Coated Tablets

Tablet coating is one of the oldest pharmaceutical processes that still exist. Coating is a method of applying the outer layer of the essentially dry coating material to the surface of the dosage form to give specific benefits to the uncoated variety. It involves application of a sugar or polymeric coat on the tablet. The advantages of tablet coating are taste masking, physical and chemical protection, protecting the drug in the stomach and controlling their release characteristics. There are several techniques for tablet coating, such as sugar coating, film coating and enteric coating. Coating can also be applied to a variety of oral solid dosage forms, such as granules, powders, granules, crystals and pellets.

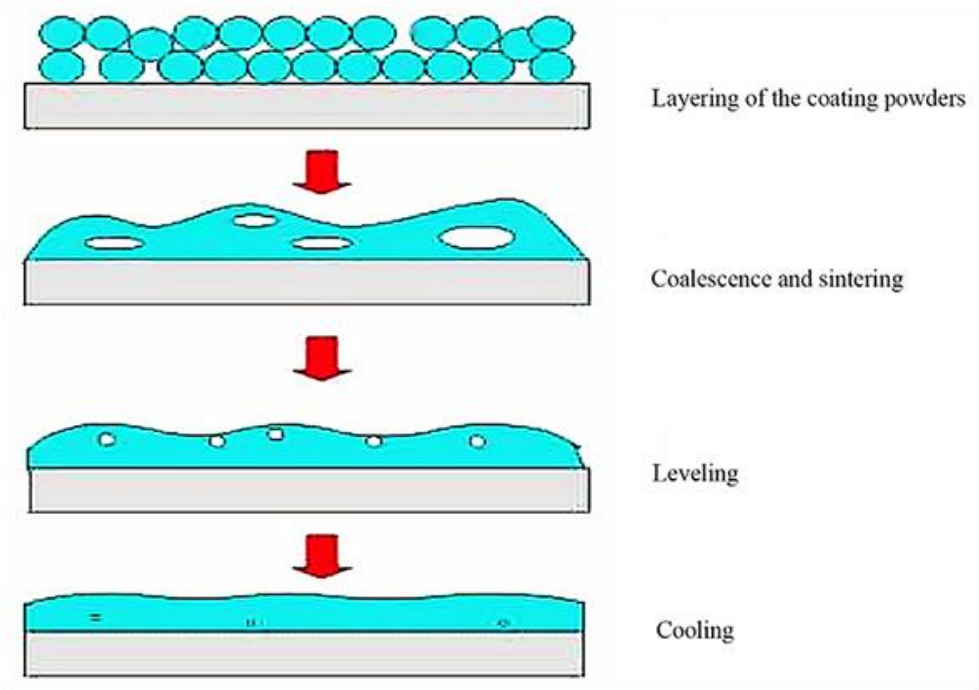


Fig.1 Schematic of film formation in dry powder coating systems. (Jaimini M, *et al*. 2014)

The team of **CD Formulation** is leading experts in all aspects of pharmaceutical formulation development and dosage form optimization, we can accord the characteristics of the API and the development goals of the customers to design the formulation of coated tablets. **CD Formulation** can provide you with one-stop service to meet your needs of coated tablets.

Technologies Used for Coated Tablets

- Fluidized bed coating
- Hot melt coating
- Apparatus for MAIC
- Compression coating
- Supercritical fluid spray coating
- Electrostatic dry coating

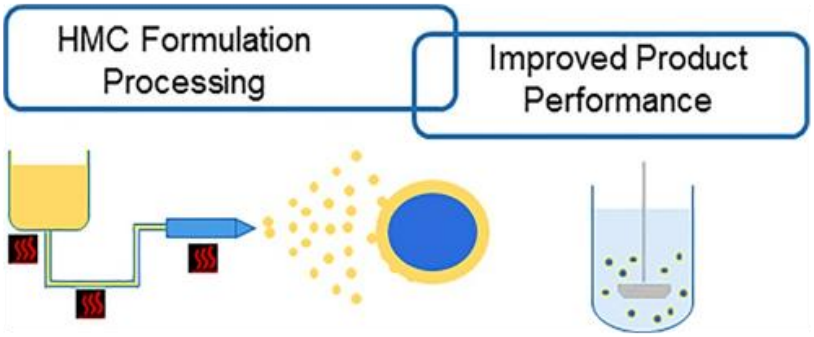


Fig.2 Hot-melt coating (Lopes D G, *et al*. 2017)

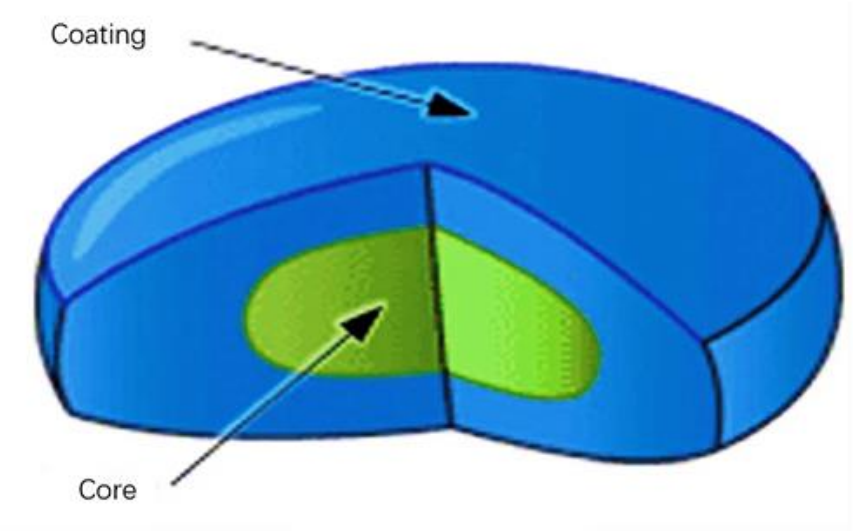


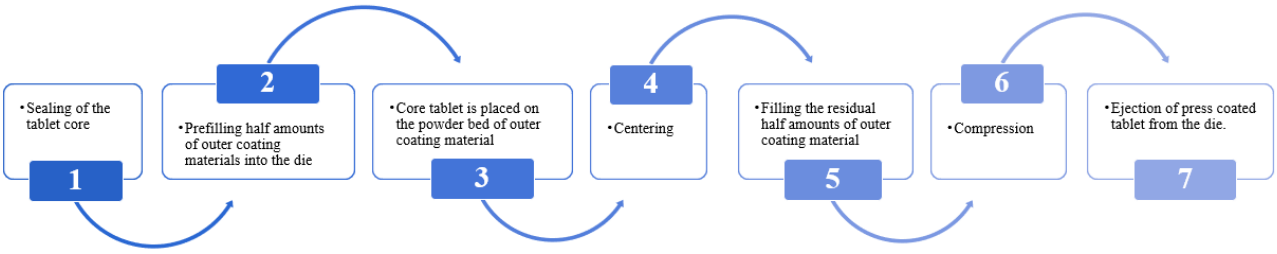
Fig.3 Compression coated tablet (Jaimini M, *et al*. 2014)

The Purpose of The Tablet Coating is as Follows:

- Cover up the nasty smell, color or taste of the tablet.
- Provide physical or chemical protection for the drug.
- Control and maintain drug release from the dosage form.
- Add another drug which creates incompatibility problems.
- Protect acid-labile drug from the stomach environment.
- Increase the mechanical strength of the dosage form.

The Process of Developing Coating Tablets

The procedure of coating tablets is a complex process that results in the forming of a thin layer around the tablet. The thickness of the thin layer formed around the tablet is in the range of 20 to 200 μm, or about 1 to 9% of the initial weight of the tablet. The three main ingredients involved in tablet coating are the nature of the tablets, the coating process and the coating ingredients. The results of the coating process depend to a large extent on the rheological properties of the applied film coating dispersion.



How to Contact Us?

If you have a requirement about coated tablets services, please contact us by phone or email, our colleagues will reply to you within three working days.

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