

aspire



TAPERED POLE



Xiamen Aspire Import & Export Co., Ltd

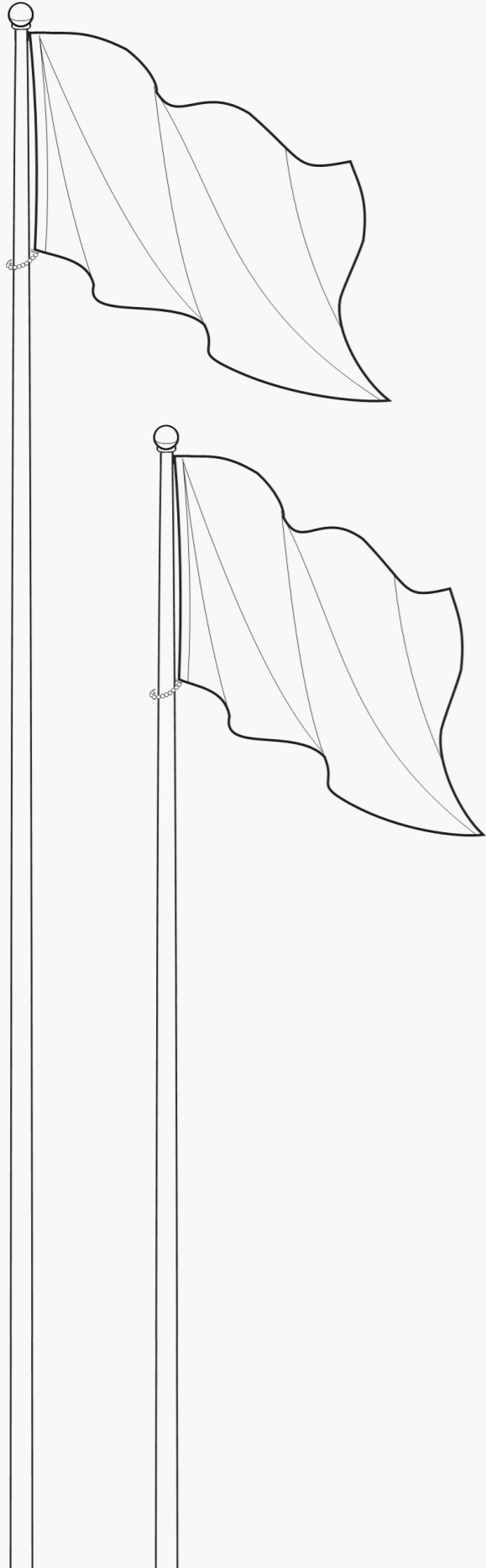
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Xiamen Aspire Import & Export Co., Ltd



Make Your Brand Fly

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Sustainability In Aluminium

Aluminum resists the ravages of time, temperature, corrosion, humidity, and warping, creating an incredibly long life cycle when compared to alternative materials. This results in a far lower environmental impact through reduced material replacement energy.

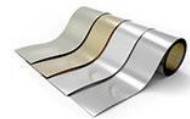
Aluminum poles provide an environmentally responsible choice of material and approach with the burgeoning green movement, allowing specifiers to aggressively pursue a design based upon sustainable principles.



Corrosion resistant, maintenance free. Aluminum poles will gradually replace stainless steel poles. The aluminum poles will never rust.



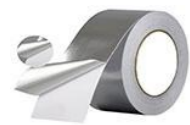
Aluminum poles totally changes the situation that traditional tapered pole has longitudinal weld. It can be manufactured into a variety of shapes.



Through the process of aluminium extrusion it can be supplied in a variety of finishes including anodised, satin or powder coating.



Lighter weight for easy installation. It's about a third of the weight of steel, which makes it easier and cheaper to transport than most other metals.



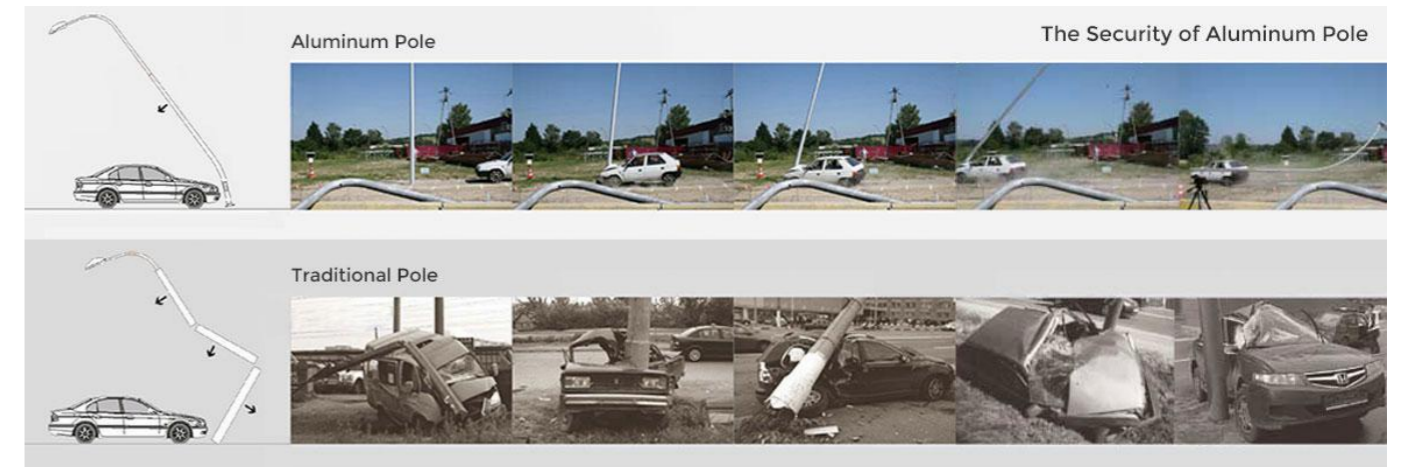
Even with 0.007mm thickness of aluminium foil, it is still impermeable and doesn't have a substance taste or smell. It is odourless and non-toxic.



100% recyclable, aluminum melting temperature is low to save energy and reduce emission. During the recycling, it retains all of its original properties.

Aluminum Pole VS Traditional Pole

For the sake of safety, European Union has already made mandatory provision: lamp post must use aluminium alloy material, and this regulation already began to carry out gradually. The reason is when a moving vehicle hits an aluminum pole, the pole bends, cushioning the vehicle so that it doesn't stop momentarily and the occupant doesn't fly out the window. And the aluminum rod by virtue of its own toughness, will not be broken and injured passers-by. The same thing happens with steel rods, with very different results.



Correlation Table

| Product | Advantage | Shortcoming |
|------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Steel poles | Strength | Visible rust and corrosion Weights three times as aluminium and high freight cost Limited recycle value Should not be direct buried Limited finishing |
| Fiberglass poles | Light weight Can be direct buried | Short life No recycle value and difficult and expensive to dispose Ultraviolet damage is common Expensive maintenance costs Can be damaged by mowing & trimming |
| Concrete poles | Can be direct buried Strength Never needs painting | Heavy and expensive shipping costs No recycle value Difficult to install and require expensive installation equipment More dangerous than other material |

Widely Application



Flagpole



Lamp Pole



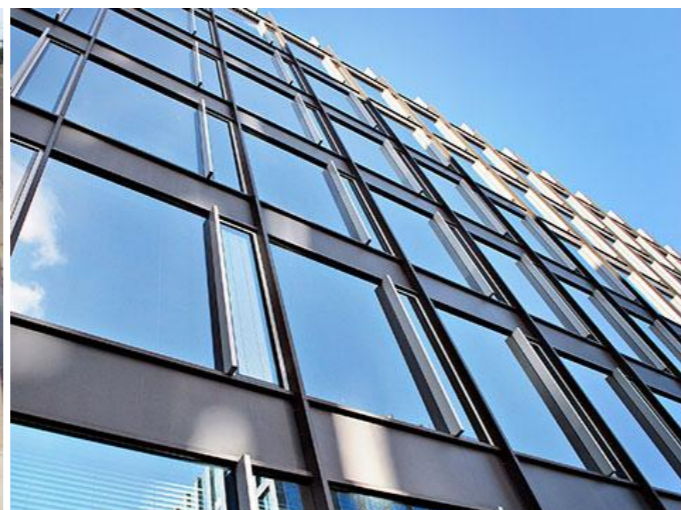
Bird House Pole



Bollard Cover



Handrail



Curtain Wall

Production Process

1. Raw material selection

We use aluminum alloy 6063 material bar. It is high quality building material, widely applied in construction projects such as aluminum windows and doors, curtain wall frame and so on. It guarantees the products have corrosion resistivity in the natural environment and will never rust. At the same time, in order to make sure flagpole's regular production, we select the aluminum alloy material strictly and does homogenization processing.

2. Precise numerical control extrusion

We have own extrusion production line, which meets the standard raw material supply. It enormously reduce production processing cycle.

3. Numerical controlled spinning

With the advanced entire numerical controlled spinning equipment, it forms cone shape or other different spindle shape in the high speed revolving process. The whole profile does not have welding joint but has smooth line and extremely round circle shape.

4. Intensity processing

In order to make aluminum alloy material have steel intensity, our lighting poles must pass through several heating treatment procedure in order to meet international intensity standard for aluminum alloy material.

5. Base plate welding

In order to make sure base intensity, all lighting poles bases are casting aluminum material. The base plate use automatic welding machine to weld, in this high grade welding process, the welding intensity and artistic can be guaranteed.

6. Access door

Each light pole has an access door for the installation of the electrical junction box. We use advanced cutting machine to cut the door, so the door is part of pole and is tightly matched, and the crack gap is even, which guarantee the door waterproof. Generally access door is 500mm up from the ground in the poles (also may based on the shape of poles). At the back of door, that is inside the pole, there's a aluminum rail welded for fixing the junction box. Lock is specially made with stainless steel anti-theft screws, and only professional tools provided can open, thereby this enhances the product's security performance.

7. Grounding system

Use a "L"-shaped folded aluminum workpiece, one side is welded to the wall of the pole, on the other side, drill a M8 hole in the center for the grounding wire.

Production Process

8. Anticorrosive protection for the bottom of lighting pole

We protect bottom part of lighting poles to prevent alkaloid ingredient corrosion from salt soil and mechanicalness damage. The protection coating is environmental protection. We use epoxy resin to cover bottom and up to 200mm pole surface. The inserted type poles bottom should cover epoxy resin wholly. Protective layer thickness is between 0.7mm-1.0mm. In addition, in order to prevent construction damage, our lighting poles have pyrocondensation membrane at bottom place, please get rid of it when the construction completes.

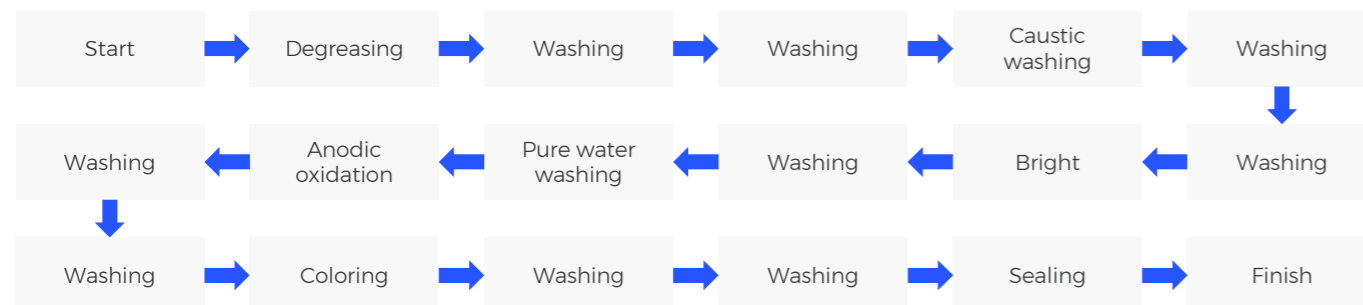
9. Surface treatment

(1) Anodic oxidation

We offer anodized finish as standard because it provides the best quality product. Brushed poles cannot offer the same level of protection and easily blacken in polluted aggressive environments such as coastal corrosion areas, traffic intersections and salted road are susceptible to corrosion. Anodizing is used to protect the aluminum surface of poles, extension arms and ornamental motifs from corrosion.

Anodizing is an electrochemical method which creates an oxide layer on the surface of the metal. Anodized coatings are supplied in several thickness of coating appropriate to the installation location and local conditions. The standard anodized coating is 12 microns and this ensure safe use in moderate to harsh conditions.

Anodic oxidation process of general profile as follows:



① Degreasing

No matter how you process the aluminum products, the surface will exist in varying degrees, dirt and defects, such as dust, metal oxides (oxide film formed under natural or high temperature), residual oil, asphalt signs, artificial handling fingerprints (the main component is fatty acids and nitrogen-containing compounds), welding flux, as well as corrosive salts, metal burrs, scratches and other minor draw. Therefore, prior to oxidation treatment, it is necessary to use chemical or physical methods to clean the surface of the products in order to expose metal matrix to do oxidation coloring and get the artificial membranes, which is combined with the solid matrix. Its color and thickness will meet the requirements and it has the best corrosion resistance, wearable, weatherproof performance.

② Alkali etching (caustic washing)

Alkali etching is the process that wash the surface of aluminum products in the sodium hydroxide solution within or without other substances, also known as alkali corrosion or caustic washing. Its role is to make up degreasing and do further cleaning, to remove natural oxide film and minor abrasions on surface. So that products expose clean metal matrix which is conducive to the generation of anodic film and has a high-quality film. In addition, by changing the composition of solution, temperature, processing time and other operating conditions, we'll have smooth, satin-matt, gloss or other kinds of corrosion washing surface.

③ Bright (neutralization)

The gray or black hanging ash which attach on surface of aluminium products after Alkali etching will not be dissolved in the cold or hot water, but can be dissolve in acidic solution, therefore, after Alkali etching, products should wash in acid solution in order to remove the hanging ash as well as residue lye and expose bright basic metal surface, this process is called neutralization, or bright processing.

④ Anodized

Aluminum or aluminum alloy products as the anode is placed in electrolyte solution (sulfuric acid solution commonly), through electrolysis, to make aluminum oxide film formed on the surface, this process is known as anodized.

⑤ Colouring

a. Chemical coloring: The process is simple, easy to control, having a wide color range and the color is bright.

(a) Monochrome staining: immerse aluminum products which is finish anodic oxidation and washing into the dye liquor that is in stated temperature.

(b) Multi-color staining: two or more colours are required on aluminium products, such as landscapes, flowers and birds, text, mainly use printing process to complete.

b. Electrolytic coloring

Electrolytic coloring process is sun-proof and hard to fade, it is the most widely used method of coloring. Through changing the dyeing time, we may gain yellow, champagne, bronze colour, brown, black and so on.

⑥ Sealing

In order to improve the quality of aluminum and dyeing, the micro-porous of the oxidized film should be closed after colouring. After sealing treatment the surface becomes even and non-porous and form a dense oxide film. Dye depositing in the oxide membrane is indelible. And the oxide film has no adsorption, which will avoid being contaminated by absorption of harmful substances and early erosion, thus it improves anti-pollution and anti-corrosion of anodic oxide film. Commonly hydrated sealing way, inorganic salt solution sealing way, transparent organic coating sealing way after dyeing are available.

Features of anodized pole: Anodized layer is part of metal surface, which will not peel and flake, and the color won't fade;

Long life: through anodic oxidation treatment, product forms a 12 microns sealing film in order to ensure the poles to resist corrosion in nature and no significant discoloration in 25 years.

(2) Fluorocarbon coating

A new coating material, it has excellent anti-fade, anti-frost, anti-air polluted(acid rain,etc.) corrosion, anti-UV ability, and strong anti-crack and the ability to withstand harsh weather conditions that the general coating can't reach.

(3) Powder coating

Light pole surface can be colored polyester powder coating, bright color, anti-ultraviolet radiation, non-fading.

Note: Because rod body, boards, wire and other material differences, anodizing would produce a certain color.

NOTICE: Anodizing inherently results in color variations on aluminum as the material difference between the poles, the base and the welding material, it is inevitable. If you want to ensure the color consistency on surface of poles, powder coating or fluorocarbon coating is recommended.



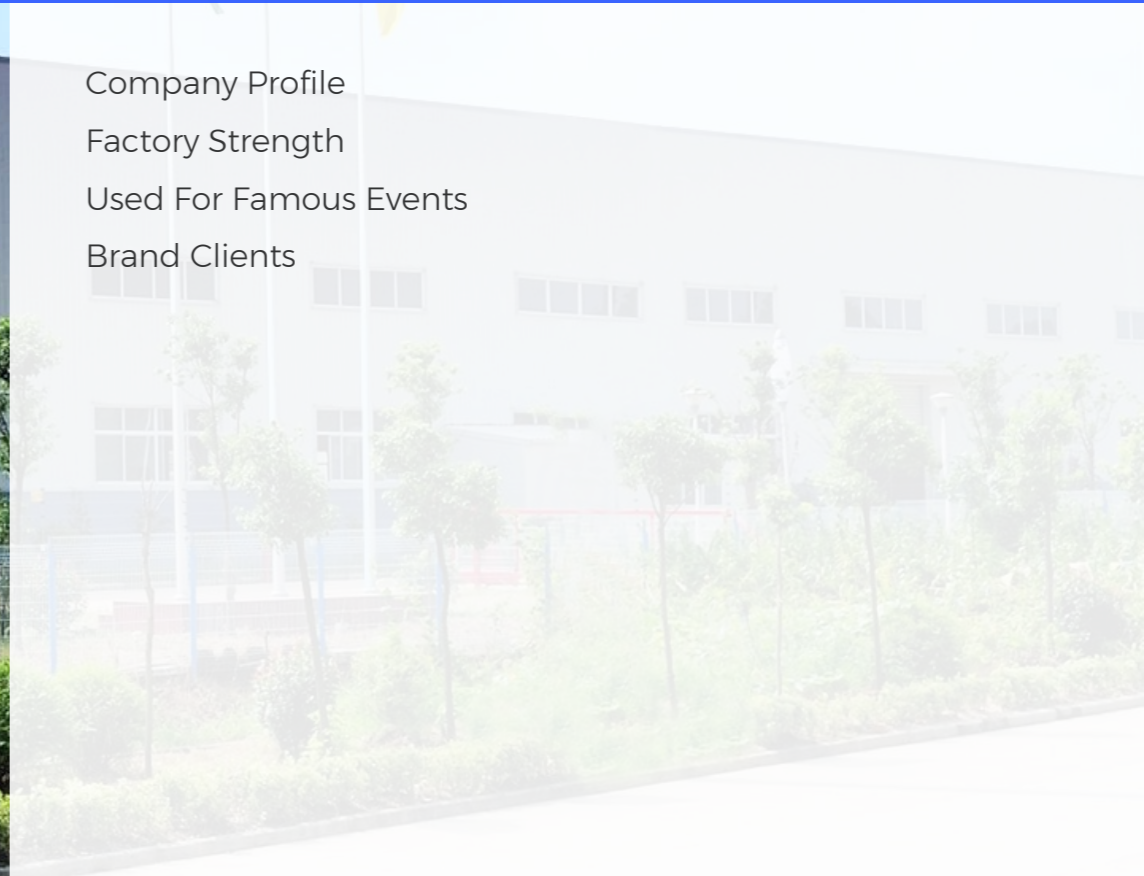
ABOUT US

Company Profile

Factory Strength

Used For Famous Events

Brand Clients





| | | | |
|----------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------------------------|
| <p>20+ Years Experience</p> | <p>30+ R&D Engineers</p> | <p>500+ Global Projects</p> | <p>80,000m² Production Workshop</p> |
|----------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------------------------|

COMPANY PROFILE

Aspire Industry is a leading manufacturer and exporter of stainless steel flagpole, aluminum flagpole, aluminum lighting pole and tapered tubes, which are widely used in P.E. playgrounds, exhibition centers, schools, factories, hotels, government facilities, residential homes, etc..

In China, our factory is the first manufacturer bringing in modern spinning technology to produce aluminum alloy poles. Basis on over 80,000m² of manufacturing facilities and workshop, we provide competitive, high quality solutions to your specific requirements, all supported by excellent service and reliability.

Our engineering capabilities range from precision rolled and welded tube and pipework fittings, to tubular piles, fabricated pipework, civil and environmental pipework, heavy and complicated fabrications that comply with all the major international codes. Our long serving skilled workforce are experienced in achieving the highest engineering SS-316, SS-316L, SS-304 and aluminum 6063-T6.

We have an excellent R&D team supplying new items to the markets continuously. As a professional manufacturer, Aspire Industry also welcome OEM design.

We not only take much more attention on QC, but also pay great attention in the communication with every customer. We do not allow any defect products out of the factory.

Nowadays, our products have won good reputation at home and abroad, such as Europe, America, Oceania, Asia, Middle East, Africa, etc..

We would like to establish long standing relationship with every customer in the near future.

- A Accountability**
We accept full responsibility for our actions
- P Passion**
People with passion can change the world
- R Respect**
The feelings of others are important

- S Simplicity**
Simplicity is the ultimate sophistication
- I Integrity**
We are honest, ethical and trustworthy
- E Excellence**
We are honest, ethical and trustworthy

FACTORY STRENGTH



In China, our factory is the first manufacturer bringing in modern spinning technology to produce aluminum alloy poles.



Aluminum Spinning Equipment



Aluminum Stick Extrusion Presser



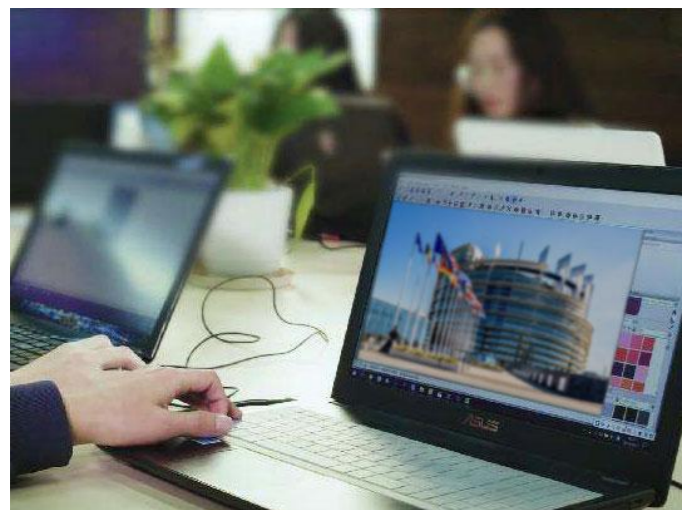
Our Electrophoresis process has a ten years Gold Guarantee to be corrosion and maintenance free.



Laser Cutting Machine



Laser Engraving Machine



With the ability of AutoCAD rendering, we accept customer's own designs and OEM design orders.



15m Hot Proceeding Equipment



13m Anodized Production Line

USED FOR FAMOUS EVENTS

As an industry-leading manufacturer of aluminum poles, we are extremely proud to offer the better pole value, professional customer service and continued innovation to industry professionals worldwide. Our products have been used for many famous projects and received positive recommendations from our customers.



2008
Beijing Summer Olympics



2010
Expo Shanghai China



2010
Guangzhou Asian Games



2010
Singapore Youth Olympic Games



2011
Shenzhen Summer Universiade



2012
African Union Conference Center



2014
The 22nd APEC Economic Leaders' Meeting



2016
G20 Hangzhou Summit



2017
The BRICS Xiamen Summit



BRAND CLIENTS

