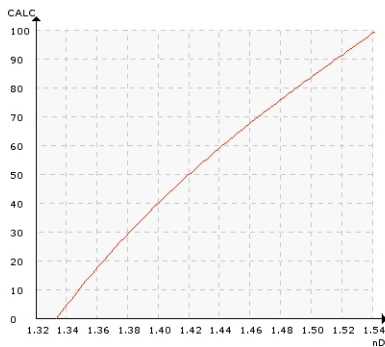


CANE SUGAR

Typical end products

Syrup, soft drinks, beer brewing, preserves, beverage, sweets, liqueurs, ethanol, etc.

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



Introduction

The decolorization process removes organic impurities, which impart color to the sugar liquor. These impurities and colorants are removed with ion-exchange columns.

Application

The clear brown syrup is passed through a series of acrylic and styrene resin columns, and granular

activated carbon columns. Depending on the liquor quality, different resins and/or resin combinations can be used.

The resulting light colored syrup or fine liquor is used for white sugar crystallization or, after further treatment, for the production of bulk liquid sugar.




In the decolorization process the resins require periodic "back washing". When the sweetening is off, hot water is pumped into the column and the discharge flow is diverted to the sweet water line. After the hot water starts to break through the carbon bed, the discharge is ready for carbon transfer.

Installation

The K-Patents Process Refractometer is used in the washing control. In the carbon column control K-Patents refractometer is used in the column's sweet water discharge line.

Typical measurement range is 0-20 Brix and typical process temperature is about 60°C (140°F).

SUGAR AND SWEETENERS	
APPLICATION NOTE	1.02.02
CANE SUGAR DECOLORIZATION	

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>
	<p>K-Patents Sanitary Probe Refractometer PR-23-AP for installations in large pipes, tanks, cookers, crystallizers and kettles, and for higher temperatures up to 150°C (300 °F). Installation through a 3A Sanitary clamp.</p>
	<p>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.</p>
<p>Measurement range:</p>	<p>Refractive Index (nD) 1.3200 – 1.5300, corresponding to 0-100 Brix.</p>