Channel Letter Bending Machine Operation Manual



1. The first step , we need to connect power and air input (air pressure about 0.4-0.6 mpa)

2. Turn on the machine



3.we need to feed the material ,manual feeding, put the material with cap side in the groove , material up and down with pressure roller fixed, material into iron drive wheel position



7. Next we open software :CBS4-V1.05 (aluminum)

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W CBS4-V1.05	2017/7/11 星期	应用程序	5,029 KB

8. Open "device test"

File Machine Set Craft Param Bend Craft Table Device Test Draw Tool Help	
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9.Press all home button from right to left.

Wait for the button to turn green \rightarrow then press next one.







How to adjust the depth?

According to the following operation, the machine will be slotted



If you feel the cut depth is a little shallow or a little deep , you can adjust these parameter from this part

"craft parameter"---vert parameter (follow as picture)

enaing system			10110		
Set Craft Paran Bend Craft Table Device Test Draw Tool	Help				
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700 100 2100 2800 3500 4200	4900 5600 63	300 7000 1	700 8400 9100 980	0 10500 11111 1111	0 11200 11900 12600 13300 1
	Craft Param				×
	Bend Param		- Vert Param		
	Bend Home Dir	1	Enable Depth Front Adj	Yes	A
	Bend Home Correct	-14.0000	Slot Critical Angle	165.0000	
	Bend Span	392.5000	Slot Span	0.0000	
	Front Bend Air Angle	15.8000	Slot Depth Adjust Param		
	Rvs Bend Air Angle	15.8000	Material Thick	0.6000	E
	Bending Backlash	0.0000	Slot Deep Adjust Home Correct	0.5000	3
			Front Depth Correct	0.0000	
			Rvs Depth Correct	0.0000	
			Turn Tool Param		
			Turn to Reverse Dir	-1	
			Turn Tool Home Dir	1	
	1		Tura Taal Hama Corroat	24 0000	·
	Feed Param		Multipoint Vert		

1.About "slot deep adjust home correct" this parameter, if you feel both front side and back side are all deep or shallow , you can adjust this parameter

If deep, decrease this number, if shallow increase this number (little by little , for example 0.3)

	Bend Param		- Vert Param		
	Bend Home Dir	1	Enable Depth Front Adj	Yes	^
	Bend Home Correct	-24.0000	Slot Critical Angle	165.0000	
	Bend Span	395.6000	Slot Span	0.0000	
	Front Bend Air Angle	16.0000	Slot Depth Adjust Param		не
	Rvs Bend Air Angle	16.0000	Material Thick	0.6000	
Adjust the front ar	nd reverse slotting	g depth togeth	CI Slot Deep Adjust Home Correct	1.2000	
			Front Depth Correct	0.0000	
			Rvs Depth Correct	0.0000	
			Turn Tool Param		
			Turn to Reverse Dir	-1	
			Turn Tool Home Dir	1	
	1. A.		Turn Teal Hama Carrant	24.0000	
	Feed Param		Multionint Mart		
	Enable Material Home Material Home Correct	No -15.0000	Enable Multipoint Vert		Pr
"开槽深度调节[值,开槽深度变》	回零修正距离 罙。减小数值	:"可以同时 [,开槽深]。	忖调节正面和反 度变浅。(慢鹘	反面的 曼的修]开槽深度。增加数 经改这个数值,如0.3)
"Slot deep adjust hor Increase the figure,th	me correct" can ne slotting deptl	adjust the fro h will be deep	ont and reverse slo er.	otting	depth at the same time.

About" front depth correct ", this parameter, if you feel just front side is shallow or deep , you can adjust this number (decrease or increase)

Because stainless model doesn't have back cut ,so in this software ,it doesn't show back depth correct(but in aluminum model, it has)

	Front Bend Air Angle	16.0000	Slot Depth Adjust Param	
	Rvs Bend Air Angle	16.0000	Material Thick	0.6000
	Bending Backlash	0.0000	Slot Deep Adjust Home Correct	1.2000
Only adjı	ust the front slotting	depth	Front Depth Correct	0.0000
			Rvs Depth Correct	0.0000
			Turn Tool Param	
			Turn to Reverse Dir	-1
			Turn Tool Home Dir	1
			Turn Tool Home Dir	1
	Rvs Bend Air Angle	16.0000	Turn Tool Home Dir Material Thick	0.6000
	Rvs Bend Air Angle Bending Backlash	16.0000	Turn Tool Home Dir Material Thick Slot Deep Adjust Home Correct	1 0.6000 1.2000
	Rvs Bend Air Angle Bending Backlash	16.0000	Turn Tool Home Dir Material Thick Slot Deep Adjust Home Correct Front Depth Correct	1 0.6000 1.2000 0.0000
Only adj	Rvs Bend Air Angle Bending Backlash ust the reverse slotti	16.0000 0.0000	Turn Tool Home Dir Material Thick Slot Deep Adjust Home Correct Front Depth Correct Rvs Depth Correct	1 0.6000 1.2000 0.0000 0.0000
Only adj	Rvs Bend Air Angle Bending Backlash ust the reverse slott	16.0000 0.0000	Turn Tool Home Dir Material Thick Slot Deep Adjust Home Correct Front Depth Correct Rvs Depth Correct Turn Tool Param	1 0.6000 1.2000 0.0000 0.0000

How to adjust curve?

If you feel the curve degree is not good , and it can't suit the letter , for example , the curve is big or small so the letter from bending machine and CNC router can't suit , you can adjust this parameter

Test file is 50mm test

📕 xxx	2020/12/16 星期	文件夹	
30mmTEXT.DXF	2015/9/30 星期	AutoCAD图形交	34 KB
50mmTEXT.dxf	2015/9/30 星期	AutoCAD图形交	34 KB
8150-BX4cm2017.0 米田, AutoCA		FLAP 文件	6 KB
Date ava ant a			C 100

Open this file is software

Select outline and select inline Make it



顺时针折弯调整 反面折弯空程角" When clockwise bending adjust "Rvs Bend Air Angle"



"craft parameter"--bend parameter

File	Machine Set	Craft Para	Bend Craft Table	Device Test	Draw	Tool

Bend Home Dir	1
Bend Home Correct	-21.2000
Bend Span	394.0000
Front Bend Air Angle	21.3000 🚽
Rvs Bend Air Angle	14.2000 ┥
Bending Backlash	0.0000

From this picture ,you can see, it include two parameters , front bend air angle can adjust back side , and "Rvs bend air angle "can adjust front side ,about this , you can have a try , change one number (one of these two) , try to make a letter, then you will see the curve(back or front) is changed,then you will know which parameter can control backside and which one can control front side.





adjust front bend air angle When clockwise bending, adjust rvs bend air angle

-Feed Param -

Enable Material Home Material Home Correct No -15.0000

Enable Depth Front Adj	Yes	1
Slot Critical Angle	165.0000	
Slot Span	0.0000	
Slot Depth Adjust Param		
Material Thick	0.6000	III
Slot Deep Adjust Home Correct	0.5000	
Front Depth Correct	0.0000	
Rvs Depth Correct	0.0000	
Turn Tool Param		
Turn to Reverse Dir	-1	
Turn Tool Home Dir	1	
Turn Tool Home Correct	24 0000	-

How to make a aluminum letter

Find a file and open it



Open it





Enable Process Sharp	Corner	
- Zoom Type Zoom Out C Zoom In	Offset	
Sure	ESC	

Flat Aluminum is outside arcylic, it is need to select Zoom out, Offset is 0.3 Channle aluminum is outside arcylic.Zoom ou 0.6



Flat Aluminum is inside arcylic, it is need to select Zoom in, Offset is 0.3





When a green line appears outside the white line, Right click, confirm



Revise "burin radius" the figure of "Burin radius" should be half of the cnc routor cutter diameter. Click the cutter comp one time





Right click in black area and choose select outline or inline



Then it shows like this:



Choose a node point and click it two times ,then it will become red(outline) or blue(inline)



Right click again in black area and choose confirm.

Now we have to choose this letter, press start/run.

4	Process
	Process Delay 1 S
3	Repeated Times 1
	Start Hold Stop
2	
E	

Then the machine will start .

After finishing , break it and bend it follow as the cut line (don't use the first part, break it)



Making it

