
Chocolate Enrobing Fundamentals

Enrobing increases shelf life and improves the flavor of confections, thus enhancing your business.

Randy Hofberger

R&D Candy Consulting LLC

ENROBING MAY HAVE SEVERAL definitions, but basically it is covering a confection or snack center with chocolate or compound coating. Hand or fork dipping of confections was probably the earliest form of enrobing, but here we will limit our discussion to automatic mechanized enrobing. We can think of it as product going through a chocolate waterfall bath in which we remove the excess amount of chocolate before it hardens.

We enrobe confections for several reasons, including the following:

- It increases shelf life of product
- It reduces moisture loss
- It maintains product shape, especially those with soft centers
- It allows the product to be easier to eat
- It improves the flavor—what doesn't taste better with chocolate!

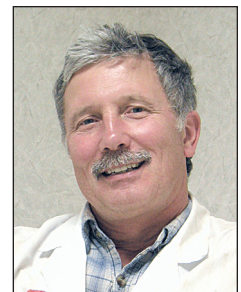
Enrobing has several advantages over moulding (which is another method of getting a chocolate-covered center). Enrobing can often allow for greater production rates with lower capital costs than moulding. There are also many confections with large inclusions and/or a viscous mass that are incompatible with the moulding process.

BASIC ENROBING-LINE LAYOUT

There are many possibilities for designing an enrobing line. Much of this will depend on the product being enrobed, available equipment and floor space.

Prior to the Enrober

Prior to the enrober there will be some type of conveying feed belt. Confection centers are deposited or placed on the belt in an orderly fashion to feed the enrober. Often the centers will go through a conditioning tunnel to ensure the proper product temperature before entering the enrober. If the centers are soft, prone to leakage or need extra protection to prevent moisture loss of the centers, they may go over a prebottomer (Figure 1). A prebottomer is basically an enrober without the waterfall curtain. The function of a prebottomer is to apply an extra bottom to the confection center. Enrobed confections are notorious for having thin bottoms and the prebottomer will help correct this defect. Depending on the manufacturer's desire, prebottomers can apply either chocolate or compound coating. If a prebottomer is used, it should be fol- ➤



Randy Hofberger has recently formed R&D Candy Consulting LLC after a career with Nestlé and Peters in technical applications, quality control and quality assurance.