Electrostatic Application on Cakes

Any decoration is now easy to realize and remains perfect for the consumer, thanks to the electrostatic application.

Production data

Belt width: 300-1000 mm
Belt speed: 5 - 10 m/min
Powder qty.: 5 - 15 g/cake



Icing Sugar

Applied powders

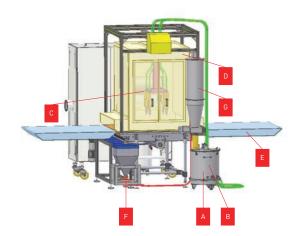
- Sugar
- Encapsulated sugar
- Granulated sugar
- Icing sugar
- Cocoa



Cocoa

Operating Principle Example

- The powder is loaded into the hopper (A). Venturi pumps (B) transport the powder to the electrostatic guns (C) that apply it on the products.
- The application takes place in a powder booth (D) which is kept in depression by an air extraction system and filter.
- The powder that is not applied on the product falls on the belt (E) and is recovered through a hopper (F) and sent back via the sieve (G) into the powder hopper (A).
- In the booth the pieces are automatically turned to allow the application of the powder on all surfaces.





Process Improvements

- Thanks to the excellent adhesion on the cakes, powder losses during application and packaging are strongly reduced, resulting in:
 - Reduction of cleaning / maintenance time
 - Lower risk of packaging problems
- The application takes place in a depressurized booth that prevents powder escaping to the ambient, resulting in:
 - Reduction of contamination
 - Reduction of cleaning / maintenance time
- The powder that is not deposited on the cakes can be recovered, sieved and immediately reused, resulting in:
 - Improved process stability



- Results are easy to reproduce: the amount of applied powder can be easily and precisely adjusted and remains constant for the whole production.
- Different decorations are possible using different masking.
- Thanks to the excellent adhesion, decorations are not damaged during packing and transport and remain intact for the final consumer.

Powder savings

- Significant decrease of powder losses:
 - On the conveyor belt
 - During packaging
- 20% 35% powder savings have been achieved in several installations





Gema Switzerland reserves the right to make technical changes without prior notice!

