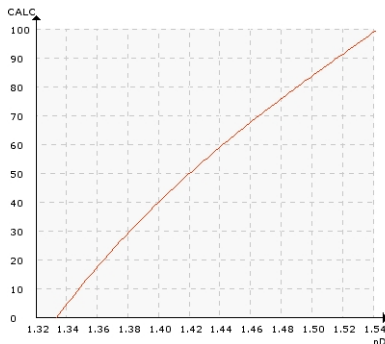


SUGAR SYRUP FOR COATING

Typical end products

Pillow-shaped chewing gum, other coated confectionary products.

Chemical curve: R.I. per BRIX at Ref. Temp. of 20° C



Introduction

Confectionery coating plays a decisive role in the final product's appearance and functionality. Fine coating has effect on the flavour and the quality of confectionery products such as the chewing gum. Moreover, if applied unevenly, coating can result in different sizes of the chewing gum pads, thus, causing packaging problems.

Application

Preparation of syrup for chewing gum coating starts with adding syrup components, in particular, sugar or its substitutes, e.g. maltose, and water to the mixing tank. The exact syrup concentration is critical to secure the correct flavour and gums not sticking

together in the coating machine (drum). Chewing gum comes pillow-shaped to the coating machine.

The briquetted gum is then sprayed with the sugar syrup. Totally, in 5 hours of mixing up to 40 microthin sweetener layers are applied step-by-step to the chewing gum pads to produce crunchy coating. For instance, over 100 000 pieces of coated briquetted gum can be produced from a 200 kg batch. Out of specification sugar syrup may result in the gums getting sticky and the whole batch being spoiled. This may also cause the drum damage.

After the chewing gum has been coated, it proceeds for packing.


Installation

The K-Patents Sanitary Refractometer PR-23-AC is used to measure the concentration of the sugar syrup upstream before it is sprayed to the gum for coating. Installation of the refractometer assures efficient chewing gum manufacturing process by preventing the risk of defect batches.

Typical installation is the elbow flow cell installation on the recycling pipe.

The K-Patents PR-23-AC is 3-A approved and EHEDG tested to meet the highest hygiene requirements for food production. The K-Patents refractometer monitoring of product Brix allows for continuous real-time quality control of the manufacturing.

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Instrumentation	Description
	<p>K-Patents Sanitary Compact Refractometer PR-23-AC for small pipe line sizes of 2.5 inch and smaller.</p> <p>The PR-23-AC sensor is installed in the pipe bend. It is angle mounted on the outer corner of the pipe bend directly, or by a flow cell using a 3A Sanitary clamp or Varivent® connection.</p>
Measurement range:	Refractive Index (nD) 1.3200 – 1.5300, corresponding to 0-100 Brix.
Output units:	Concentration % by weight, °Brix.