

# Standard PV Ribbon Rolling Machine/Single Rolling Type

Equipment Name : Standard PV Ribbon Rolling Machine/Single Rolling Type  
(Produce PV Ribbon Wire)

Model : WC-1111



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# Standard PV Ribbon Rolling Machine

## 1. USE

- \* Produce PV Ribbon Wire
- \* Principle : Makes the round wire process Rolling, Annealing, Cooling, and become to Flat copper wire. °

## 2. Equipment composition & Specifitation

- \* The Machine including Pay-off, Rolling, Annealing, Take off °

Spec	Pay off	Rolling	Annealing	Take off	Total
Length	1130mm	1550mm	1760mm	900mm	5340mm
Width	900mm	840mm	1200mm	1210mm	Max1210mm
Height	1160mm	1700mm	2250mm	1190mm	Max2250mm
Weight	120KG	780KG	1500KG	620KG	3020KG

- \* Input Source : 380V/3Ph ; 50/60MHz



## Standard PV Ribbon Rolling Machine

### A. Pay-off

- AC motor 2.24KW
- PLC
- Linear wire potentiometer , auto tension pulley.

### B. Rolling

- Rolling Wheel /  $\phi$  106 mm
- Water cooling equipment
- Electric motor : AC motor 5.5KW  
Servo motor 400W
- PLC
- Laser scanners measure the width of the conductor
- Automatically adjust the rolling wheel to stabilize the conductor size

### C. Annealing

- Electric motor : AC motor 2.24KW
- Annealing method : DC voltage output electrode wheel
- Annealing voltage : DC 25V
- Annealing current : 500A
- Anneal protect method : Nitrogen
- Radiator/Cooling water control
- Auto tension pulley control

### D. Take off

- Electric : Servo motor 400W x 1  
Servo motor 750W x 1
- PLC
- Using plastic spool
- Auto winding speed control (Constant speed.)



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### 3.Productivity

※ Produce Speed : 3.0mm(width) ↓ 100M/min~140M/min

※ Conductor sizes apply: The following is a common specification reference :

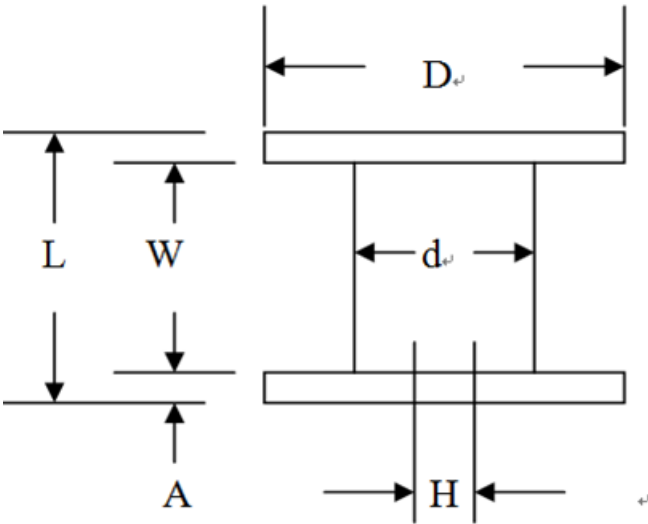
No.	Flat conductor (mm)		Bus Spec (mm)		Speed (M/min)	Length (M/kg)
	Spec	Tolerance	Dia $\phi$	Spec		
1	2.0*0.15	±0.05/0.01	0.670	±0.005	120~140	390
2	1.5*0.15	±0.05/0.01	0.582	±0.005	120~140	520
3	2.0*0.1	±0.05/0.01	0.550	±0.005	120~140	585
4	1.5*0.1	±0.05/0.01	0.466	±0.005	120~140	780
5	0.7*0.1	±0.03/0.01	0.297	±0.002	120~140	1670
Noted			Bus specs and quality of raw materials, drawing conditions and working environment will be some differences.			

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## 4. Spool Spec

SPOOL

Type	MATERIAL	D (mm)	d (mm)	W (mm)	H (mm)	A (mm)	L (mm)
DIN355	PS or ABS	355±0.5	224±0.5	160±0.5	36±0.2	20±0.5	200±0.5



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## 5. Notice

### \* Set up condition :

- ① Location of installation requirements Mixed for the land surface ◦
- ② Make sure install space is enough.  
Minimum of space require : 10m(L) x3m(W) x3m(H) ◦
- ③ The location should be easy to exhaust and drainage ◦
- ④ Clean air environment ◦
- ⑤ Power, air compressor's joints should be easy to connect ◦
- ⑥ Power Supply :

This machine is three-phase system, check the voltage and frequency are consistent with this

AC voltage 380V  $\pm$  10% At normal voltage

Frequency 50/60 MHz

Humidity 20%~80% (Non-condensing)

### \* Precaution :

- ✓ Makes installation location clean.
- ✓ Confirm the adequacy of work space
- ✓ Remove all obstacles in the vicinity of the machine
- ✓ Avoid moisture, dust and hot places
- ✓ Power connection should be done by certificated operators
- ✓ Make sure the power is consistent with the requirements
- ✓ When connecting power, ensure that all power is disconnected
- ✓ Provide a stable power supply, or to prepare regulator
- ✓ Power in the open after installation, remove any dangerous obstacles
- ✓ Confirmation of the pipe connector, found leakage, immediately turn off the power supply repair
- ✓ When the machine stops due to power outages, turn off switch