Soft Sugar Shell Panning

Engrossing and polishing centers using quality ingredients, controlled environmental conditions and a consistent approach requires good science, but it's still an art.

By Sylvia J. Coyle

SOFT SUGAR SHELL OR SOFT SUGAR panning is the process of coating a center with alternating layers of carbohydrate syrups and sugars. The most common candy example is the jelly bean.

According to the NCA website for the history of jelly beans, this panning process is an offspring of the French process for coating Jordan almonds which began in the 17th century. The hand-stirring process evolved into the use of a rotating bowl or pan with the addition of syrups and dry charges of sugar. Penny candies became popular in the 1800s with the production of affordable refined sugar. As early as 1861, a Boston newspaper advertized jelly beans for William Schrafft. Soft sugar panning remains a vital process for the production of candy products after hundreds of years. Products include seasonal jelly beans, gourmet jelly beans, soft caramel-type centers, Easter marshmallow eggs, gummi eggs and rocks, fruity snacks and branded products such as Jelly Belly, Mike and Ike and Hot Tamales.

There are two major steps in soft sugar panning: the engrossing process and the polishing process. The engrossing begins with centers placed into a nonribbed revolving pan. Enough engrossing syrup is added to the revolving centers to thoroughly wet the center surfaces. Dry sugar is sprinkled over the tumbling centers until the product remains dry. This step is repeated two to nine times until the targeted shell thickness is achieved. The dry sugar granulation is larger in the beginning with smaller granulation in the later layers, finishing with confectioner's 6X or powdered sugar. The coated product remains in trays for equilibration overnight.

The polishing process has three parts. The first step is smoothing, finishing and cleaning of the surface with simple syrup. The second step is the shining of the product with waxes. The final optional stage is the sealing of the surface with glaze.

COMPONENTS

The basic components of a soft sugarpanned product are centers, engrossing syrup, sugars (various particle sizes), characterizing flavors, colors and acids, and polishing agents, including simple sugar syrup, waxes and glazing agents.

Centers

The center is the foundation of a successful product. Typically, the centers are soft and/or chewy. They are formulated with sugar, corn syrups, starches, pectin, gelatin and possibly gums. The texture of the cen-



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