
Frequently Asked Questions on Powder Coating

What Is Powder Coating?

Any electrically conductive metal or material that can withstand 400° F temperature without losing its integrity

The powder coating process uses a solvent free dry mix of plastic resins, pigments and fillers that melt and fuse together when heated. The solid particles of coating are electrostatically charged in a spray gun and carried by low velocity air to the surface of the piece to be coated. The electrostatic charge holds the powder particles in place while the part is cured in a 400-degree oven. The heat of the oven causes a chemical reaction to occur and the powder to cure, creating a highly durable finish.

Why should I use Powder Coating?

Powder coated product simply looks better. It's more durable than liquid paint, more chip resistant, has superior adhesion, is less expensive than liquid paint of comparable performance, environmentally friendly, chemically resistant, and ready to use as soon as a part has cooled down.

What determines cost?

Number of pieces (piece cost decreases as the number of parts increases per batch), stripping required, masking required, color (non-stock colors are more expensive), texture, piece weight and maximum material thickness are the main factors affecting cost.

Do you handle small jobs?

Yes!

What imperfections will Powder Coating cover up?

Powder coating can cover minor scratches and small imperfections. Smooth glossy powders are the most demanding and matte or textured powders the most forgiving for surface preparation. However, Powder Coating will not make up for poor workmanship. As with any coating, the end result is only as good as the surface it was applied on

Is it environment friendly?

Powder coating is an environmentally friendly process unlike solvent-based wet paint systems. With EPA regulations growing ever stricter, powder coating is fast becoming the technology of choice. Since the powder coating process does not use solvents in any way, VOC emission problems are eliminated

What Can Be Coated?

Any metal object that can hold an electrostatic charge and withstand the heat of the curing process can be powder coated. Powder can be applied to intricate surfaces and still maintain a uniform finish across the entire piece. Powder coating is ideal for items such as:

- Industrial Fabrications
- Architectural Signage
- Trade Show Exhibits
- Metal Fencing and Railings
- Retail Displays & Fixtures
- Patio Furniture
- Motorcycle Frames Wheels & Parts
- Automotive Frames Wheels & Parts
- Off Road Vehicle Frames & Parts
- Bicycle Frames & Parts
- Antique Beds, Gliders & Chairs
- Large Bird Cages

How do you prepare parts for Powder Coating?

Surface must be perfectly clean, typically metal surface exposed with no contaminants. Oil must be thoroughly removed. MAX does this preparation for you. Before you bring the parts to us, please remove any rubber, plastics, gaskets, bearings, and other parts that are sensitive to 400° F temperature including excess oil and grease. For example, bring your rims without tires and valve stems.

What About Holes with Threads & Other Areas That Need To Stay Coating Free?

High temperature masking can be applied to special surfaces such as threads or high tolerance areas to keep them from being coated. We also use high temperature silicon plugs for threaded holes or shafts

Can I Use Body Filler?

The high oven temperature makes the use of plastic and resin body fillers problematic. Often the powder will not bind to filler's surface causing bubbles in the coating. To be safe, fill any depressions with a torch using brass or welding rod as fill.

Is there a Powder Coating process that resembles chrome?

Yes, the powder coating "Near Chrome" is very comparable; however you lose the mirror effect with the finished product

What is Clear Powder Coating?

Clear powder coating serves the same purpose as clear coat wet paint. It protects the underlying finish and adds depth and luster to the surface. Clear powder coat is applied as a second coat and shot while the piece is still hot. Then the piece is returned to the oven for a second curing process. Use clear powder coating on any piece that exposure to elements could cause it to fade or be subject to damage.