aluminum ps Substrate plates

Haomei Aluminum is located in famous aluminum capital of Zhengzhou, Henan province. We are professional aluminum manufacturer, mainly produces series-1, series-3, series-5, series-6 and series-8 pure aluminum and aluminum alloy plate/strip/foil products, aluminum strip, aluminum foil, (Aluminum Cigarette Packing Foil (Double Zero Foil), Aluminum Household Foil, Aluminium Container Foil, Pre-lubricated Container Foil, Aluminum Pharmaceutical Foil, Aluminium Cable Foil, Aluminium Beer Mark Foil, Aluminium Foil For Electronic Power Capacitor, Printed aluminium foil/sheet, Aluminium Hot Seal Foil, aluminum sheet, aluminum plate, aluminum hot rolled plate and aluminum tread plate, such as hot-rolled thick plate, ROPP cap materials, aluminum circle/disc for cookware and lighting, aluminum drilling entry for PCB, aluminum tape for aluminum plastic tube, aluminum baseplate for PS plate, aluminum bright finish tread plate, aluminum circles, aluminum checkered plate, PP cap materials and others.

We would like to highlight our aluminum foil, aluminium circle, aluminum strip, aluminum sheet, aluminum plate, aluminum ROPP cap materials, aluminum hot rolled plate and aluminum tread plate with good quality and competitive price.

**BRIEF SUMMARY OF THE PS Substrate**

Aiming at the deficiency of the existing techniques, the invention provides a kind of offset PS plate with compound support, which could save aluminum materials and enjoys reliable performance, and also provides a kind of manufacturing process at the same time.

PS plate of this invention includes aluminum substrate, has sensitization imaging layer set up on the front side of its aluminum substrate, and has a membrane of polymer materials covered on the back side of the substrate, which form the structure of compound support.

The thickness of the substrate and membrane is 0.1-0.3 mm and 0.01-0.3 mm respectively. The membrane could adopt such polymer material with great rigidity as POM, PET, PC or PPS., with the membrane pre-coated with heat-melt adhesive as the prior selection.

The manufacturing process of this invention firstly deoils and cleans the aluminum substrate, then conducts electrochemical corrosion and roughening for the surface of the substrate, generates oxidation layer through the oxidation of anode, carries out sealing or hydrophilic treatment for the oxidation layer, and coat sensitization liquid onto this oxidation layer; finally, dries and cuts the plates into finished products. And it is possible to cover a membrane
of polymer materials on the back side of the substrate after deoiling and cleaning the substrate.

In fact, it is possible to cover a membrane on the substrate after any step of the abovementioned process, or even after drying and cutting of plates. In case the membrane is compounded before the commencement of electrochemical treatment, it is available to keep the back side of aluminum materials from contacting the chemicals, save electric energy, avoid over electrochemical reaction at the edges of front side, and enhance the performance of finished products. Generally, membrane is usually stuck to and covered on the substrate with the heat melting and stitching method.

The compound support substrate of this invention continues using the advantage of aluminum materials, namely the adsorptive sensitization imaging layer, and sets up membrane layer on the back side. It is possible to use relatively thin aluminum materials to keep relatively high quality, greatly reduce the consumption of aluminum, and decrease the cost. The membrane of polymer materials is featured by strong toughness; after compounding, the substrate enjoys great tensile strength, so the plate is not easy to break during printing; and also, the polymer materials have lower density, which could lighten the weight of finished plates, decrease the requirements on package strength and the transport cost. In addition, polymer membranes have extremely smooth surface, so multiple sheets of PS plates overlapped won't scratch the sensitization layer on the front side of each other, and will require no interleaving paper. What's more, the manufacturing process of PS plate with compound support is basically accordant with the original one, and the compounding of membrane is simple and quick.

Our company has internationally advanced technology and uses highly flat aluminium coil substrated as base material, adopting advanced technology such as continuously electrolytic graining, anodizing, extruded coating of sensitive film and automatic-coating, proper graining, high resolution, stable property, rapid developing speed and high pressrun rate and highly praised by the end customers.

**Operational Instructions:**

1) Exposure:
In practice, the correct exposure time may vary according to the light source, bulb distance and quality of films etc. The suggested exposure level is 140 mj/cm².

2) Developing:
Highly recommended to use the AONE PD-1 developer, mixing as per its operational instructions, suitable for automatic processing and tank processing. The developing temperature is 25±2°C and the developing time is around 30 seconds.

3) Deletion:
Apply a little deletions to the unwanted image area on the plate wait for 30~60 seconds, then wash it with clean water.

4) Gum:
After deletion, spread the protection gum evenly over the surface of the plate. Water-absorbing ability can be improved and applying gums guards against dust.

5) Baking:
Spread the baking gums over the entire plate surface to increase the press life of the plates then bake the plate for 5~7 minutes with a temperature between 200~230°C, rinse it after cooling, finally apply the protection gums.

6) Storage:
Open the package and handle the plates in yellow safe lights. Store in cool dry place, keep away from sunshine. Avoid strikes, bent and heavy pressure on it. The ideal temperature for storage recommended is 30°C and the relative humidity is 65%. The shelf life of the plates is normally 18 months.

**PRODUCT STRUCTURE:**
A. HIGH PERFORMANCE COATING AND SPECIAL VACUUM ASSIST TREATMENT

High performance coating can shorten the exposure time and make you get excellent dot reproduction meanwhile. Special vacuum assist treatment gives fast drawdown and saves your time apparently.

B. MULTI-LAYER GRAIN AND HARD ANODIC LAYER  MULTI-LAYER GRAIN AND STRUCTURE ANODIC LAYER

The fine even multilayer grain and the thick hard anodic layer gives our plates high resolution and long run length. Effective water maintaining treatment gives excellent damping properties.

C. HIGH QUALITY ALUMINUM ROLL

High quality alluminium roll ensure the high quality of our plates. we have 2 advanced production line of PS base plate, can produce various printing plates about 10 million sqm annually; quality completely conforms to the national "HG/T2694-95" standard

<table>
<thead>
<tr>
<th>Name</th>
<th>PS Substrate Sheet</th>
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</thead>
<tbody>
<tr>
<td>Spec</td>
<td>(0.14<del>0.3) x 600</del>1200 ) x (1500 ~ 3000 ) mm</td>
</tr>
<tr>
<td>Alloy</td>
<td>1050, 1060</td>
</tr>
<tr>
<td>Temper</td>
<td>H18</td>
</tr>
<tr>
<td>Application</td>
<td>PS Single product line</td>
</tr>
<tr>
<td></td>
<td>Provide good products and tech.support for PS producers</td>
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</table>

**Product Specification / Models**

aluminium sheet/coil used for making PS plate/Printing Plate/CTP Plate

<table>
<thead>
<tr>
<th>Alloy: Temp</th>
<th>Thickness</th>
<th>Width</th>
<th>Inner diameter</th>
<th>Elongation: δ≥1%</th>
<th>Packing:</th>
<th>Tensile Strength≥150Mpa</th>
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</thead>
<tbody>
<tr>
<td>1050, 1060</td>
<td>H18, H16</td>
<td>0.14-0.16</td>
<td>500-16</td>
<td>75mm /150mm /305mm</td>
<td>405mm /505mm</td>
<td>eye to wall, eye to sky</td>
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</tbody>
</table>

**PS Substrate**

<table>
<thead>
<tr>
<th>Product</th>
<th>Alloy</th>
<th>Temper</th>
<th>Thickness</th>
<th>Width</th>
<th>Diameter</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS Substrate</td>
<td>1060, 1070</td>
<td>H18</td>
<td>0.14, 0.15, 0.28</td>
<td>600-1200</td>
<td>500</td>
<td></td>
</tr>
</tbody>
</table>

Welcome the customers from all over the world to do the business cooperation with us.

Terms of payment: T/T, L/C Productivity: 2000 metric ton per month Packing: Blank waterproof paper, Kraft, Wooden

Delivery: 25 days after receiving deposit MOQ: 3 tons

**Company profile**

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lighting, aluminum drilling entry for PCB, aluminum tape for aluminum plastic tube, aluminum baseplate for PS plate, aluminum bright finish tread plate, aluminum circles, aluminum checkered plate, PP cap materials and others. We would like to highlight our aluminum foil, aluminium circle, aluminum strip, aluminum sheet, aluminum plate, aluminum ROPP cap materials, aluminum hot rolled plate and aluminum tread plate with good quality and competitive price.

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