

## Fine Wire Drawing Machine



### I. Technical specification

1. Input wire:  $\Phi 0.8 - 1.2\text{mm}$
2. Output wire:  $\Phi 0.08 - 0.35\text{mm}$
3. Production speed: Max 2500m/min
4. Capstan Diameter:  $\Phi 206\text{mm}$
5. Number of dies: 24
6. Wire drawing lubrication: Spray type

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7. Outer diameter of dies:  $\Phi 25\text{mm} \times 8 - 13\text{mm}$  (thickness)
8. Mechanical elongation: By the dies from the 1st to 23th, 15%; By the 24th die, 8.7%.
9. Main motor power: 15kW-4P AC motor
10. Take-up motor power: 4kw-4P /5.5kw AC motor
11. Take-up control: Double frequency conversion automatic tension control
12. Take-up Capacity: 50kg, Max
13. Take-up reel:  $\Phi 300\text{mm}$ , Max
14. Brake: Electromagnetic brake
15. Supply voltage: 380V AC, 50Hz, 3-phase
16. Power consumption: 8– 18 kW
17. Machine dimensions: 2800L  $\times$  1500W  $\times$  1650H (mm)
18. Machine weight: 2200 kg

## II. Machine construction

- 1: Pay-off stand
- 2: Drawing machine
- 3: Take-up
- 4: Electrical control part

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### III. Electric control

1. Electric control components: Imported electric control components with high reliability to ensure steady operation of the machine.
2. Supply voltage: 400V AC, 50Hz, 3-phase
3. Tension control: A special-purpose tension control inverter is used to ensure steady tension so as to improve the surface quality of the wire.
4. Power control: Dual-inverter-drive is used to reduce mechanical energy loss so that energy-saving and reduced power consumption are achieved.
5. Automatic stop: This function includes automatic stop with full reel, automatic braking at wire breakage, braking at traverse overshoot and automatic braking at abnormal operation of the speed regulator, motor, etc.
6. Wire drawing: Slip type continuous wire drawing with four horizontal shafts.
7. Power control: The drawing motor has a capacity of 11kW AC and the take-up motor 4kW AC. A frequency conversion speed regulator with stepless speed regulation is used to control the power. The present line speed can be displayed automatically on the line meter.
8. Drive: Brushed part of the flat belt drive.

### IV. Selection of parts and components

No	Name	Manufacturer	Place of origin	Remarks
1	Inverter	YASKAWA	Japan	
2	3-phase asynchronous motor	Siemens	China	

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3	Air switch	Fuji / Schneider	Japan / France	
4	AC contactor	Schneider	France	
5	Intermediate relay	Schneider	France	
6	Low Voltage appliances	Schneider	France	
7	Bearing	NSK OR SKF	Japan or Germany	
8	Driving flat belt	Habasit	Switzerland	
9	Guide Pulley	Chuangkang	Taiwan invested company	
10	Electro Magnetic brake	Newly-developed product	China	

### V. Machine components and accessories

No.	Name	Unit	Quantity	Remarks
1	Pay-off stand	set	1	
2	Drawing machine	set	1	
3	Tension unit	Set	1	
4	Take-up	Set	1	
5	Electric control cabinet	Set	2	
6	Accessories of the machine			
6.1	Unloading plate Wrench	Set	1	
6.2	Power supply cords	Set	1	
6.3	Anti-vibration rubber base	Set	5	



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### VI. Yield table

Size/Speed	2400m/min	2200m/min	2000m/min	1800m/min	1500m/min
0.16mm	25kg/Hour	23.5 kg/Hour			
0.18mm		30kg/Hour	27 kg/Hour		
0.254mm			54kg/Hour	48 kg/Hour	

### VII. Others

Coating: Paint-spraying according to the color required by the Buyer after anti-rust treatment or sky blue.

