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## Back to Basics — Finished Chocolate to Finished Products

# The Enrobing Process and Techniques

***The basic product needs only basic equipment for good results, but unique product details will call for a sophisticated enrober.***

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Enrobing is covering a center with chocolate or compound coating. Originally this was done by dipping a center into chocolate by hand, but for this paper we will concentrate on machines that enrobe centers automatically. These are known as *enrobers*. The purpose of an enrober is to apply chocolate to all surfaces of the center and produce a product that is attractive, has a glossy surface, is free of voids or holes in the coating, is free of tails or other defects, has a controlled uniform thickness and is decorated so it is eye-catching and distinctive. For modern enrobing the coating thickness has to be consistent across the width of the belt and also over time to give accurate weight control.

For the enrobing process to work correctly it is necessary to prepare and present the centers to the enrober correctly and to feed the enrober with correctly tempered chocolate. Good enrobing is not just a case of pouring chocolate over a center and then cooling it; in fact, much more chocolate is put onto the center than is needed and then accurately removed from the top, the sides and the bottom to achieve a center with total

coverage and a uniform thickness of chocolate that is free of voids and defects. This paper will cover the basic components of the enrober and how each unit plays a part in producing the desired finished product.

### ENROBING-MACHINE BASICS

The machine consists of very simple units:

- Chocolate tank with agitation and water jacketing for temperature control.
- Chocolate pump for circulation of the chocolate to the enrobing station.
- Chocolate tempering, onboard or outboard (Figure 1).
- Wire belt for product transportation through all stations.
- Enrobing station with waterfall-like curtain and bottom wave for the product.
- Blower station for reducing the amount of chocolate on the top and sides of the product.
- Vibration station to also reduce the amount of chocolate on the sides.
- Licking roller for reducing and controlling the amount of chocolate on the bottom.
- De-tailing rod to eliminate smaller chocolate tails at the transfer to the cooling belt.

This is all for full or partial enrobing of the center, but we do not always have the same ➤



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