



NEPC
North Eastern Powder Coatings

Powder Coating FAQs

What is powder coating?

Powder coating is a method of using an electrostatic charge to apply a coating of resin and pigment powders to a surface.

Due to the electrostatic attraction, the part holds a consistent volume of powder to its surface which in the end creates a high-quality coating that is durable as well as being free of runs, drips and sags that conventional wet coatings can manifest.

How does powder coating work?

Powder coating is a process that is used on metal surfaces, although new technologies have expanded this to now include wood and plastics. Moving parts through each stage of the process achieves a quality coating.

The process starts with the pre-treatment of the component to be coated. This can include sandblasting in certain situations, but in most cases it is simply cleaning the metal surface and etching it in some fashion to prepare the surface bond well with the powder during the curing process.

The most widely used process includes washing the parts with an alkaline cleaner to remove grease and grime. Sandblasting is used as an alternative or in addition to a washing, although in some cases it is a necessity in order to remove scale and heavier rust.

Following the pre-treatment, the object must be completely dried before the powder is applied. This can be achieved by air drying methods or in an oven setting. Once dry, the component is ready to have the powder applied.

The optimum temperature for applying powder coating is 75 degrees F. Therefore if a dry off oven method was used the parts will need to be cooled before the powder coating takes place.

Application of the powder is achieved by electrostatically charging the powder as it is sprayed onto the part. This takes place as the powder flows through the spray gun, which contains an electrode. The result is a uniform coating of dry powder clinging to the part.

Once the coating process is complete, it then needs to be cured in a curing oven. The powder melts onto the part and cures to a durable finish.

Does powder coating cover up imperfections in an object?

Coating over an imperfection only gives a nice colour and finish but the flaw in the surface will show through the finished coating. Any imperfections need addressing prior to the coating process.

What colours are available?

There are a huge range of colours, initially, take a look at our colour chart but if you do not find what you require we can offer made to order powders.

If you have any questions about powder coating or if you would like a price please do not hesitate to contact us 0191 417 7576 or email sales@nepcltd.co.uk