

Multiple Candy and Metallic Color for your pubic art work and gardens





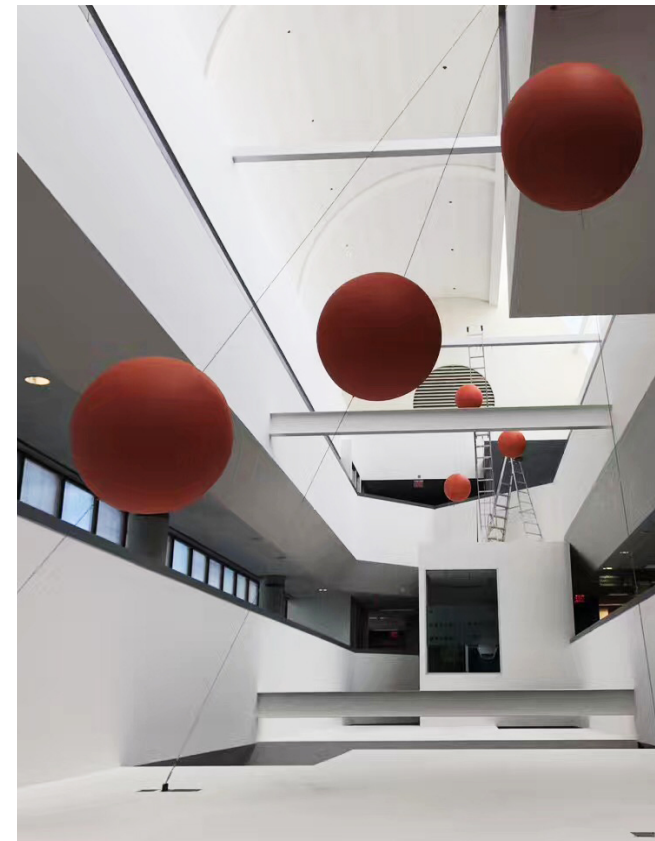
## Vacuum Metalizing (PVD)

- Size range:  $\Phi 6\text{MM}$  to  $\Phi 500\text{MM}$  ( $\Phi .236\text{inch}$  to  $\Phi 20\text{inch}$ )
- Color: Brilliant Mirror or Matt candy color.-Red, Green, Orange, Gold etc.
- Finger-print Free



## Electroplating Titanium

- Size Range:  $\Phi 6\text{MM}$  to  $\Phi 2200\text{MM}$  ( $\Phi .236\text{inch}$  to  $\Phi 7\frac{1}{3}\text{ft}$ )
- Color: Mirror or Matt Metallic color -Titanium Gold , Black, Copper, Bronze, rainbow, etc
- Finger-print Free



## Spray Painting

- Size Range:  $\Phi 6\text{MM}$  to  $\Phi 3500\text{MM}$  ( $\Phi .236\text{inch}$ -  $\Phi 11\frac{1}{4}\text{ft}$ )
- Color: Multiple smooth Color
- Superior general-purpose protective coating
- Impact resistance



# Vacuum Metalizing (PVD)

Vacuum Metalizing is the process of evaporating metals (most commonly aluminum) inside a vacuum chamber which then bonds to the desired substrate to achieve a uniform metalized layer. Thermal evaporation, otherwise known, as vacuum metalizing, is the most common PVD (Physical Vapor Deposition) process used to apply metal alloys under vacuum. Vacuum Metalizing has many uses including; decorative chrome and metallic finishes, highly reflective coatings for light reflectors, heat shielding, vapor barriers, and more.

## Production process

### 1: Tooling

Our process begins with the fabrication of custom tooling fixtures to hold your [stainless steel gazing balls](#) during the vacuum metalizing and painting operations. we'll drilled a hole or weld a eye bolt to fixed on the tool fixtures.

We ensure tooling fixtures provide maximum efficiency both in the number of components on a fixture and the handling of the fixture for processing, which allows for the best possible piece price.

### 2: Loading and Base coating

We adhere to strict to quality standards to ensure correctly processed balls. Operators wear gloves while loading the balls, so no contaminants are transferred to the balls. in-spected to ensure visible defects get resolved, are then load-ed onto the tooling fixtures.

For most decorative and reflective applications it is necessary to apply a specially formulated primer or base coat to promote adhesion and to provide a smooth surface, assuring a high-quality surface for the metalizing or finish paint steps. This step is needed for reflective finishes and chrome and metallic coatings for the balls.

### 3: Metalizing

First, the tooling fixtures get placed into Carousels that are moved into the vacuum chamber. A predeter-mined vacuum level is reached, and current is sent to the evaporation source. The source is a tungsten filament loaded with alloy (most commonly chrome). The current heats the filament until the alloy evaporates, which forms a vapor cloud that bonds to the parts. Thermal evaporation of alloys is a line-of-sight process, so the tooling fixtures rotate in front of the evap-ora-tion sources to achieve a uniform coating. Upon completion of the metalizing process, the chamber is re-turned to atmosphere, and the tooling fixtures are unloaded. Our proprietary process allows us to evaporate over 25  $\mu\text{m}$  of aluminum, while the typical thickness of evap-orated aluminum for light reflectors and chrome decorative coatings is approximately 1000 angstroms. In chamber pretreat and post treat processes aid in the adhesion of the coating.



## 4:Top coating process

A UV tinted topcoat is applied to enhance, moisture, abrasion, and chemical resistance for our stainless steel gazing balls. We offer many different topcoats for different colors.

All work is done in a clean and responsible manner so as to produce the best finish with the least impact on the environment.



## Featured Color Reference



Chinese Red



Gold



Green



Orange



Pink



Purple



Blue



8K Chrome

# Electroplating Titanium

Electroplating Titanium , also called stainless steel titanium/zirconium coating, forms a titanium/zirconium compound ion film layer on the stainless steel surface in a vacuum container. The film layer can not fade in the outdoor environment for many years.

## Process

In high temperature, vacuum titanium furnace, titanium, zirconium metal. The glow discharge of an inert gas is used to ionize the vapor of the metal or alloy, and the ions are accelerated by the electric field to deposit on the negatively-charged stainless steel plate, thereby forming a metallic film with a rich and beautiful color and luster.

## Features:

Different from traditional electroplating methods because of its unique properties, high hardness, anti-abrasive, no peeling, no fading, high corrosion resistance, and is not affected by ultraviolet light. Therefore, titanium electroplating stainless steel is used as a unique decoration. Materials are widely used in various decorative fields .



## Featured Color Reference



Titanium Gold



Titanium Black



Titanium Copper



Champagne Gold



Diamond Blue



Rainbow<sup>®</sup>





# Spray Painting

Spray painting is a painting technique where a device sprays a coating (paint, ink, varnish, etc.) through the air onto the large steel balls surface.

## Process

### 1.Grinding

We're using the car spray painting method for the colored large steel gazing balls. we make a steel balls with-out mirror polishing. The unpolished surface has better adhesion for the paint. We just grinding off the welds and burrs to make sure preparing a smooth surface.

### 2:Puttying

Apply putty to the entire ball surface. Our qualify workers will apply the putty evenly. Apply a very thicker coating, this will make the coating more durable. Allow it to dry.

### 3:Sanding

Sand the putty surface. Start with 150-grit. Then 180-grit.finish with 600-grit

### 4:Painting

Apply the topcoat paint on the finished puttying balls surface. Each coat will take about 10 minutes to apply per panel and between 20 minutes to an hour between re-coating for the paint to cure.

