DIGITAL READOUT MANUAL

MODEL : JCS900-2AE/3AE

Dear User:

Welcome to the use of JCS900-2AE/3AE DRO System, which is developed by Measurite Pte Ltd, the JCS900-2AE/3AE DRO System is widely used in milling machine, grinding machine、wire-cut, EDM and lathe, the functions can help us to improve efficiency、ease of operation, precise measurement and repeatability. It is now an absolute need to install them on your machine.

The Use of the DRO System , is easily understood by any user. You can use it without needing to finish reading the manual. You can use it very easily and is suitable for both new operator and skilled operator alike.

Safety precautions:

Open the box and remove it from the packing. Plug it with the power cable and test if the DRO powers up and the digit display correctly. It accepts power of 80Vac ~ 240Vac.

1 When you open the box, check the physical appearance is in good condition, if you find something at fault, please contact the seller, be sure not to take dismantle it.

2 The DRO used the alternating current of 110V~220V or 50Hz~60Hz，the electrical connector plugs pin is three core pin which has earth pin.

3 The user be sure not to repair it, the DRO has high-powered piezoelectricity, this could do some damage to people.

4 The chassis is made by ABS plastic , it can't be used in the high temperature .

5 When you do not use it , please turn off the electrical source. It can prolong the life-time of the product.

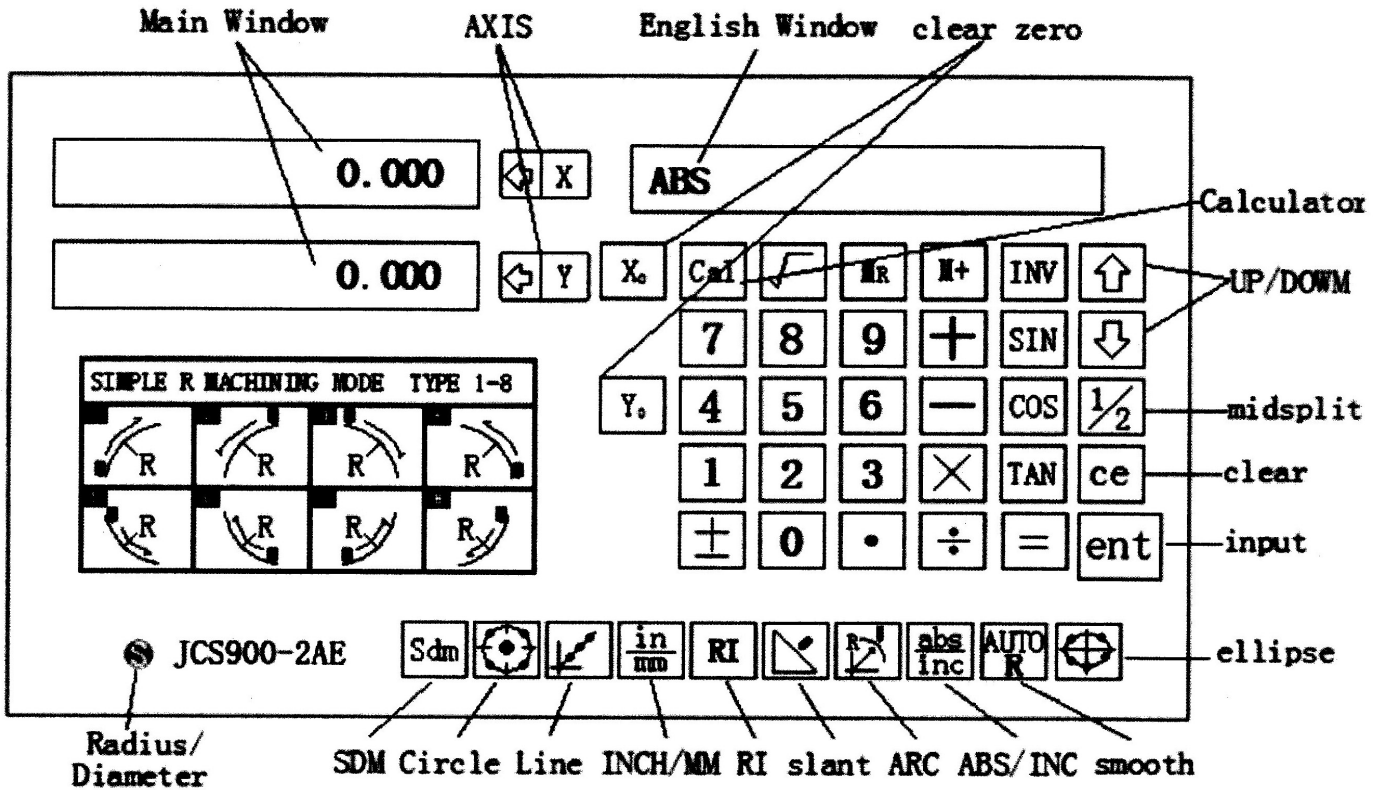6 If the thunder storm comes, close the electrical source.

Routine Maintenance:

1 When you are cleaning the DRO , please turn off the power.

2 Use a dry cloth or brush clean the keyboard / rear panel of the DRO.

3 Do not clean the panel or keyboard by thinner or ethanol.

4 The rear of the casing can be cleaned by detergent。

Promises:

If there are some issue with the DRO operation or the malfunctions, you can contact Measurite Pte Ltd at http://www.aliexpress.com/store/1191142/ email :szjingce@foxmail.com

The Note of the Pressed key

JCS900-2AE/3AE

Main Window   AXIS   English Window   clear zero

Calculator

UP/DOWM

midsplit

clear

input

ellipse

SIMPLE R MACHINING MODE   TYPE 1-8

Radius/
Diameter

SDM Circle Line INCH/MM RI slant ARC ABS/INC smooth

0.000

0.000

ABS

JCS900-2AE

List

JCS900-2AE/3AE, used high-tech component and PCB assembly technique, more function, operate easily, credibility durable. Please read the manual before operation of the machines.

一、Function item

1、Cleared

2、Input coordinate

3、INCH/MM

4、ABS/INC

5、1/2

6、RI

7、Radius/Diameter

8、Calculator

9、SDM

10、Circle-Hole

11、Ellipse-Hole

12、Line-Hole

13、ARC-Hole

14、Smooth

15、Slant

16、Power cut memory

二、nine core bnc connector jack and sense organ connect table

feet size	1	2	3	4	5	6	7	8	9
function	null	0v	null	null	null	signal	5V	signal	RI signal

Clear

$$\boxed{X_0}$$

Function: JCS900-2AE/3AE english prompt   operator and clear the coordinate at any place

e.g:key $\boxed{X_0}$ ──────▶clear X0

key $\boxed{Y_0}$ ──────▶clear Y0

0.000	⇦ X	ABS
0.000	⇦ Y	X_0
		Y_0
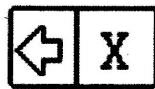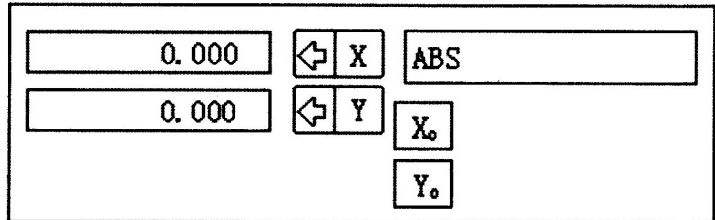
$\boxed{⇦\ X}$ input Coordinate

Function: JCS900-2AE/3AE english prompt the operator and set the workpiece place to any data.

e.g: set the X to 45.8mm

Press in turn: $\boxed{⇦\ X}$ $\boxed{4}$ $\boxed{5}$ $\boxed{\cdot}$ $\boxed{8}$ $\boxed{ent}$

| 45.800 | ⇦ X | ABS |
| 0.000 | ⇦ Y | |
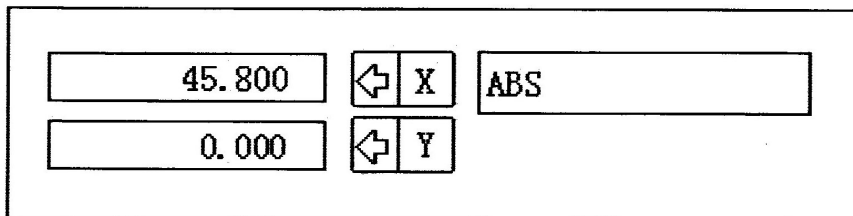
(pour: when you input, the X data will glint)

$\boxed{\frac{in}{mm}}$ INCH/MM

Function: JCS900-2AE/3AE english prompt   it can make the data switch between the mm and inch

Now the mm is 25.400, the inch is 1.0000。

operation steps

e.g 1: now the data is in inch ,we change it to mm.

| 1.0000 | ⟨⟩ X | ABS |
| 0.0000 | ⟨⟩ Y | |

press [in/mm]

| 25.400 | ⟨⟩ X | ABS |
| 0.000 | ⟨⟩ Y | |

e.g 2: now the data is in mm ,we change it to inch.

| 25.400 | ⟨⟩ X | ABS |
| 0.000 | ⟨⟩ Y | |

press [in/mm]

| 1.0000 | ⟨⟩ X | ABS |
| 0.0000 | ⟨⟩ Y | |

(attention: at ABS/INC, SDM it can be switched also)

[ABS/INC] ABS/INC

function : JCS900-2AE/3AE english prompt the dataview table provide two coordinate, they are ABS and INC.

1、The operator can memory the RI to ABS, and switch to INC for operationg.

2、Clear the INC coordinate at any place, the 1/2 can not affect the ABS Coordinate.

3、at ABS coordinate the absolut value can autosave, and the operator can see it at any time.

e.g1: Switch the ABS to INC

| 0.000 | ⇦ X | ABS |

| 0.000 | ⇦ Y | |

Press ABS/INC

| 45.000 | ⇦ X | INC |

| 50.000 | ⇦ Y | |
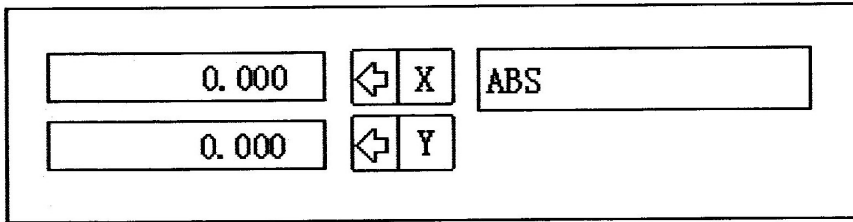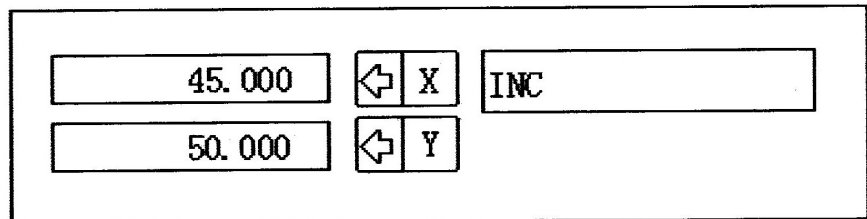
e.g2:Switch the INC to ABS

Press X₀

| 0.000 | ⇦ X | ABS |

| 0.000 | ⇦ Y | |

→
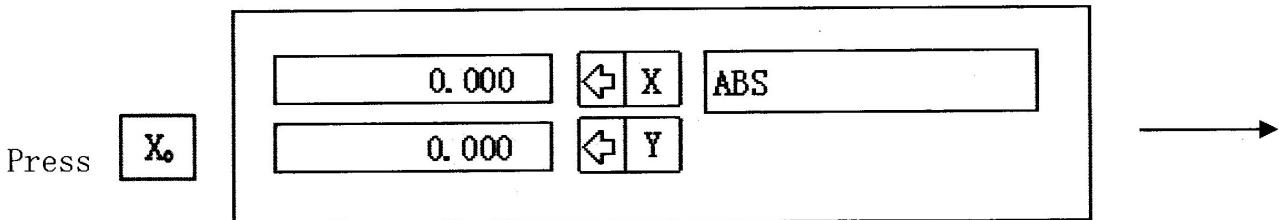
make the X to another side ⟶ press ½ ⟶ Press ⇦ X

operate RI ⟶press ABS/INC ⟶ move the machine tool to RI.

½ Mid-split

Function: JCS900-2AE/3AE english prompt at currently data press ½ and move the machine tool to Zero.

e.g: set the X zero to the middle of the machine tool.

1、move the machine tool to one side ,press X₀

2、move the machine tool to another side, press ½ ,and press ⇦ X

3、move the machine tool to "0.000"

RI (Find RI)

Function: JCS900-2AE/3AE English prompt set the size of Zero and RI

e.g: example for X

1、Clear the X at ABS, press **X₀**

2、press **RI** ⟶ ⟨◁ X⟩

3、move the machine tool when it come by the RI.

When power off, if you move the operation table, you can find the RI by the RI function when you open it next time.

Press **RI** ⟶ ⟨◁ X⟩ move the machine table when it come by RI, the

function, window view **OK······** and beep for "du—du".move the machine

tool to "0.000".

R／D Radius/Diameter

Function: JCS900-2AE/3AE english prompt this function view the Radius size of the operation
workpiece. then set the Diameter follow the user's need.

Cal Calculator

At everyday process, the most tool is calculator besides workpiece.

The Calculator of the JING provide the function for add、minus、multiply、

divide and some function ,contains Sin 、Cos、TAN.etc.

The Calculator function can move the result to the axis which you need to

operate it, the operator just need move the machine tool to zero. the place

is you needed.

e. g: 123+76=199   6×35=210

Press | 1 | | 2 | | 3 | | + | | 7 | | 6 | | = |

| 6 | | × | | 3 | | 5 | | = |

attention: 1、if you input error press | ce | to cancel.

2、when you finished press | ⇦ | X |, the result move to X.

3、at calculator press | X₀ | move the data of X to calculator

| sdm | 300 Group

JCS900-2AE/3AE english prompt the dataview table provide three coordinates:ABS、INC、SDM（SDM0-SDM299）。300 Group user coordinate can use to assistant zero in opeating. ABS is absolutent coordinate. it's established at the begin, it used to be the datum mark of processing workpiece. the SDM is defined relative to absolutent coordinate.

operation steps

Like chart, the origin of the ABS is in the center of the workpiece, the others assistant zero is like pic 1、2、3、4, there are two menthod to set assistant zero.

1 To place clear zero

2 Coordinate input
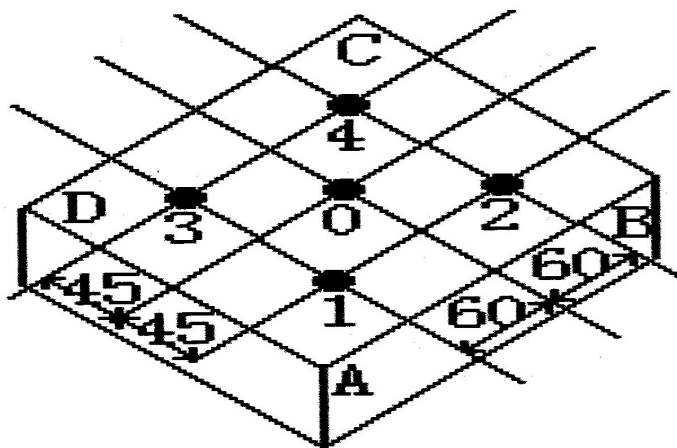
e. g 1: To place clear zero
set the workpiece zero to ABS zero. move the machine tool to SDM begin place and clear zero, when operating without reference to ABS or SDM, move the workpiece to "0. 000".

Steps:

(1) Follow the methods of the midsplit autoly, set the ABS begin to the rectangle centre, AB neat to the X.

AD neat to Y, aim at 0, ABS、X、Y clear near.

Sdm0 X, Y Clear Zero

Sdm1 X, Y Clear Zero

Sdm2 X, Y Clear Zero

Sdm3 X, Y Clear Zero
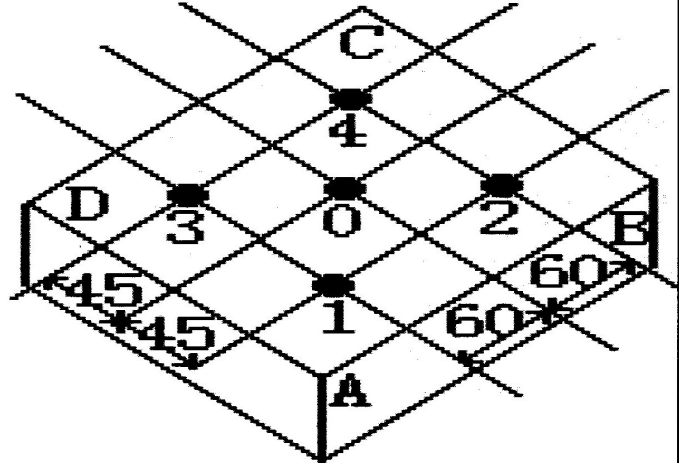
| 0.000 | ◁ X | ABS |
| 0.000 | ◁ Y | |

(1) Set the first point SDM , enter the SDM coordinate, Clear X, Clear Y, move the machine tool to the first point. like pic.

| − 60.000 | ◁ X | SDM. . . . .0 |
| 45.000 | ◁ Y | |

press [X₀] [Y₀]

| 0.000 | ◁ X | SDM. . . . .0 |
| 0.000 | ◁ Y | |

(2) Set the first point SDM1 , enter the SDM1 coordinate, Clear X, Clear

Y, move the machine tool to the second point. like pic.

60.000	⇦ X	SDM. 1
45.000	⇦ Y	

press X₀ Y₀

0.000	⇦ X	SDM. 1
0.000	⇦ Y	
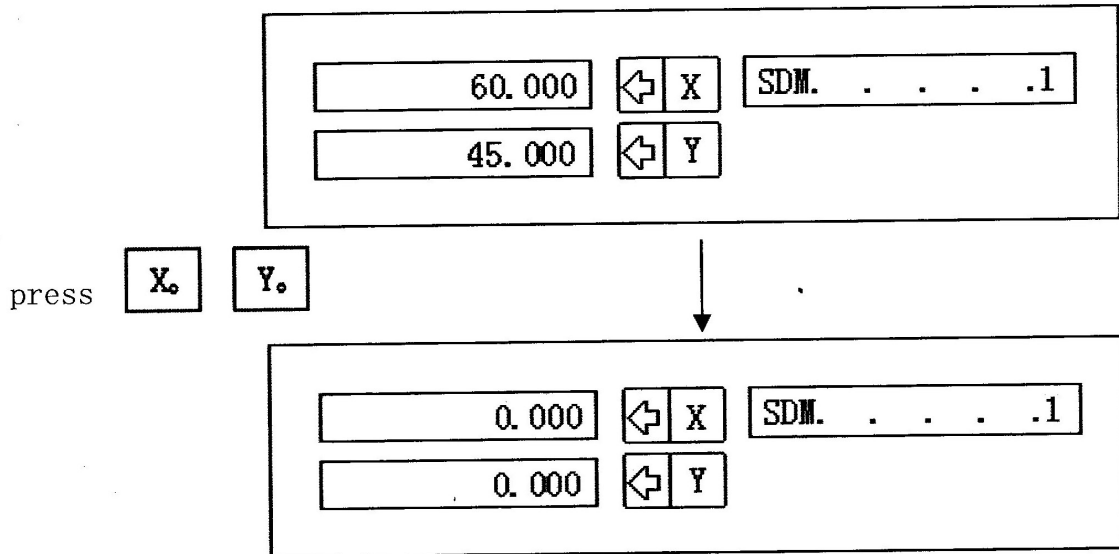
(3) Set the first point SDM2 , enter the SDM2 coordinate, Clear X, Clear Y, move the machine tool to the third point. like pic.

— 60.000	⇦ X	SDM. 2
— 45.000	⇦ Y	

press X₀ Y₀

0.000	⇦ X	SDM. 2
0.000	⇦ Y	
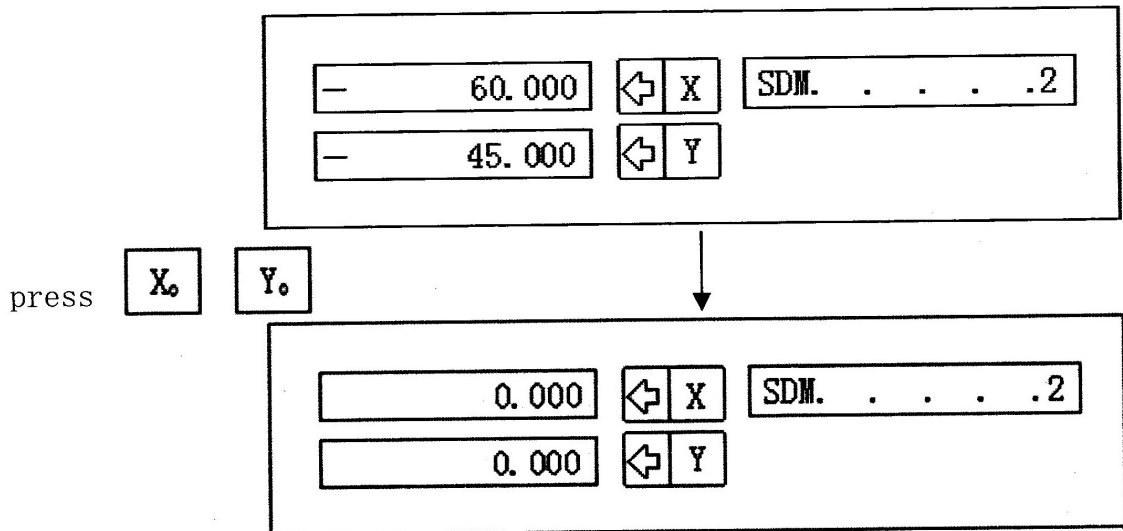
(4) Set the first point SDM3 , enter the SDM3 coordinate, Clear X, Clear Y, move the machine tool to the fourth point. like pic.

60.000	⇦ X	SDM. 3
— 45.000	⇦ Y	

press X₀ Y₀

0.000	⇦ X	SDM. 3
0.000	⇦ Y	
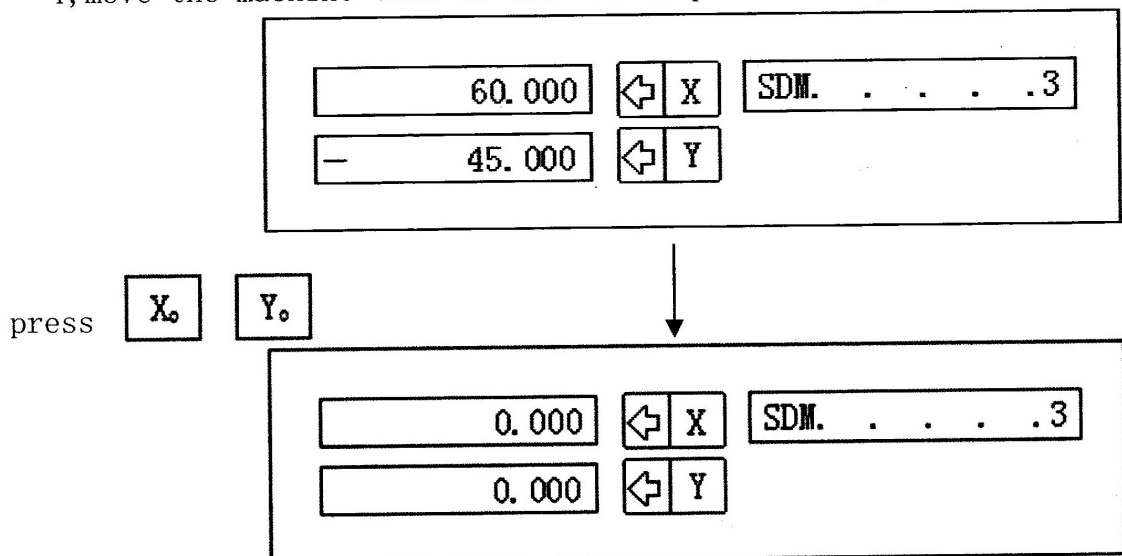
(5)   Process workpiece according to the coordinate.

(6)   Process workpice which is the same to the previous workpiece, just set the ABS zero at "0.000", the SDM Zero have set autoly, press ⬆ ⬇ and move the machine tool to zero.

2、Preset the SDM coordinate.
Use the method of preset zero, you needn't to move the machine tool, itcanset the user's zero exactness and shortcut.

e.g: use the "0" mode input, like pic when the absoluteness coordinate is in zero, the 1 (60, -45) , 2 (-60, -45) , 3 (60, 45) , 4 (-60, 45)

Operation steps

(1) In the ABS set the RI

Press X_0 Y_0

0.000	⬅ X	ABS
0.000	⬅ Y	
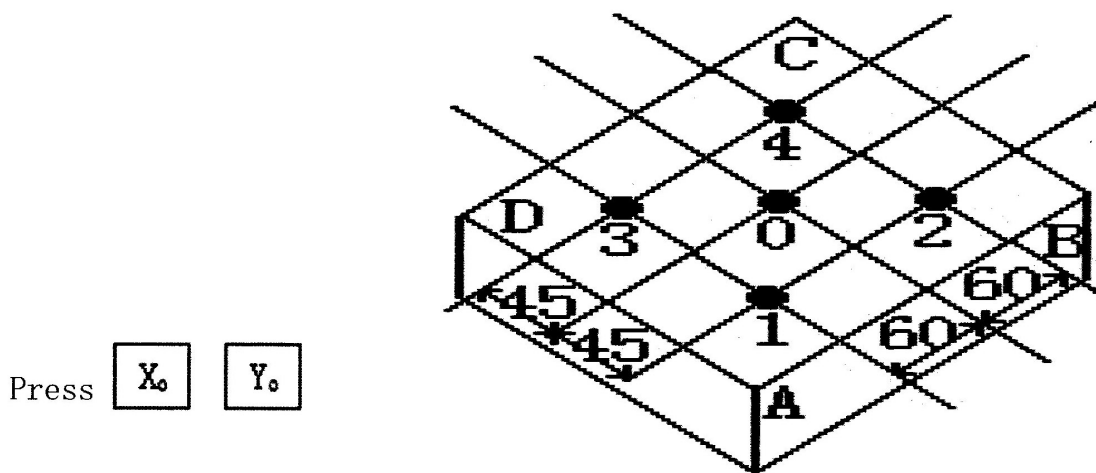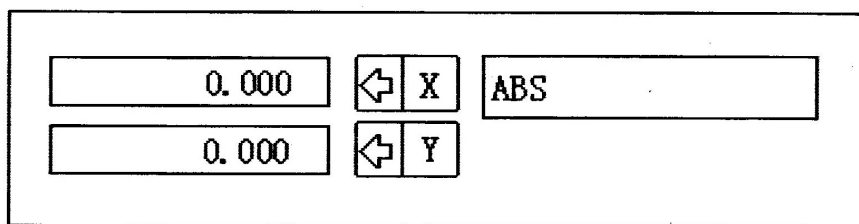
(2) Set the 1st zero, turn to the 1st zero SDM1.

press sdm ⟶ 1 ⟶ ent
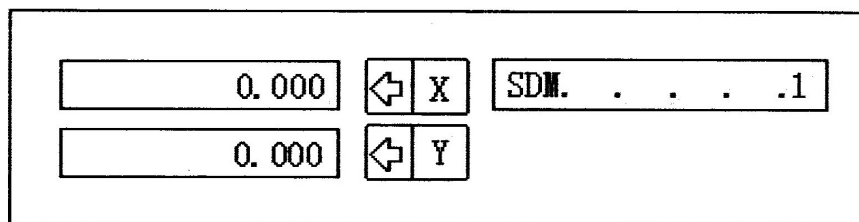
0.000	⬅ X	SDM. 1
0.000	⬅ Y	

(3) Input the 1st assistant zero coordinate straight.

Press   [⇦ X] → [6] [0] → [ent]

Press   [⇦ Y] → [4] [5] [±] → [ent]

60. 000	[⇦ X]	SDM. 1
— 45. 000	[⇦ Y]	

Set the 2nd zero,
turn to the 2nd zero SDM2.

0. 000	[⇦ X]	SDM. 2
0. 000	[⇦ Y]	

press [⇩]

Input the 2nd assistant zero coordinate straight.

Press   [⇦ X] → [6] [0] [±] → [ent]

Press   [⇦ Y] → [4] [5] [±] → [ent]

— 60. 000	[⇦ X]	SDM. 2
— 45. 000	[⇦ Y]	

Set the 3rd zero,
turn to the 3rd zero SDM3.

Press [⇩]

0. 000	[⇦ X]	SDM. 3
0. 000	[⇦ Y]	

Input the 3rd assistant zero coordinate straight.

press   [⇦ X] → [6] [0] → [ent]

press   [⇦ Y] → [4] [5] → [ent]

60.000	⇦ X	SDM. 3
45.000	⇦ Y	

Set the 4th zero

Press ⬇

0.000	⇦ X	SDM. 4
0.000	⇦ Y	

Input the 4th assistant zero coordinate straight.

Press ⇦ X → **6** **0** **±** → **ent**

Press ⇦ Y → **4** **5** → **ent**

− 60.000	⇦ X	SDM. 4
45.000	⇦ Y	

When the four assistant zero have been set, operator can press

⬇ to the assistant zero, and move the machine tool to zero, it's the

assistant zero, quit the SDM function , you can press **ABS/INC** .

Switch SDM input mode:

When the SDM mode is "0" , the data input is fact data.
When the SDM mode is "1" , the data input is reverse data.
e.g: 1 Press ⬤S ⟶ press ⬇

0.000	⇦ X	**SDM.MODE.0**
0.000	⇦ Y	

2 Press **ent** to selet "0" mode or "1" mode, Press **ce** quit.

SDM All clear away

  The function is introduced: Eliminate consumer coordinate system SDM300 Group The plain is interposed, Eliminate the queen, SDM Coordinate system has to demonstrate value and ABS coordinate system has to demonstrate value equality.

Handle a step:

1、Press JCS900-2AE/3AE KeyEnter the fundamental parameter ⬇ Press Choice arrives at "Clear SDM multiunit coordinate"

Press ent

| 0.000 | ◁ | X | CLR SDM |
| 0.000 | ◁ | Y | |

2、When right window display "OVER", Press ce for exit.

| 0.000 | ◁ | X | OVER. . . . . . |
| 0.000 | ◁ | Y | |

⊕ Circumference be allotted a hole

Function: JCS900-2AE/3AE The obvious form of number provides the convenient circumference halving hole function , Person requires operation to import
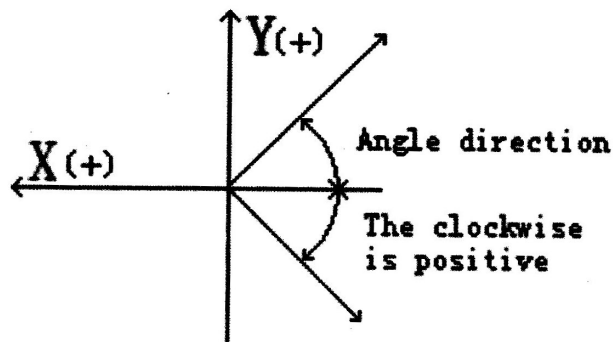
The circumference radius
The circumference initiation angle

The circumference termination angle
The halving hole number

JCS900-2AE/3AE English is pointed out
On the circumference the obvious form of number is calculated out just voluntarily, every divides the hole location from the middle , Every hole

location is set up for zero, Person needs operation press ⬆ or ⬇ ,Which

and then the upper hole choosing to the circumference, the machine tool working table is swayed to zero , is the location being a hole's turn。

Handle a step

Example: Radius: ——— 30mm

Initiation angle: ——— 30^0

End an angle: ———318^0

Divide the hole number
from the middle: ———6
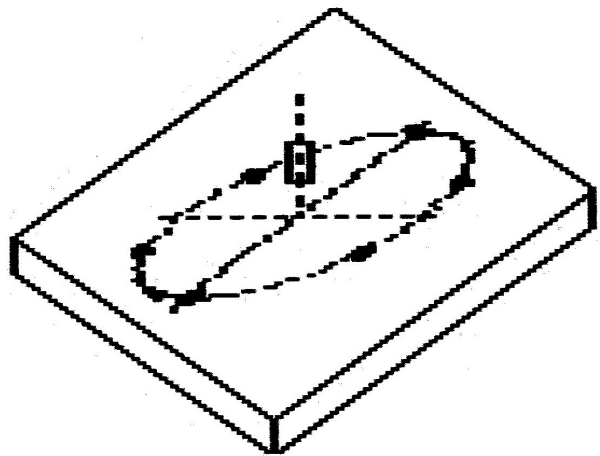
Remarks: 1   The central point location X=0, Y=0
2   The halving hole hole number is that the angle divides till destination angle from starting point along the clockwise sense
3   Think that the initiation angle is 0 , that the termination angle is 360 points , the input hole number ought to is (N+1)

Handle a step:

1、First workpiece centre location is fixed for zero, then press

⊕ Enter the circumference mark of hole function

```
┌────────────────┐ ┌─┬─┐ ┌──────────┐
│                │ │◁│X│ │ DIA      │
└────────────────┘ └─┴─┘ └──────────┘
┌────────────────┐ ┌─┬─┐
│       10. 000  │ │◁│Y│
└────────────────┘ └─┴─┘
```

2、Import a radius (R: 30)

Press **3** **0** **ent**

```
┌────────────────┐ ┌─┬─┐ ┌──────────┐
│                │ │◁│X│ │ DIA      │
└────────────────┘ └─┴─┘ └──────────┘
┌────────────────┐ ┌─┬─┐
│       10. 000  │ │◁│Y│
└────────────────┘ └─┴─┘
```

In the first place radius interposing

```
┌────────────────┐ ┌─┬─┐ ┌──────────┐
│       30. 000  │ │◁│X│ │ DIA      │
└────────────────┘ └─┴─┘ └──────────┘
┌────────────────┐ ┌─┬─┐
│                │ │◁│Y│
└────────────────┘ └─┴─┘
```

3、Import the initiation angle

Press **3** **0** **ent**

```
┌────────────────┐ ┌─┬─┐ ┌──────────┐
│                │ │◁│X│ │ ST. ANG  │
└────────────────┘ └─┴─┘ └──────────┘
┌────────────────┐ ┌─┬─┐
│       45. 000  │ │◁│Y│
└────────────────┘ └─┴─┘
```

In the first place initiation angle interposing

```
┌────────────────┐ ┌─┬─┐ ┌──────────┐
│       30. 000  │ │◁│X│ │ ST. ANG  │
└────────────────┘ └─┴─┘ └──────────┘
┌────────────────┐ ┌─┬─┐
│                │ │◁│Y│
└────────────────┘ └─┴─┘
```

4、Import the termination angle

Press **3** **1** **8** **ent**

```
┌────────────────┐ ┌─┬─┐ ┌──────────┐
│                │ │◁│X│ │ END. ANG │
└────────────────┘ └─┴─┘ └──────────┘
┌────────────────┐ ┌─┬─┐
│        8. 000  │ │◁│Y│
└────────────────┘ └─┴─┘
```

In the first place initiation angle interposing

```
┌─────────────────────┐ ┌──┐ ┌────────────┐
│     318.000         │ │◁│X│ │ END.  ANG   │
├─────────────────────┤ ├──┤ └────────────┘
│                     │ │◁│Y│
└─────────────────────┘ └──┘
```

5、Import the maximal hole number (Hole number)

Press **6** **ent**

```
┌─────────────────────┐ ┌──┐ ┌──────────────┐
│                     │ │◁│X│ │ NO.  HOLE     │
├─────────────────────┤ ├──┤ └──────────────┘
│       5.000         │ │◁│Y│
└─────────────────────┘ └──┘
```

In the first place Maximal hole number interposing

```
┌─────────────────────┐ ┌──┐ ┌──────────────────┐
│ −     12.990        │ │◁│X│ │ HOLE.   .   .   1 │
├─────────────────────┤ ├──┤ └──────────────────┘
│ −      7.500        │ │◁│Y│
└─────────────────────┘ └──┘
```

Enter treating directly, If treating is finished, Press ⊕ exit

Remarks:
1、Process the queen in entrance, Handle person press ⬇ The coordinate
   the which number holes queen to choosing , the machine tool working table
   being swayed arriving at is 0.000 Be the location owing a circumference
   a hole

2、Import process middle, YAxis scintillation that can not stay, Press **ent**
    That the number displays a form is able to enter next step voluntarily

3、If operation person requires that the halfway is temporary remove from
   "the circumference mark of hole " function, When returning to regular

   ABS state, X , Y , coordinate show, Press **TAN** Withdraw from temporarily,

Press **TAN** Return to circumference mark of hole state。
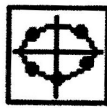
Function: JCS900-2AE/3AE The god of the earth who points out that the obvious form of number provides the convenient ellipse halving hole function , handles person requires English to import an ellipse

    X , Y axis radius

Y(+)

X (+)

Angle direction

The clockwise is positive
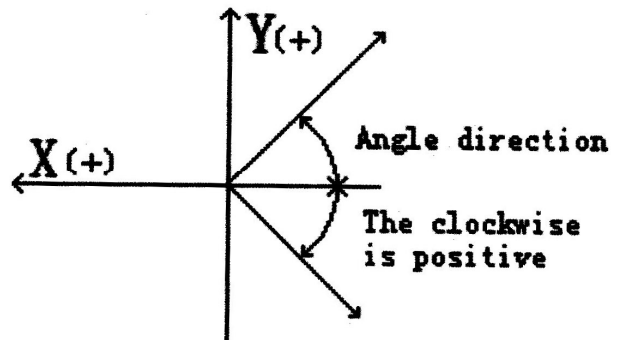
    Elliptic initiation angle

    Elliptic termination angle

    Elliptic maximal hole number

JCS900-2AE/3AE English mounts every halving hole location , every hole location is set up for zero to point out that the obvious form of number calculates out an ellipse just voluntarily,

Person needs operation Press ⬆ or ⬇ Which and then the upper hole choosing to the ellipse, the machine tool working table is swayed to zero , is the location being a hole's turn.

## Handle a step

Example: X axis radius:
20mm

Y axis radius:
30mm

Initiation angle:
0^0

End an angle:
360^0

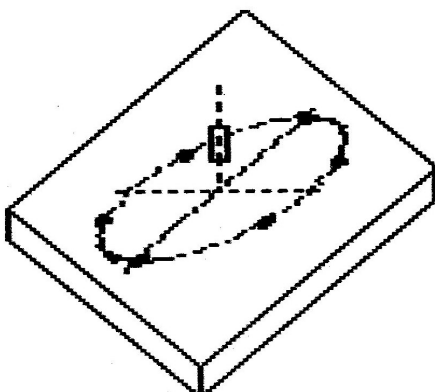Divide the hole number from the middle:
6
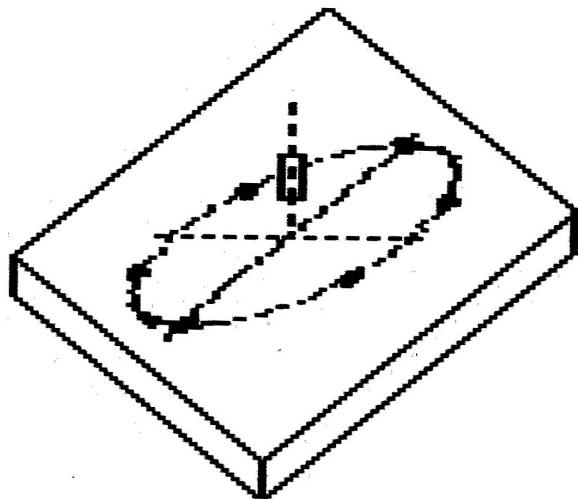
Remarks: 1、 The central point location is X=0, Y=0

    2、 The halving hole hole number is that the angle divides till destination angle from starting point along the clockwise sense。

    3、 Think that the initiation angle is 00 , ending an angle is 3600 points , ought to be when importing the hole number (N+1)

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Handle a step:

1、 Fix position for zero first with workpiece centre location, then press

[⊕] enter the ellipse mark of hole function

Example: X、Y axis radius: 20、30mm

Initiation angle: 30^0

End an angle: 360^0

Divide the hole number from

the middle: 6
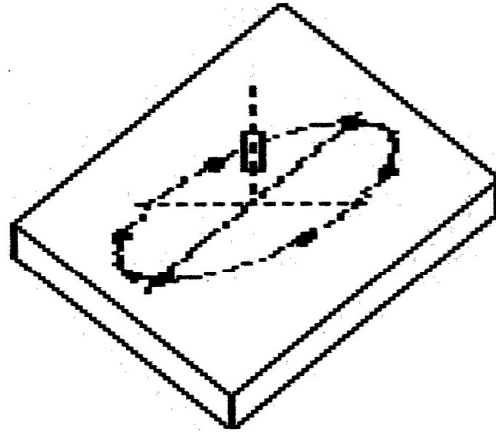
	◁ X	X RADIUS
78.000	◁ Y	

2、 Import the X axis radius (R: 20)

Press [2] [0] [ent]

Handle a step

	◁ X	X RADIUS
78.000	◁ Y	

In the first place radius interposing

20.000	◁ X	X RADIUS
	◁ Y	

Import the Y axis radius, Press [3] [0] [ent]

30.000	◁ X	Y RADIUS
	◁ Y	

3、 Import the initiation angle

Press [0] [ent]

	[↩] X	ST. ANG
6.000	[↩] Y	

In the first place initiation angle interposing

0.000	[↩] X	ST. ANG
	[↩] Y	

4、Import the termination angle

Press [3] [6] [0] [ent]

	[↩] X	END. ANG
50.000	[↩] Y	

In the first place end an angle interposing

360.000	[↩] X	END. ANG
	[↩] Y	

5、Import the maximal hole number (Hole number)

Press [6] [ent]

	[↩] X	NO. HOLE
5.000	[↩] Y	

In the first place Maximal hole number interposing

|		
— 20.000	[↩] X	HOLE. 1
0.000	[↩] Y	

Enter treating directly, If treating is finished, Press ⊕ exit。

Remarks:.
1、 Process the queen in entrance, Handle person press ⬇ The which number holes queen to choose , the machine tool working table is swayed being the location owing an ellipse a hole to the coordinate for 0.000.

2、 Import process middle , Y axis scintillation that can not stay, Press **ent** That the number displays a form is able to enter next step voluntarily。
3、 Require that the halfway is temporary if handling person withdraw from X , Y , Z , coordinate show when "the ellipse mark of hole " function, returns to regular ABS state, Press **TAN** Withdraw from temporarily, Press **TAN** again Return to ellipse mark of hole state。

⬈ Oblique line be allotted a hole

Function: JCS900-2AE/3AE The English hint provides the oblique line halving hole , is used for the centre of a circle processing the YX flat surface on the same straight line, uniform distribution hole place , operation person need importing the following parameter

Oblique line length
(The first centres of a circle arrive at final hole centre of a circle distance)

Oblique line angle
(Refer to the oblique line and zeta-axis direction intersection angle)
Hole number

Y(+)

X (+)

Angle direction

The clockwise is positive
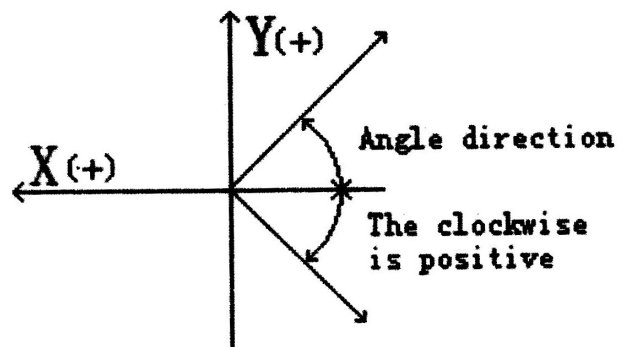
Every hole location the obvious form of entering parameter queen number meeting automation is calculated out an oblique line, Handle person press ⬇ , Choose the hole number

And then rock workpiece being 0.000 to zeta-axis, Y axis location for 0.000 , location being that hole

Example: The workpiece , parameter showing with regard to if pursuing an institute are set up as follows

Oblique line length: 150mm

Oblique line angle: -30^0

Hole number: 6
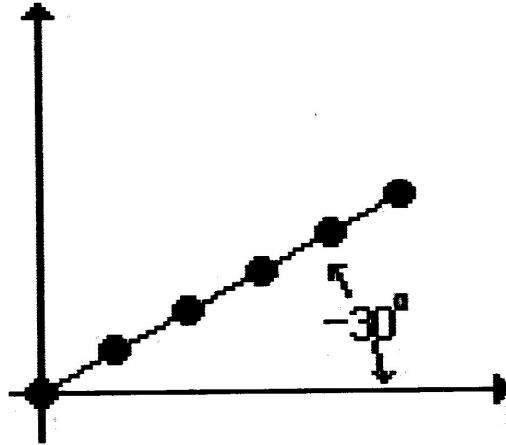
Handle a step:
1、First with lathe tool alignment oblique line hole first o'clock, And press Enter the oblique line mark of hole function
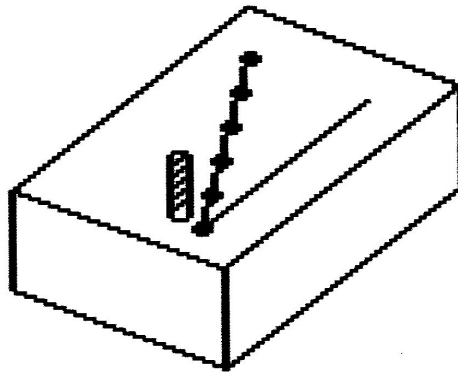
Handle a step

2、Import the oblique line length

The host Windows Y axis demonstrates the oblique line length interposing in the first place

Press [1] [5] [0] [ent]

```
┌──────────────┐  ┌──┬──┐  ┌──────────────┐
│              │  │⇦ │X │  │ LIN DIST     │
├──────────────┤  ├──┼──┤  │              │
│      20.000  │  │⇦ │Y │  │              │
└──────────────┘  └──┴──┘  └──────────────┘
```

Oblique line length that the plain sets up

```
┌──────────────┐  ┌──┬──┐  ┌──────────────┐
│    150.000   │  │⇦ │X │  │ LIN DIST     │
├──────────────┤  ├──┼──┤  │              │
│              │  │⇦ │Y │  │              │
└──────────────┘  └──┴──┘  └──────────────┘
```

3、Import the oblique line angle

Windows subsidiary Windows is demonstrated "importing oblique line angle Y, please" demonstrates the oblique line interposing last time

and press [3] [0] [±] [ent]

```
┌──────────────┐  ┌──┬──┐  ┌──────────────┐
│              │  │⇦ │X │  │ LINE ANG     │
├──────────────┤  ├──┼──┤  │              │
│      20.000  │  │⇦ │Y │  │              │
└──────────────┘  └──┴──┘  └──────────────┘
```

Oblique line angle that the plain interposes

```
┌──────────────┐  ┌──┬──┐  ┌──────────────┐
│ −    30.000  │  │⇦ │X │  │ LINE ANG     │
├──────────────┤  ├──┼──┤  │              │
│              │  │⇦ │Y │  │              │
└──────────────┘  └──┴──┘  └──────────────┘
```

4、Import the maximal oblique line mark of hole number

"NO. HOLE " Y Windows subsidiary Windows is demonstrated demonstrates mark of hole number interposing last time, Press [6] [ent]

Start treating

```
┌──────────────┐  ┌──┬──┐  ┌──────────────┐
│     0.000    │  │⇦ │X │  │ HOLE......1  │
├──────────────┤  ├──┼──┤  │              │
│     0.000    │  │⇦ │Y │  │              │
└──────────────┘  └──┴──┘  └──────────────┘
```

5、Press [⇧] or [⇩] , And then the number choosing the hole processing,

has rocked the machine tool working table being able to punch a hole in that right away to zeta-axis, Y axis, the location demonstrating "0.000"'s

Remarks: Treating is finished press [⬚] Return to regular display state, Be allotted hole process middle in the oblique line, Handle person

press [TAN] for Leave time of function temporarily returning to regular X, Y, Z-coordinate display, Press [TAN] again to return to the oblique line mark of hole function。

The arc is processed

Function: JCS900-2AE/3AE English is pointed out: Obvious system of number provides

simple arc treating, makes stick treating can be equal in the amounts processing out, controlling every time conveniently rapidly on the milling machine being applied or used universally to cut an arc; The arc controlling the arc level and smooth degree, cutting amounts stop processing increasingly, is getting shorter as level and smooth, cutting amounts to feel rougher, as big, processing an arc more processing time more.

A: Process XZ, YZ, flat surface

YZ, have what the arc processes XZ, shows to process way 8 kinds face to face, pursue as follows
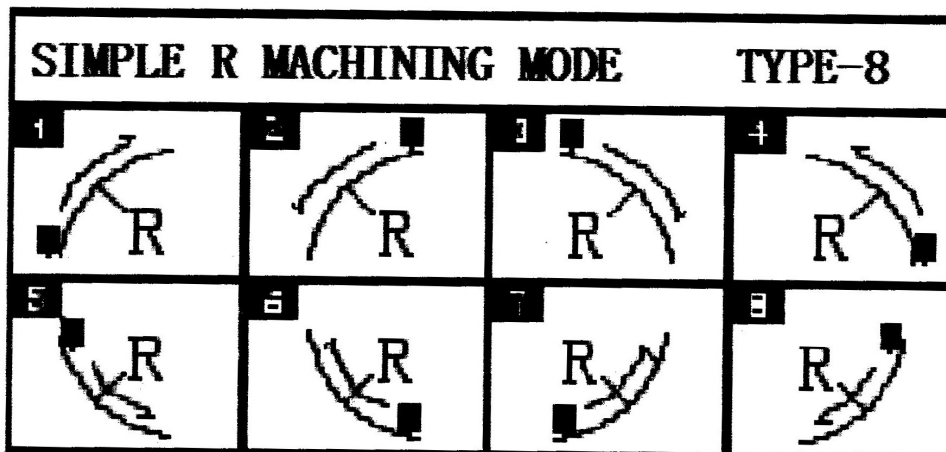
May use the flat base milling cutter or the arc milling cutter when processing; When using the flat base treating arc, the knife sets up from the diameter for 0.000

B: Process XY Floor

When processing Floor, also be just like eight kinds treating way, one's duty arc processes and processes for the arc the cutter and perpendicularity , every one kind of way processing face; Need to choose a knife when compensating way , treating Floor , therefore when processing Floor, disregarding round-headed knife be still closely cropped hair knife, according to that actual value interposes the cutter diameter。

Arc treating needs to import the following parameter
Choose treating face
Choose the treating pattern
The inner/ outside arc processes choice (XY face is proper)
Wait for the radius processing an arc
Cutter diameter
Strong point processing an arc every time

Example 1: Need to process if pursuing 900 arc AB of what be shown, start

treating , B is over , the parameter interposes from A as follows:

Process face: XY

R processes a pattern: 3

The arc processes the outside
Radius: 20mm

Cutter diameter: 6mm

Depth of cut: 0.5mm
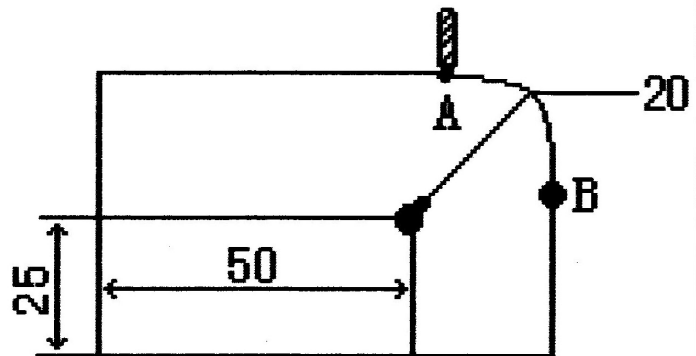
Handle a step:

1、 Wave the machine tool working table , lathe tool alignment A burn ,

zeta-axis clears

2、 Enter arc treating

```
 ┌──────────────────────────────────────────────┐
 │   ┌──────────────────┐  ┌──┐┌──┐  ┌─────────┐ │
 │   │          0.000   │  │⇦ ││X │  │ABS      │ │
 │   └──────────────────┘  └──┘└──┘  └─────────┘ │
 │   ┌──────────────────┐  ┌──┐┌──┐              │
 │   │          0.000   │  │⇦ ││Y │              │
 │   └──────────────────┘  └──┘└──┘              │
 └──────────────────────────────────────────────┘
```
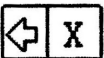
Press [R] Enter arc treating

```
 ┌──────────────────────────────────────────────┐
 │   ┌──────────────────┐  ┌──┐┌──┐  ┌─────────┐ │
 │   │                  │  │⇦ ││X │  │SIM.R - XY│ │
 │   └──────────────────┘  └──┘└──┘  └─────────┘ │
 │   ┌──────────────────┐  ┌──┐┌──┐              │
 │   │                  │  │⇦ ││Y │              │
 │   └──────────────────┘  └──┘└──┘              │
 └──────────────────────────────────────────────┘
```

Treating flat surface that the plain interposes
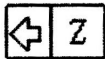
3、Choose treating face

4、Press [⇦][X] [ent] Choose XY face , enter the pattern choosing treating

```
 ┌──────────────────────────────────────────────┐
 │   ┌──────────────────┐  ┌──┐┌──┐  ┌─────────┐ │
 │   │                  │  │⇦ ││X │  │SIM.R - XY│ │
 │   └──────────────────┘  └──┘└──┘  └─────────┘ │
 │   ┌──────────────────┐  ┌──┐┌──┐              │
 │   │                  │  │⇦ ││Y │              │
 │   └──────────────────┘  └──┘└──┘              │
 └──────────────────────────────────────────────┘
```

Remarks: Press [⇦][X] Choose XY face

Press [⇦][Y] Choose YZ face

Press [⇦][Z] Choose XZ fase (Press X Axis choose XZ face)

5、Choose the treating form

```
 ┌──────────────────────────────────────────────┐
 │   ┌──────────────────┐  ┌──┐┌──┐  ┌─────────┐ │
 │   │                  │  │⇦ ││X │  │TYPE. 1-8 │ │
 │   └──────────────────┘  └──┘└──┘  └─────────┘ │
 │   ┌──────────────────┐  ┌──┐┌──┐              │
 │   │              2   │  │⇦ ││Y │              │
 │   └──────────────────┘  └──┘└──┘              │
 └──────────────────────────────────────────────┘
```

Subsidiary Windows demonstrates ″
the treating pattern ″
 1-8″ Press [3] [ent]

The arc processes or the **Handle a step**

outside arc processes the inner choosing the choice processing form entrance

```
┌─────────────────────────────────────────────────────────┐
│  ┌──────────────────────┐   ┌──┬───┐  ┌──────────────┐   │
│  │                      │   │◁ │ X │  │ R - TOOL     │   │
│  └──────────────────────┘   └──┴───┘  └──────────────┘   │
│  ┌──────────────────────┐   ┌──┬───┐                     │
│  │                      │   │◁ │ Y │                     │
│  └──────────────────────┘   └──┴───┘                     │
└─────────────────────────────────────────────────────────┘
```

6、The arc processes the outside choosing an inner

Press ➕ The arc choosing the outside is processed

Press ➖ The arc choosing an inner is processed

Remarks: Choose the pattern interposing in the first place press ent
        If not press ⇩

```
┌─────────────────────────────────────────────────────────┐
│   ┌──────────────────────┐   ┌──┬───┐  ┌──────────────┐  │
│   │                      │   │◁ │ X │  │ R - TOOL     │  │
│   └──────────────────────┘   └──┴───┘  └──────────────┘  │
│   ┌──────────────────────┐   ┌──┬───┐                    │
│   │                      │   │◁ │ Y │                    │
│   └──────────────────────┘   └──┴───┘                    │
└─────────────────────────────────────────────────────────┘
```

7、Import the arc radius

The window subsidiary Windows is demonstrated "importing the arc radius Y axis, please" demonstrates the arc radius interposing in the first place; Press 2 0 ent Be completed importing a radius

```
┌───────────────────────────────────────────────────────┐
│   ┌──────────────────────┐   ┌──┬───┐  ┌────────────┐  │
│   │                      │   │◁ │ X │  │ RADIUS     │  │
│   └──────────────────────┘   └──┴───┘  └────────────┘  │
│   ┌──────────────────────┐   ┌──┬───┐                  │
│   │        50. 000       │   │◁ │ Y │                  │
│   └──────────────────────┘   └──┴───┘                  │
└───────────────────────────────────────────────────────┘

        ┌────────────────────────────────────────────────┐
        │  ┌──────────────────┐  ┌──┬───┐  ┌───────────┐  │
        │  │      20. 000     │  │◁ │ X │  │ RADIUS    │  │
        │  └──────────────────┘  └──┴───┘  └───────────┘  │
        │  ┌──────────────────┐  ┌──┬───┐                 │
        │  │                  │  │◁ │ Y │                 │
        │  └──────────────────┘  └──┴───┘                 │
        └────────────────────────────────────────────────┘
```

8、Import the cutter diameter
The window subsidiary Windows is demonstrated "importing the cutter diameter Y axis, please" demonstrates the cutter diameter interposing in the first place; Press 6 ent Be completed importing the cutter diameter

```
┌─────────────────┐  ┌──┬──┐  ┌──────────────┐
│                 │  │⇦ │ X│  │ TOOL DIA     │
└─────────────────┘  ├──┼──┤  └──────────────┘
┌─────────────────┐  │⇦ │ Y│
│       20.000    │  └──┴──┘
└─────────────────┘
```

```
        ┌─────────────────┐  ┌──┬──┐  ┌──────────────┐
        │        6.000    │  │⇦ │ X│  │ TOOL DIA     │
        └─────────────────┘  ├──┼──┤  └──────────────┘
        ┌─────────────────┐  │⇦ │ Y│
        │                 │  └──┴──┘
        └─────────────────┘
```

9、Import the strong point processing an arc every time

Windows subsidiary Windows is demonstrated "importing long step-by-step arc amounts Y, please" demonstrates it truns out that the treating arc

at every time interposing is long; Press $\boxed{0}$ $\boxed{\cdot}$ $\boxed{5}$ $\boxed{\text{ent}}$

Import the strong point processing an arc every time , enter the treating arc

```
┌─────────────────┐  ┌──┬──┐  ┌──────────────┐
│                 │  │⇦ │ X│  │ MAX.  CUT    │
└─────────────────┘  ├──┼──┤  └──────────────┘
┌─────────────────┐  │⇦ │ Y│
│        1.000    │  └──┴──┘
└─────────────────┘
```

```
        ┌─────────────────┐  ┌──┬──┐  ┌──────────────┐
        │        0.500    │  │⇦ │ X│  │ MAX.  CUT    │
        └─────────────────┘  ├──┼──┤  └──────────────┘
        ┌─────────────────┐  │⇦ │ Y│
        │                 │  └──┴──┘
        └─────────────────┘
```

10、Process an arc

Subsidiary Windows demonstrates "1 treating processing a serial number" looking at a window till X , Y Windows shows when value is "0.000" , the first treating

are completed, and presss $\boxed{⇩}$ The display beginning to process the operation second repeating last time , processing till auxiliary looks at window "processes a serial number 54 "

| 0.000 | ⇦ X | NO. . . . . . .1 |
| 0.000 | ⇦ Y | |

| − 17.000 | ⇦ X | NO. . . . . . 54 |
| − 17.000 | ⇦ Y | |

11、Treating is finished press [R⤵] exit

Remarks: In the process of arc treating, Handle person can press [TAN] Leave temporarily, The R function returns to regular X , Y , zeta-axis show, Press [TAN] Return to an arc process a function

Example 2: The arc processes from E burns , the parameter interposes treating if pursuing what be shown FE Duan as follows
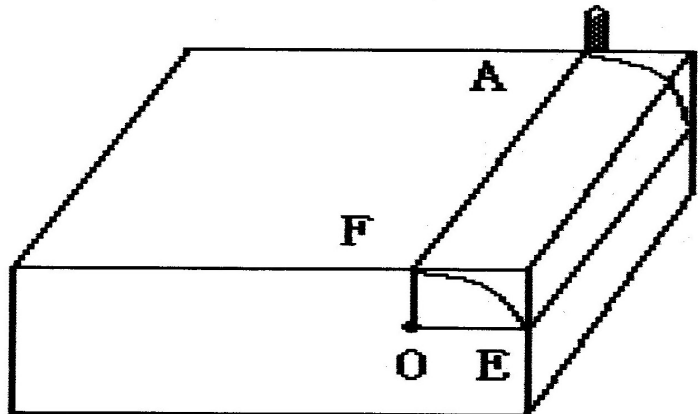
Process a flat surface: XZ

Process a pattern: 3

Arc radius: 20mm

Cutter diameter: 0

Strong point processing an arc every time: 0.5mm

Handle a step:

1、Wave the machine tool working table, selects knife alignment A , zeta-axis clears

2、Enter arc treating, Press [R⤵] Enter arc treating

| | ⇦ X | SIM.R − XY |
| | ⇦ Y | |

3、Choose treating face, Press [←][X] XZ choosing enters the treating pattern face to face

```
┌──────────────────┬──────┬──────────────────┐
│ [          ]     │[←][X]│ SIM. R - XZ ·    │
│ [          ]     │[←][Y]│                  │
└──────────────────┴──────┴──────────────────┘
```

4、Choose the treating pattern

Subsidiary Windows demonstrates "the treating pattern 1-8 ", Y axis display window display before process a pattern press [3] [ent] Choose the entrance processing a pattern

```
┌──────────────────┬──────┬──────────────────┐
│ [          ]     │[←][X]│ TYPE.  1-8       │
│ [         1]     │[←][Y]│                  │
└──────────────────┴──────┴──────────────────┘
```

Turn out to be the treating pattern interposing

```
┌──────────────────┬──────┬──────────────────┐
│ [         3]     │[←][X]│ TYPE.  1-8       │
│ [          ]     │[←][Y]│                  │
└──────────────────┴──────┴──────────────────┘
```

5、Import the arc radius

Windows subsidiary Windows is demonstrated "importing arc radius Y, please" demonstrates the radius interposing in the first place, and press

[2] [0] [ent] completed importing the arc radius

```
┌──────────────────┬──────┬──────────────────┐
│ [          ]     │[←][X]│ RADIUS           │
│ [   30.000]      │[←][Y]│                  │
└──────────────────┴──────┴──────────────────┘
```

Turn out to be the radius interposing

```
┌──────────────────┬──────┬──────────────────┐
│ [          ]     │[←][X]│ RADIUS           │
│ [   20.000]      │[←][Y]│                  │
└──────────────────┴──────┴──────────────────┘
```

6、Import the cutter diameter

Subsidiary Windows display "imports the cutter diameter, please" , Y Windows demonstrates the cutter diameter interposing in the first place, and press $\boxed{0}$ $\boxed{\text{ent}}$ Be completed importing the cutter diameter

	⇦ X	**TOOL DIA**
5.500	⇦ Y	

Cutter diameter that the plain interposes

0.000	⇦ X	**TOOL DIA**
	⇦ Y	

7、Import step-by-step amounts of Z-axis

Subsidiary Windows demonstrates it truns out that the treating arc at every time interposing is long, and press $\boxed{0}$ $\boxed{\bullet}$ $\boxed{5}$ $\boxed{\text{ent}}$ Import the strong point processing an arc every time , enter arc treating

	⇦ X	**Z STEP**
0.600	⇦ Y	

The arc that the plain interposes is long

0.500	⇦ X	**Z STEP**
	⇦ Y	

Process an arc:
Z-axis that the data expression that subsidiary Windows demonstrates processes currently when stopping processing simulates if altitude, pursuing what be shown.
The flat surface processing XZ , X Windows demonstrate zeta-axis location , think that X display is that "0.000" o'clock is finished in X direction treating, Y

Handle a step

Windows first two demonstrate the crescent-shaped knife with long handle ring number of turns , last four demonstrates the crescent-shaped knife with long handle ring graduation number, indicate that as for processing point currently , process till being circle graduation's turn to be OK.

If the flat surface processing YZ , Y Windows demonstrate Y axis location, think that the Y axis shows "0.000" o'clock , is in Y

Direction processes the crescent-shaped knife with long handle ring number of turns being finished , showing X Windows the first two , last four demonstrates the crescent-shaped knife with long handle ring graduation number.

The institute shows as follows:

| 01 | 0.000 | ⟨⟩ | X | | 2.500 |
| | 11.990 | ⟨⟩ | Y | | |

AUTO R Smooth arc processing to enter the following parameters

Processing of choice

Select processing mode

Inner / outer smooth arc processing options (X, Y-specific)

X, Y-axis coordinates of the location of origin

Smooth radius to be processed

Tool diameter

Length of each step of processing

Starting point of view

End perspective

Example 1:

Processing side: XY

Processing of Arc

X, Y-axis origin coordinates: (20, 30)

Radius: 25 mm

Tool diameter: 20 mm

Stepping in: 0.5 mm

Starting point of view: 00

The termination point of view: 3600

Smooth arc processing steps:

1, rocking machine table, tool aimed at the smooth processing takes place starting point arc, each axis cleared.

0.000	⟵ X	ABS
0.000	⟵ Y	

2, press **AUTO R** keys to enter smooth arc processing functions.

	⟵ X	ARC −YZ
	⟵ Y	

3, planar processing options, according to ⟵ X button or ⟵ Y key options. According to two axes of the three ⟵ X keys to select XY, XZ two planar processing.

4, by ⬇ , and then choose from within the arc arc processing or processing.

	⟵ X	PAD − TL
	⟵ Y	

5, by [+] key for the selection of Arc processing, according to the circular [—] key for processing. If you choose to face ZX, YZ plane, the direct input of the coordinates of the origin location of the origin of the XY coordinates position refers to the processing smooth arc relative to the center position by-0.1 [ent] key.

6, input X axis coordinates, by [ent] key; input Y-axis coordinate value by [ent] key.

| 20.000 | [⇦] X | CT X POS |
| | [⇦] Y | |

| 30.000 | [⇦] X | CT Y POS |
| | [⇦] Y | |

7, the importation of smooth radius [2] [5] [ent]

| | [⇦] X | RADIUS |
| 5.000 | [⇦] Y | |

A radius of the original settings

| 25.000 | [⇦] X | RADIUS |
| | [⇦] Y | |

8, input tool diameter [2] [0] [ent]

| | [⇦] X | TL DIA |
| 10.000 | [⇦] Y | |

Tool diameter of the original settings

20.000	⇦ X	TL DIA
	⇦ Y	

9, Step length of input **0** **·** **5** **ent**

	⇦ X	MAX. CUT
4.000	⇦ Y	

Stepping of the original settings

0.500	⇦ X	MAX. CUT
	⇦ Y	

10, starting point of importation **0** **ent**

	⇦ X	ST. ANG
15.000	⇦ Y	

The starting point of the original settings

0.000	⇦ X	ST. ANG
0.000	⇦ Y	

11, the end point of importation **3** **0** **0** **ent**

	⇦ X	END. ANG
320.000	⇦ Y	

The termination point of the original settings

Handle a step

360.000	◁ X	END. ANG
	◁ Y	

12, the word of the show such as m

− 55.000	◁ X	NO. 1
− 30.000	◁ Y	

13, will show zero-axis machine tools. R which is the starting point for processing. ⬇ according to a processing show. Machine Tool Show then moved to zero axis. Repeat operations to complete all processing is completed processing.

◢ **Slant processing**

Features: JCS900-2AE/3AE English tips to provide a significant number of processing automatically calculate slope processing function, the operator can type the following parameters

Plane processing options (XY, YZ, for the slant processing XZ plane)

Slant angle (in the XY plane and the X-axis slant that positive angle in the YZ plane with the Y-axis slant that positive angle)

	◁ X	ANGLE
0.000	◁ Y	

After several significant input parameters Table hypotenuse will be automatically calculate the location of each point, the operator by ⬆ or ⬇ option processing serial number, and then turning tool processing to the
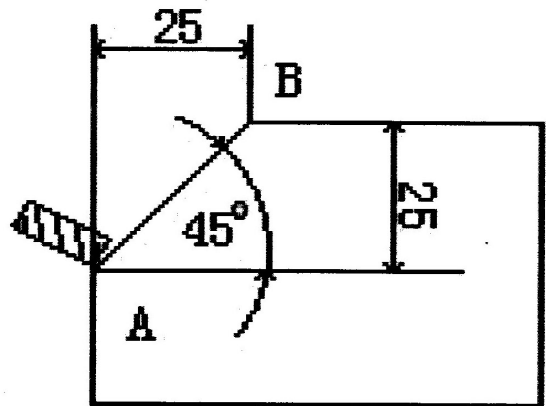
two axes of the plane showed that the value of 0.000 for all locations

Example: processing as shown slant AB, parameter settings are as follows
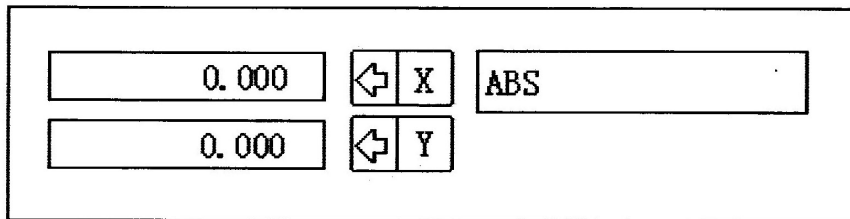
Plane Processing: XZ

Slant angle: 450

Each processing slant length: 1.2

Handle a step

1, machine tool spindle tilt table 450, rocking machine processing workstations at the slant-A start, the X-axis cleared, the Z-axis cleared. In the normal show, press $\boxed{X_o}$ $\boxed{Z_o}$

0.000	◁ X	ABS
0.000	◁ Y	

2, $\boxed{\diagup}$ by the processing function will be inclined to enter parameter input, by $\boxed{ent}$ direct access to the state processing

	◁ X	LINE – XY
	◁ Y	

The original settings XY plane processing
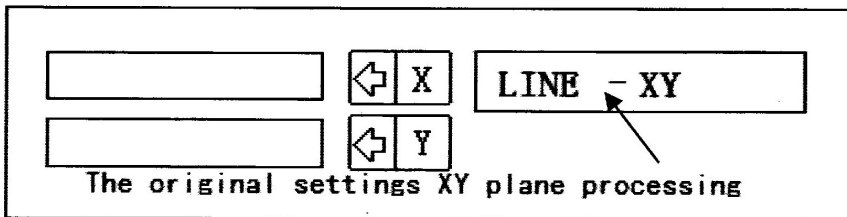
3, the processing of choice $\boxed{◁ Z}$ by $\boxed{ent}$ and then choose XZ plane into the next step "input bevel angle"

Note: XY plane by $\boxed{◁ X}$ options
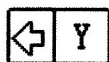
$\boxed{◁ Y}$ plane by choice

Select XZ plan $\boxed{◁ Z}$

```
┌──────────────────┐  ┌──┬──┐  ┌──────────────────┐
│                  │  │◁ │ X│  │ ANGLE            │
├──────────────────┤  ├──┼──┤  └──────────────────┘
│          0.000   │  │◁ │ Y│
└──────────────────┘  └──┴──┘
```

4, slope angle input

Deputy window display "Please enter slant angle of the" Y-axis settings of the

original slant angle. Followed button. | 4 | | 5 | | ent |

```
┌──────────────────┐  ┌──┬──┐  ┌──────────────────┐
│         ↖        │  │◁ │ X│  │ ANGLE            │
├──────────────────┤  ├──┼──┤  └──────────────────┘
│         20.000   │  │◁ │ Y│
└──────────────────┘  └──┴──┘
 The slant angle of the original settings
```

```
┌──────────────────┐  ┌──┬──┐  ┌──────────────────┐
│         45.000   │  │◁ │ X│  │ ANGLE            │
├──────────────────┤  ├──┼──┤  └──────────────────┘
│                  │  │◁ │ Y│
└──────────────────┘  └──┴──┘
```

5, each input processing slant length

Deputy window display the "Z-axis stepper type of" Y-axis stepper set by the

original volume. Followed by | 1 | | • | | 2 | | ent |

```
┌──────────────────┐  ┌──┬──┐  ┌──────────────────┐
│                  │  │◁ │ X│  │ Z STEP           │
├──────────────────┤  ├──┼──┤  └──────────────────┘
│          0.300   │  │◁ │ Y│
└──────────────────┘  └──┴──┘
 Stepping of the original settings
```

```
┌──────────────────┐  ┌──┬──┐  ┌──────────────────┐
│          1.200   │  │◁ │ X│  │ Z STEP           │
├──────────────────┤  ├──┼──┤  └──────────────────┘
│                  │  │◁ │ Y│
└──────────────────┘  └──┴──┘
```

6, processing slant

Deputy window display the "3.600" to the X-axis lathe tool processing, and Z-axis showed that 1.100 finished processing the first point, followed by the processing ⬇ of some

7, by ⬆ or ⬇ points in the inter-switch

8, processing has been completed, according to the state show that ◺ to return to normal

Note: For two-axis digital form, no Z-axis installation, use ⬆ or ⬇ to the Z-axis position in the simulation

step

1, set in the internal functions of the Z-axis settings of Central Boring

2, before the first workpiece machining at the slant of the Z-axis position of the starting point, then Z-axis location is set to "0.000"

3, in the process, the Z-axis of window display a high degree of simulation, that the current cease processing laboratories, Z-axis height, if processing XZ plane, the X-axis shows that X-axis position, when X shown as "0.000", X direction processing finished processing, and Y-axis shows that the two previous ring a few boring, boring after four Central show that the scale of the current processing, processing of the circle to the calibration can be

4, if the processing YZ plane, the Y-axis shows that Y-axis position, when Y shown as "0.000", in the Y-axis direction of processing completed, the two previous X-axis shows that ring a few boring, boring show after four Central calibration few, said that for the current processing, processing can scale to the ring

In slant process, the operator can temporarily left by TAN slope processing function to return to normal

XYZ-axis, to check a few boxes marked the calculation of the position, TAN and then returned to slant processing functions

The basic parameter settings

A plus or minus direction switch

Features: You can fine-tuning the direction of the axis of plus or minus

JCS900-2AE/3AE cases by entering key parameter settings

According to t[⇩] "X DIR +", and then switch the direction [ent]

[⇩] can choose according to X-axis or Y axis, switching direction

According to e[ce]

Second, SDM coordinates input mode switch

After entering the basic parameters, according to choose to go to [⇧] [⇩] "SDM.MODE.0" click [ent] switch.

When SDM model "0", input data for the actual value

When SDM model for the "1", contrary to input data for a few

Third, set up in Central Boring

Boring ring of the main function in the R and slant processing, the principal of the two-axis digital simulation settings Z-axis Z-axis height of boring ring

Z-axis milling machine with boring ring of a circle of 5 mm according to

[ent] → [5] → [ent]

1、 according to Deputy window [⇩] until a "Z DIAL"

2、 the main window by [ent] Y-axis settings of the original Z-axis of Central Boring, vice window display the "Z DIAL"

3、 by [5] [ent]

Note: If the input error may withdraw from the [ce] enter it again

```
  ┌─────────────────────────────────────────────────────┐
  │                                                     │
  │      ┌──────────────┐  ┌──┬──┐  ┌──────────────┐    │
  │      │     5.000    │  │◁ │ X│  │  Z   DIAL    │    │
  │      └──────────────┘  └──┴──┘  └──────────────┘    │
  │      ┌──────────────┐  ┌──┬──┐                      │
  │      │              │  │◁ │ Y│                      │
  │      └──────────────┘  └──┴──┘                      │
  │                                                     │
  └─────────────────────────────────────────────────────┘
```

4、When setup completed, press `ce` to quit

Advanced users

A senior user settings

1, according to JCS900-2AE/2AC entered the parameter settings, according to choose

`⬆` "SET PARA"

2, and then the right of the `ent` metres character display window will show "PASSWORD"

3、press `3` `2` `1` `1`

Second, the resolution settings

After entering advanced users based on user configuration requirements from the production home settings, users must not lose chaos on chaos, otherwise prevented normal use. Functional disorder caused by the software must be sent back to the manufacturers to set up, otherwise no warranty.

1, in the senior user settings, the characters of the display window metres tips on `X.Y. RES` - `ent` All resolution settings, and our digital form can be

carried out separately for each axis resolution settings.
2, when entering resolution settings, the X, Y-axis show such as "0.00500." At

by `◁ X` , the X-axis display window flashes on `⬆` or `⬇` bond cycle

choose a different resolution, and then selected the current Resolution `ent` .
Showing no window immediately, it means that the action has been completed.

Note: If you want to set the two-axis resolution, select a shaft after not

directly by `ent` , but that on-demand changes in the resolution of several

`◁ Y`

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key axis of the home such as   .

Three, linear compensation

Features: JCS900-2AE/3AE English tips provide linear compensation, in accordance with the actual value of the processing and observation of the error between the value of compensation amendments.

Example: access to advanced users, according to choose to go to

"X. LIN. COMP" and then click `ent` compensation after the axial under standard value, observation error correction value compensation, in accordance with the right features tips window English "STANDARD", then the right input

`3` `0` `0` `•` `0` `5` `ent`

window displays "OBSERVED", enter the observations you want and then click `ent` JCS900-2AE/3AE-English tips digital system will automatically compensation, the final

withdrawal by `ce`

Fourth, the total system
 Showing access to the system - the total by `ent` bond, English Show: STRART… WAIT…. M waiting for a few seconds after the show revert to the word "CLR SDM," said that at this time the total-system has been completed.

Fault	Analyze the causes	Approach
Do not show	1, missed good power 2, a tributary of 110 V power supply voltage is not within the scope of ~ 220V	1, power line inspection plug and socket Interpolation is strong, whether good contact. 2, inspection of a significant form of insurance is good. 3, tests whether the input voltage 110 V ~ 220V range.
Shell Charged	1, grounding bad 2, 220 V power leakage	1, machine tool bed with a few significant leader – Connectivity, and power requirements of the earth The same. 2, machine Chuangjiao such as plastic mats, the ground power supply must be linked to good ground, or else they affect low-pressure sensors operating power inconvenient. 3, 220 V power leakage, speed electrician requested formal inspection, there are still problems such as Please contact with the manufacturers of the service. 4, please do not access FireWire 380 V Power Zone, to avoid burn a few significant power or form factors of insecurity, affecting the operator's personal safety.
Fault	Analyze the causes	Approach

X, Y window display confusion, numerical No laws, no	Table may be in power a few bad contact, Affected by the power disruption	1, a few tables in the power-down and then re-opened, a few significant forms can be automatically scans of their own-one. 2, if the first step is not operating the trip, please refer to the specification of-way. 3, if the next step is still unable to rule out the possibility of the service, please contact manufacturers.
Table axis of a significant number do not count	1, grating-foot table with several significant contact is good. 2, no grating signal output device. 3, check optical grating-foot body, feet first is the normal installation, whether users limit themselves demolished, rendering the first reading by ultra-foot trip Penghuai body. 4, a few tables in the axis counting problems.	Another axis grating and see whether they can change their normal count, if transplanted to normal after a device is the root counting device malfunction. Customers are requested to speed the above issues and service companies associated with the Department.

Table count several significant errors that distance and the actual distance inconsistent	1, machine tool accuracy Guide bad. 2, machine tool running too fast. 3, sub-grating device installation requirements of the parallel device did not adjust well, whether on Connecting Plate ministries firmly installed. 4, the grating set foot resolution inconsistent with the actual resolution. 5, linear error compensation value is not set up correctly. 6, grating bad feet, and missed a few.	1, maintenance or transfer Machine Tool Guide is space. 2, reducing the speed. 3, reload grating feet firmly ministries to install on Connecting Plate. 4, set the correct resolution. 5, set the correct value of the linear error compensation. 6, repair or replacement of optical grating.