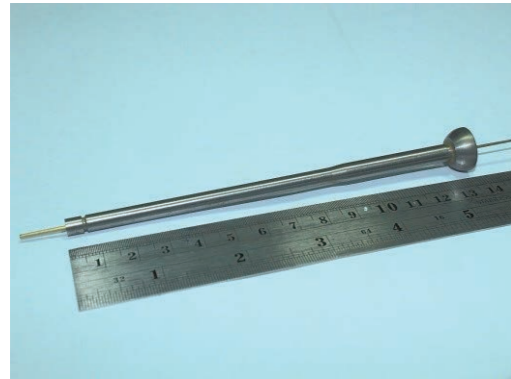


**Workpiece SUS316**  
Size  $\phi$ 0.3 x 120mm



**Workpiece HSS, SKH9**  
Size  $\phi$ 0.13 x 15mm

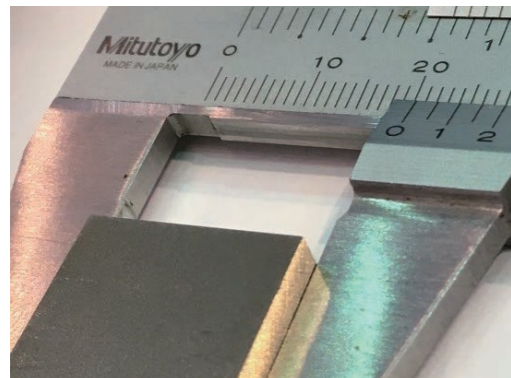
**Samples**



**Workpiece** Stahless  
Size  $\phi 1.2 \times 125\text{mm}$



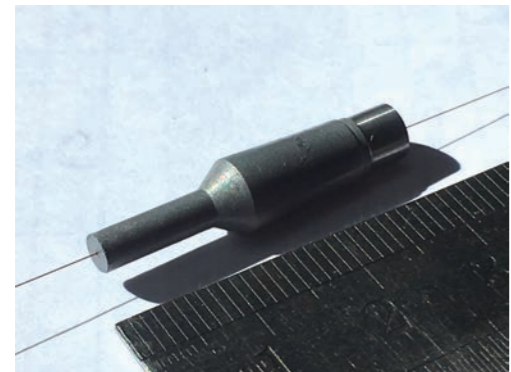
**Workpiece** Titanium, surgical drill  
Size  $\phi 2.5 \times 450\text{mm}$



**Workpiece** Tungtsen carbide, CR20  
Size  $\phi 0.13 \times 20\text{mm}$



**Workpiece** OFHC, pure copper  
Size  $\phi 0.3 \times 67\text{mm}$

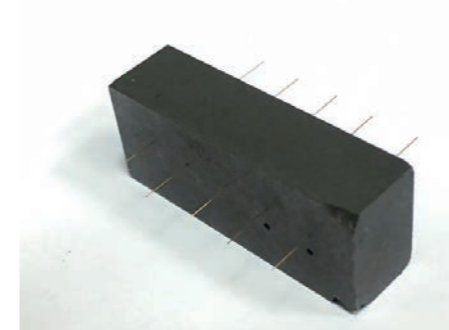


**Workpiece** Nozzle  
Size  $\phi 0.13 \times 13\text{mm}$

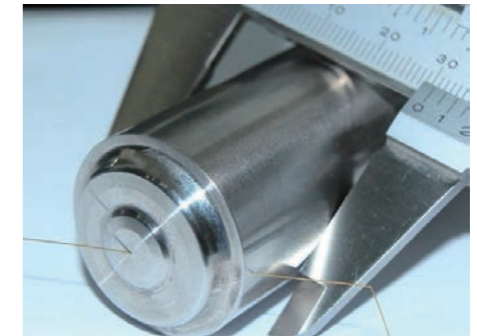


**Workpiece** Steel  
Size  $\phi 0.5 \times 120\text{mm}$

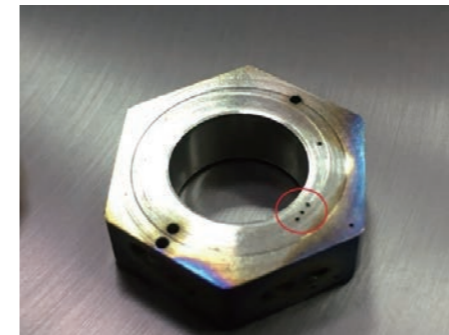
**Small Hole**



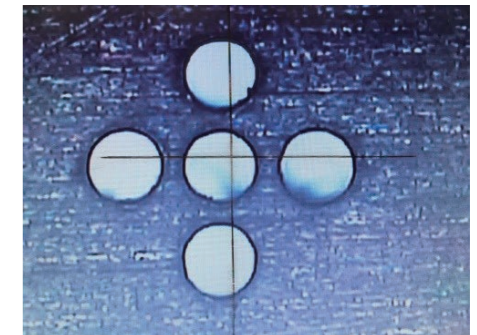
**Workpiece** carbide  
Size  $\phi 0.3 \times 120\text{mm}$



**Workpiece** HSS, SKH9  
Size  $\phi 0.13 \times 15\text{mm}$



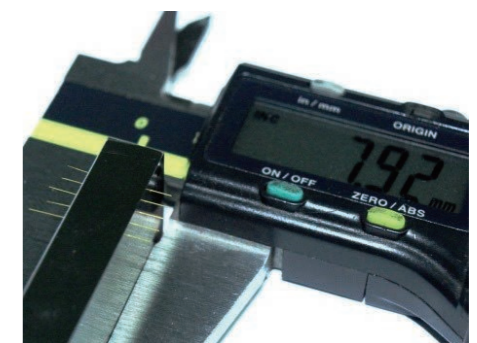
**Workpiece** Titanium  
Size  $\phi 0.2 \times 5\text{mm}$



**Workpiece** SUS304  
Size  $\phi 0.13 \times 7\text{mm}$  with pitch 0.21mm



**Workpiece** M333  
Size  $\phi 0.13 \times 7\text{mm} \times 45 \text{ degree}$



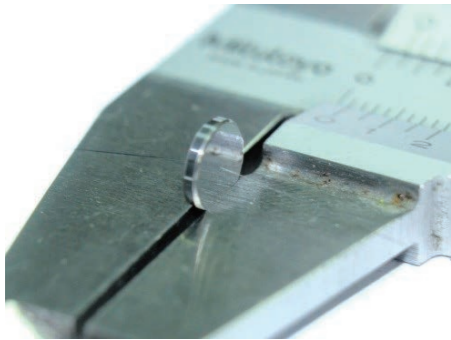
**Workpiece** M333  
Size  $\phi 0.13 \times 8\text{mm}$

Samples

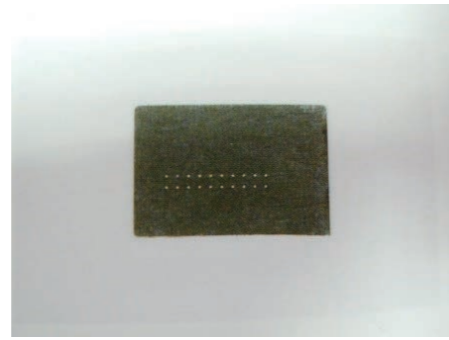
Samples

**Samples**

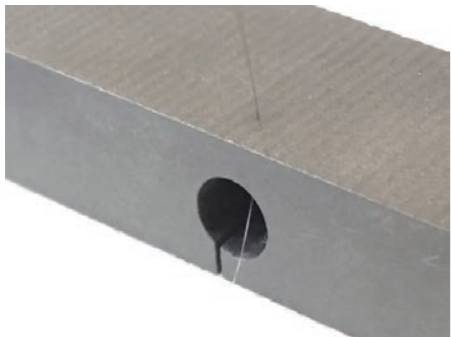
**Small Hole**



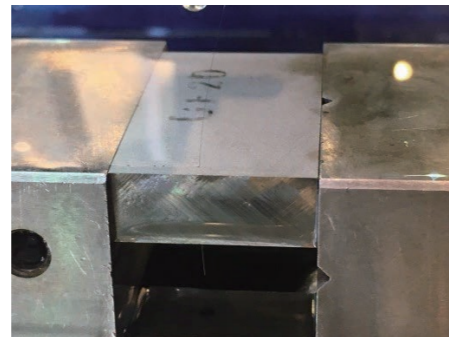
**Workpiece tungsten carbide**  
Size  $\phi 0.05 \times 1\text{mm}$



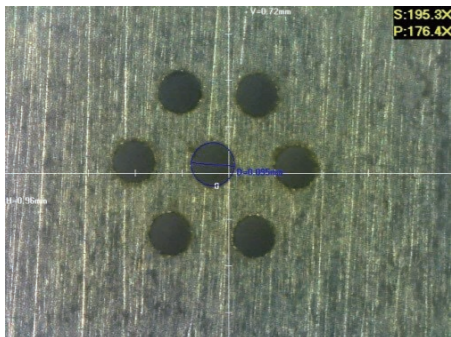
**Workpiece SUS304**  
Size  $\phi 0.05 \times 0.5\text{mm}$



**Workpiece tungsten carbide**  
Size  $\phi 0.08 \times 2\text{mm}$

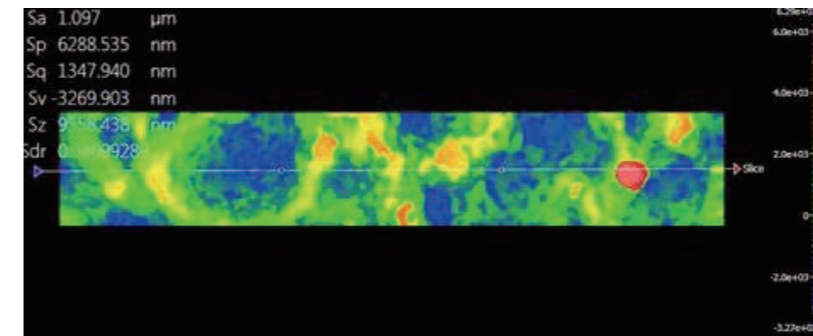


**Workpiece tungsten carbide, CR20**  
Size  $\phi 0.08 \times 5\text{mm}$



**Workpiece SUS304**  
Size  $\phi 0.05 \times 0.5\text{mm}$

**Test Report**



**Surface roughness, Ra 0.9-1.1 $\mu\text{m}$ , carbide**



**High roundness**