

INDUSTRY: SUGAR MANUFACTURING

PRODUCT: WHITE GRANULATED SUGAR

APPLICATION: Measure the °Brix of a Sugar Solution in a Vacuum Crystallization Pan during Sugar Crystal Production.

This is a Continuous Process with our System being used for Closed Loop Control. The Microwave Measurement is essential for controlling the Boiling Curve.

DESCRIPTION: The Sugar Making Process requires that a Liquid Sugar Solution of around 75 °Brix is put into a Vacuum Pan for the production of Sugar Crystals. This Liquid is then Concentrated up to 92 °Brix using a specific Boiling Curve.

The customer would like to measure and control the °Brix of the Established Boiling Curve during the Crystallization Process.

BENEFITS:

COST SAVINGS By having good control of the °Brix of the Liquid Sugar Solution during the Vacuum Crystallization Process, the customer can shorten the time that of the Boiling Process. This means less energy is used for the Boiling Process

The HK Microwave System:

1. Has no moving parts and therefore is very inexpensive to maintain.
2. Can be easily calibrated with one or two points. The costs for a difficult and detailed Calibration are not found with this system.

QUALITY The better control that you have over the Boiling Curve, the better Sugar you are able to produce.

REPEATABILITY +/- 0.2 % is possible with a very good Calibration Curve.

MEASURING RANGE 70 to 95 °Brix is Typical of the Sugar Solution during this process.

HK EQUIPMENT: HK2-M or HK2-C with Insertion Sensors and Flange
Over 500 HK Brix Meters Sold Worldwide for this Application

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