Introduction

Sugaring donuts and other specialty bakery products with granulated or a powdered sugar preparation is very common. Certain sugar preparations are specifically formulated by the manufacturers for long shelf life on donuts. Fine and uniform sugar coating also plays a key role in the bakery products’ final appearance, flavour and quality.

Application

Sugar flows are applied over the surface of baked donuts for an even all-round coating. It is the powdered sugar quality that affects the final product coating.

Liquid sugar that is prepared from powdered or granulated sugar, as well as the recovered sugar are added to the mixer according to the recipe for the coating mix preparation. The finer the sugar mix, the better it adheres to the donut surface.

The K-Patents refractometer is used for quality control of the sugar mix before the final stage of the donuts preparation process, i.e. before the sugar coating is applied to the baked donuts. The excess of the sugar mix is shaken off and recovered to be recycled.

Installation

The K-Patents Sanitary Probe Refractometer PR-23-APP is installed in the lower part of the mixer. It measures the Brix of the powdered sugar before it is spread over the surface of the baked donuts. Also a flush mounted refractometer is available for vessels with a mixer. The refractometer design meets 3A Sanitary Standards and withstands CIP cleaning.

The instrument provides a full measurement range corresponding to 0-100 Brix and is automatically temperature compensated.
Instrumentation | Description
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| K-Patents Process Refractometer PR-23-GP is an industrial refractometer for large pipe sizes and tanks, cookers, crystallizers and kettles. Installation through a flange or clamp connection. |

Automatic prism wash: | Refractive index (nD) 1.3200 – 1.5300, corresponding to 0-100 % by weight. |