Changzhou Techelect Electronic Equipment CO.,LTD

Date: Nov, 8th,2016

Equipment name	Widen etching machine	备注
Equipment specs	Model: ZQ-SEQM-1150	
Minimum size of board	600mm*600mm	
Maximum size of board	1500 mm * length no limit	
Minimum thickness of board		
Maximum thickness of board		
The size of equipment area	L11980*W3000*H1980mm	Working height: 900±25mm
Equipment weight		
Power supply	380V, 50HZ, 3phrase	
Electronic control operating type	Button switch	
Power consumption	66.95KW	
Running water consumption		
DI water consumption	20~ 32 L/min	
Running water supply pipe diameter	ф 32	
Drain out water pipe diameter	ф 62	
Drain out waste liquid pipe diameter	Ф 40	
Cooling water pipe diameter	Ф 20	
Air waster exhaust pipe diameter	Ф 160	Each air waste bleeding point install demist box
Blow drying hot air exhaust pipe diameter	Ф 62	
Air draft capacity	15CMM	
Transmission speed	2m/min(0.1-5.0m/min adjustable)	
Approval:	Check: Wendy	Charting: Leo

Widen etching machine

Processing speed 2m/min--- Energy consumption specs

1. Power consumption part:

	Processing item	Transmission reducer	Heater	Pumping	Swing motor	Agitator Pump	
1.	Loading	1/2HP*1					
2.	Etching One		12KW	7.5KW*1	100W		
3.	Etching Two		12KW	7.5KW*1	100W		
4.	Air knife					3KW	
5.	Chemical washing		12KW	3KW*2			
6.	Recycle water washing 1/2			3KW*2			
7.	Running water						
was	washing						
8.	Blot up						
9.	Unloading	1/2HP*1					
	In total:	0.75KW	36KW	27KW	0.2KW	3KW	
	Total : 66.95KW						

2. Water consumption part:

Item	Pure water	Running water
1. Loading		
2. Etching One		
3. Etching Two		
4. Air knife		
5. Chemical washing		
6. Recycle water washing 1/2		
7. Running water washing		15
8. Blot up		
9. Unloading		
In total (L/Min)		15

Chiller is required as below part:

A. Etching

Widen etching machine Specification

Model: ZQ-SEQM-1150

I. Process flow:

Loading → Etching One → Etching Two → Air Knife → Recycle water washing 1/2 → Running water washing → Blot up → Unloading

II. Main technical parameter:

- 1. Body structure: The plastic section applies excellent PP board, temperature resistance 50°C;
- 2. Effective Processing width: 1500mm
- 3. Working height: 900 \pm 25mm
- 4. Transmission roller wheelbase: 200mm
- 5. Transmission shaft diameter: \emptyset 20mm
- 6. Transmission shaft material: Titanium/Glass fiber
- 7. Rubber roller diameter: 50mm
- 8. Rubber roller shaft diameter: Ø19mm
- 9. Roller shaft material: PVDF
- 10. Maximum board size: $1500 \text{mm} \times \text{any length}$

- 11. Minimum board size: L600mm × W600mm
- 12. Transmission speed: 0.5-5 / min (Frequency speed)
- 13. Power supply: Three-phase and four-wire system, 380VAC, 50HZ
- 14. The power of the complete machine: 66.95KW
- 15. Outer dimension: L11980mm \times W3000mm \times H1980mm

III. The equipment feature:

- 1. The plastic section applies excellent PP board;
- 2. The baseboard of the liquor tank leans to make the deposition and polluted water to flow out of the tank
- 3. The transmission gear applies titanium. The driving mode applies nail-shaped wheel gear, so it is very easy to disassemble and deliver the roller.
- 4. The complete machine applies independent looping pump, the pressure and rate of flow can be adjustable
- 5. The spray rinsing pipe can easily disassemble to do maintenance service
- 6. The high flow nozzle can carry off dirt rapidly when it's washing.
- 7. The space between all the tanks will be sealed up to avoid cross mixture.
- 8. Design as up exhaust tube, the modeling of the machine set is

smooth to decrease the difficulty of connecting the exhaust tube for customers.

- 9. The plug board filter and total pressure filter unit can fully filter liquid impurity and it's convenient to take out for cleaning.
- 10. The before process flow needs to be connected with the Cold-drying section when it's assembling in the drying section. The material of shaft tunnel applies high strength Bakelite plate 15mm, the material of engine base applies angle iron, the structure is solid and durable. The cover applies 8mm toughened glass which can bear high temperature and pressure. Pressure fan with big air quantity can coordinate with up and down knives at a 40M/SEC high speed to blow away the remnant water on the board.
- 11. The components of this equipment are all standard, so don't worry about the accessories and repairs.

IV, System Specs:

1. Process: Loading section

Working length: 2500mm

1) Loading:

Body: Anti-impact PP board δ 20mm, 12mm, 8mm

Transmission: Φ19mm Ti rod/Glass fiber rod with Φ50mm

rubber roller

Transmission principal axis: $\Phi 20$ mm Ti axis

Transmission Motor: 1/2HP×1 (Taiwan Chengbang Brand)

2. Process: Etching One/Two + Air knife section

Working length: 2880mm

2) Etching One/Two:

Body: PP board δ20mm, 12mm, 8mm

Transmission: Φ19mm Ti rod/Glass fiber rod with Φ50mm

rubber roller

Roof Cover: Uncovered transparent toughened glass cover

Transmission principal axis: Φ 20mm Ti axis

Etching pump: 7.5KWx2 (Joint Venture)

Pressure gauge: $0 \sim 4 \text{kg}$

Spraying pipe: Thickening PP pipe (Taiwei made in Taiwan)

 Φ 32× Φ 25

Nozzle: Excellent ABS Plastic conical injection which has

heat resistance and wear ability

Transport gear: PVDF

Swing system metal part: PP

High strengthen flexible pipe: Adopt Japan imported pipe

Heater: 12KW*2 Ti heater (Domestic brand)

Temperature controller: Digital display

Cooling pipe: Φ 12 Ti pipe

Swing motor: 100W×2 (Imported from Taiwan)

Filter: Full pressure filtration with PE film

Air knife fan: 3KWcentrifular fan (Domestic Brand)

3. Process: Chemical washing section

Working length: 1600mm

3) Chemical washing section:

Body: PP board δ20mm, 12mm, 8mm

Transmission: Φ 19mm Ti rod/Glass fiber rod with Φ 50mm rubber

roller

Roof Cover: Uncovered transparent toughened glass cover

Transmission principal axis: Φ 20mm Ti axis

Spraying pipe: Thickening PP pipe (Taiwei made in Taiwan)

 Φ 32× Φ 25

Nozzle: Excellent ABS Plastic conical injection which has

heat resistance and wear ability

Transport gear: PVDF

Chemical Pump: 3KWx2 (Joint Venture)

Heater: 4KW*3 Ti heater (Domestic brand)

Temperature controller: Digital display

Pressure gauge: 0~4kg (Imported from Taiwan)

Filter: Full pressure filtration with PE film

4. Process: Recycle water washing+ Running water washing +Blot up

Working length: 2500mm

4) Recycle water washing + Running water washing + Blot up:

Body: PP board $\delta 20$ mm, 12mm, 8mm

Transmission: Φ 19mm Ti rod/Glass fiber rod with Φ 50mm rubber

roller

Roof Cover: Uncovered transparent toughened glass cover

Transmission principal axis: Φ20mm Ti axis

Spraying pipe: Thickening PP pipe (Taiwei made in Taiwan)

Φ 32× Φ 25

Nozzle: Excellent ABS Plastic conical injection which has

heat resistance and wear ability

Transport gear: Ti

Washing Pump: 3KWx2 (Joint Venture)

Pressure gauge: $0 \sim 4 \text{kg}$ (Imported from Taiwan)

Filter: Full pressure filtration with PE film

Flow meter: 4-40L/min transparent flow meter

Magnetic valve: Ø3/4" Material: Copper

Suction roller: PVA white foam material with strong water absorption and long life characteristics.

5. Process: Unloading section:

Working length: 2500mm

5) Unloading:

Transmission: Φ 19mm Ti rod with Φ 50mm rubber roller

Transport principal axis: $\Phi 20$ mm Ti axis

Transport motor: 1/2HP×1 (Joint Venture)

9. Electric appliance:

Temperature controller	Omron	1set
Contractor	Delixi	1set
Alarm	Delixi	1set
Breaker	Delixi	1set
Indicator lights	Joint venture	1set
Button	Joint venture	7set
Terminal blocks	Domestic brand	1set
Frequency driver	Adlee	1set