Operation Speed: 1.0m/min
1. CITY/DI WATER TUBE
2. CHEMICAL WATER TUBE (DRAIN)
3. WATER TUBE (DRAIN)
4. 1000mm WIDTH AREA RESERVED FOR MAINTENANCE
5. The tolerance for machine outer dimensions is ±100mm, excluding piping.

A/B/C/D working Speed can be adjusted independently

Universal P.C.B. Equipment Co., Ltd.

<table>
<thead>
<tr>
<th>Name</th>
<th>Shadow Machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>XG.Chen</td>
<td>12/Jan/18</td>
</tr>
<tr>
<td>Model</td>
<td>17SD10DRAA06</td>
</tr>
<tr>
<td>Ratify</td>
<td>Drawing No</td>
</tr>
</tbody>
</table>
Shadow Machine

(A) SCHEMATIC

INPUT ⇒ CONDITIONER ⇒ CASCADE WR/S(1)(2)(3) ⇒ SHADOW ⇒ FIXER
⇒ RINSING ⇒ DRYING MODULE(1) ⇒ INSPECTION ⇒ MICRO-ETCHING
⇒ PRESURIZED WR/S(1)(2)(3)(4) ⇒ ANTI-TARNISH ⇒ PRESURIZED WR/S(5)(6)
⇒ DRYING MODULE(2) ⇒ OUTPUT

(B) SPECIFICATIONS

1) Outer dimension: 15594mm L × 1755mm W × 2580±25mm H

2) Panel size:
   i) 533mm × 610mm [Max]
   ii) 250mm × 250mm [Min]
   iii) 0.1 ~ 5.5mm [Thickness][Not Include Copper]
   iv) Via hole A/R: 10:1, Ø0.2mm(min. hole)
   v) Blind hole A/R: 1:1, Ø0.1mm(min. hole)
   vi) FR4 core, H/H oz copper, with 10mm length away from the panel edge
   vii) If thickness ≥ 3.5mm, it should chamfer the edge of the board. Besides, the min. panel size should be 350*350mm

3) Conveyor speed: 0.5 ~ 2.5m/min(Adjustable) [Operation speed: 1.0m/min]

4) Conveyor height: 1000mm ± 25mm

5) Conveyor width: 760 mm [Effective width: 630mm]

6) Roller diameter: Ø32mm

7) Roller distance: 35mm

8) Power consumption: 3 Phase 380V AC 50Hz 91.9kW[Rated]
   (Power of heater 46.0kW)

9) Power consumption: 39.0~48.2kwh [Actual]

10) Water consumption: 28~42 L/min [City Water]
    42 L/min [Cooling Water]
    Pressure of cooling water (water in): 2.0~3.0bar,
    Temperature of cooling water (water-in): 8~10°C
11) Exhaust capacity: 
8.4 m³/min [Non-Drying Module]
16.8 m³/min [Drying Module]

12) Input Direction: From right to left [Front View]

13) Control box: Use PLC control and Touch Screen Display

14) Exhaust pipe Quantity: 2 in total

15) Drainage pipe Quantity: 2 in total

16) Remarks:

1. The tolerance for machine outer dimensions is ±100mm excluding piping
2. The <Panel Transportation Report> acts as an acceptance criteria

3. CE declaration

4. Equipped with 1 set step down transformer (415V-380V)

5. Equipped with 1 set PVC drip tray, 16m L x 3.4m W.

6. Both input and output conveyor have a touch screen, prepare more 4m cable for the touch screen inside the laminating room.

7. Shadow Module's flood bars are hole type

8. Only 2 drains for effluent and recovered water, chemical processes have no drainpipe. Customer will offer a barrel pump to remove all chemistry. UCE provide the pocket to set the pumps.

9. There are 5 protections in heated module (Low Level sensor, Low Low level sensor, temp. controller, overheat protector, anti-dry protection).

10. Micro Etching module is separate into 2 parts, 4 pairs dirty spray pipe and 3 pairs clean spray pipe.

11. A/B/C/D working speed can adjusted independently, can reset whole line's speed once.

(C) CHEMICAL DATA (Based on 1.0m/min operation speed)

Chemical Supplier: Mac Dermid

1) Conditioner: 60 sec (effective length 1000mm) \(\leq 50^\circ\text{C}\)

2) Shadow: 66 sec (effective length 1100mm) \(\leq 22^\circ\text{C}\)

3) Fixer: 31 sec (effective length 530mm) \(\leq 50^\circ\text{C}\)

4) Micro-Etching: 45 sec (effective length 750mm) \(\leq 40^\circ\text{C}\)

5) Anti-tarnish: 24 sec (effective length 390mm) R. T.
<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1) Panel Size:</td>
<td>total output based on 18&quot; x24&quot; (460×600mm)</td>
</tr>
<tr>
<td>2) Distance:</td>
<td>50mm between of two panels</td>
</tr>
<tr>
<td>3) Operation Speed:</td>
<td>1.0m/min</td>
</tr>
<tr>
<td>4) Output (pcs/hour):</td>
<td>1000mm ÷(460+50) mmx60min 117pcs/hour</td>
</tr>
<tr>
<td>5) Output (pcs/day):</td>
<td>117x20hours 2,340pcs/day</td>
</tr>
<tr>
<td>6) Output (pcs/month):</td>
<td>2,340pcs x26days 60,840pcs/month</td>
</tr>
<tr>
<td>7) Output (ft2/month):</td>
<td>60,840×3.0ft2x80% about 146,000ft2/month</td>
</tr>
</tbody>
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