Powder coating

Introduction

Powder coating uses100% resin in powdered form which is dry. The resin powder may be of thermosetting or thermoplastic polymer.

It is applied to create hard finish which is tougher than conventional paint.



Process:

- 1. In electrostatic spray gun powder of polymeric compound is taken.
- 2. The electrostatic charging medium is placed inside the spray gun bed so that the powder material is charged.
- 3. The charged powder is attracted towards metal surface.
- 4. When metal surface is coated by powder, it is exposed to high temperature. This process is called as **curing.**

- 5. At about 200^oC temp. and 10 min. powder form full film on metal surface.
- 6. **Curing** can be done in oven, furnace, infrared cure oven or by laser curing process.

Advantages of powder coating

- \rightarrow To make metal more Durable.
- → Metal becomes more resistant to chipping, scratching, and wearing
- → Superior Finish
- → In this process very less or no VOCs are evolved therefore it is environmentally friendly process.