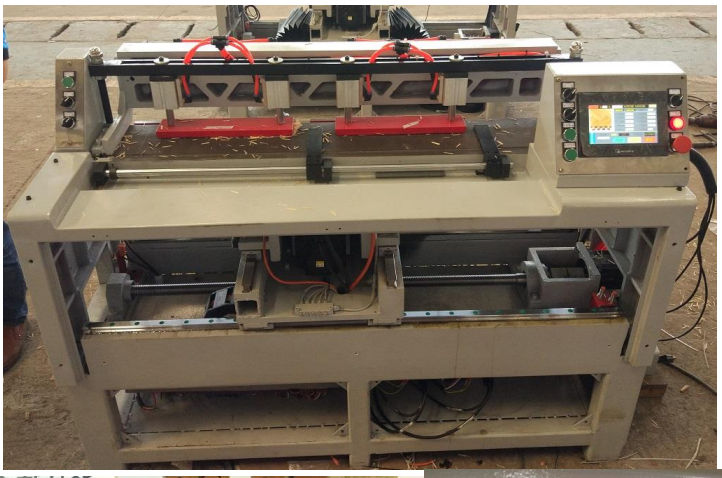
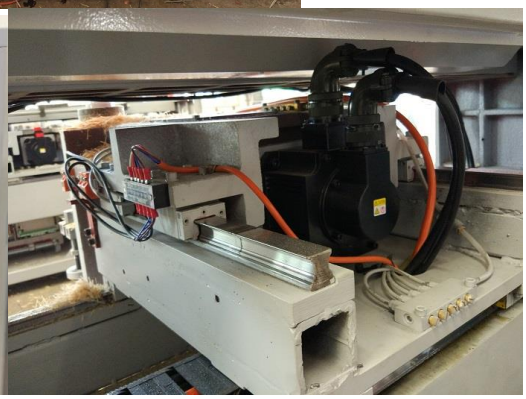
FA successful application

Case name	Shihlin SDE servo on boring machine				
Department	FA engineering group	date	2017-8-28	page	2
product	SDE series		code	ANS00002	

1.Introduction

Splicing refers to the way in which the hoe is inserted into the mortise or the gutter. It is the basic combination of classical furniture and modern furniture in China, and it is also the main combination method of modern frame furniture. The splicing is two pieces of material to make a hoe, one to make a blink, and two to wear together, the two materials are fixed together by the friction of the material. The CNC boring machine is a machine tool for processing wooden products. By using servo on application of the boring machine ensures the dimensional accuracy of the hoe.





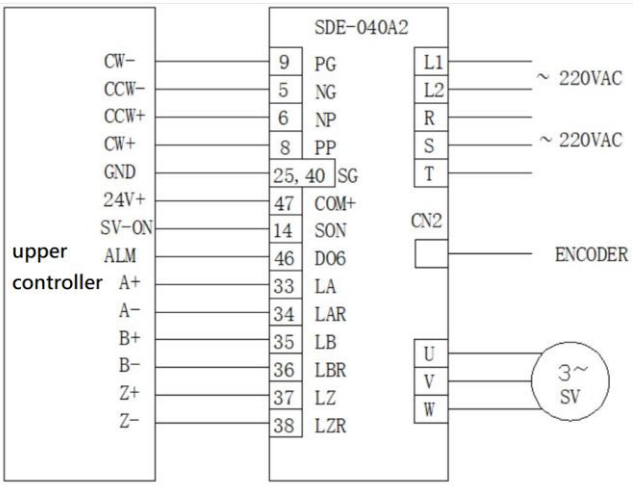
2.System control method

- It is required to achieve higher running speed and repeat positioning accuracy;
- The driver is required to have high and low frequency resonance suppression performance to prevent positional deviation when the two axes are running fast.
- Requires the drive to have excellent self-tuning

3.SDE series servo drive features description

- ✓ 22-bit high resolution Encoder for high precision positioning
- ✓ The speed response bandwidth is 1.2kHz, and the setting time is as short as 1ms.
- ✓ Excellent Auto-tuning function, can be completed accurately in only 1 cycle
- ✓ Excellent resonance suppression function to quickly and effectively suppress mechanical vibration or abnormal sound
- ✓ Responsiveness can be divided into 24 grades, and finer grades are convenient for adjusting rigidity
- ✓ Perfect servo online debugging software for engineers on site

4.Wiring



5.Parameter

X axis

parameter	abbr	set value	default value	unit
PA-03	ATUL	20	10	/
PA-13	PLSS	00000011	00000000	/
PA-15	CRSHA	200	0	%
PA-16	CRSHT	500	1	ms
PA-44	EGM	00000001	00000000	/
PA-45	FBP	5000	10000	pulse
PB-06	GD1	4	70	0.1 times
PB-07	PG1	150	45	rad/s
PB-08	VG1	602	183	rad/s
PB-09	VIC	10	34	ms
PD-01	DIA1	00001110	00000000	無

Y axis

parameter	abbr	set value	default value	unit
PA-03	ATUL	20	10	/
PA-13	PLSS	00000001	00000000	/
PA-15	CRSHA	200	0	%
PA-16	CRSHT	500	1	ms
PA-44	EGM	00000001	00000000	/
PA-45	FBP	5000	10000	pulse
PB-01	NHF1	712	1000	Hz
PB-02	NHD1	25	0	dB
PB-03	NLP	6	10	0.1ms
PB-06	GD1	10	70	0.1 times
PB-07	PG1	150	45	rad/s
PB-08	VG1	602	183	rad/s
PB-09	VIC	10	34	ms
PB-27	ANCF	00000000	00000001	無
PD-01	DIA1	00001110	00000000	無