

Powder Coating is the application of organic powder by electrostatic attraction to metal. Once cured by heat the finish is a smooth, hard skin. All processes are factory applied under controlled, stable conditions. This provides significant benefits over traditional wet spray painting. [Powder Coating](#)

Is up to 95% efficient

The process takes place in a sealed booth and any powder that is over sprayed and doesn't adhere to the surface, is collected, filtered and re-used. The powder efficiency of the process can reach over 95%.

Contains no volatile organic compounds (VOCs)

No VOC's means none of the associated short-term and long-term health and environmental risks. This affects employees, customers and users for the life of the coating.

Does not contain solvents

Up to 60% of wet paint is solvent to keep the binder and filler parts of the coating in liquid suspension. It is the solvents that cause many of the environmental problems for wet paints as they contain pollutants

Cures in 20 minutes, whatever the weather

Wet spray curing depends on atmospheric conditions and curing between successive coats. Powder coating is a one-coat system, cured in controlled conditions and over known time. Wet paint may need several layers applied over days whereas powder is one layer cured in 20 minutes!

Does not produce hazardous waste.

Up to 95% of what is sprayed stays on the metal, therefore less waste at source. The little that is left over is easily and safely disposable as an inert powder.

Is applied in controlled conditions

You can achieve a controlled more uniform and, if necessary, higher film thickness in one application with powder than with conventional paint system. The powder is manufactured, packed and sealed by specialist companies so there is no possibility of incorrect mixing by the powder coater so the performance is guaranteed.

Wet paint

Contains up to 70% solvent - which is waste.

Solvents cause many of the environmental problems for wet paints as they contain pollutants including volatile organic compounds (VOCs). These chemicals evaporate into the atmosphere as the paint dries causing high concentrations of ozone in the lower atmosphere.

Contains ozone depleting V.O.C's

(VOCs) are organic chemicals that have a high vapor pressure at ordinary, room-temperature conditions. Their high vapor pressure results from a low boiling point, which causes large numbers of molecules to evaporate and enter the surrounding air. Examples are formaldehyde, aliphatic hydrocarbons, ethyl acetate, glycol ethers, and acetone.

Curing depends on atmospheric conditions and may take days

Wet paint is usually 2 or 3 or more coats. Each coat must cure before the next is applied. Wet spray curing depends on atmospheric conditions and curing between successive coats.

Is disposed as a hazardous waste

Waste from wet painting systems cannot be easily recycled; it forms a sludge that has to be disposed of and is classed as a hazardous waste product due to the solvents

Is potentially uncontrolled application with hazardous waste.

Wet painting often occurs on site and is less controlled, increasing the risk of environmental impact. The biggest hazards are spillage and overspray of the wet paint, use of thinners and disposal of waste including brushes, cloths and paint containers. In the factory each layer of wet paint is mixed to give performance characteristics – many failures can be traced to incorrect mixing

Has uncontrolled over-spray, spillage and air pollution

Sprayed wet paints can travel long distances even in mildly windy conditions and the chemicals will affect plants, people, animals and building surfaces. Paint residues on the ground can enter the water system and can also cause marine, river and lake contamination.

* Air drying wet paint.