



## APPLICATION NOTE - CANDY AND CONFECTIONERIES

**Application Need:** Measuring and controlling the sugar/sweetener content (also known as °Brix or Brix) of candy and confectioneries is vital to extend the yield of the raw ingredients, thus maximizing profits. In addition, accurate Brix measurements ensure proper quality control of the process and resultant product. Confectionery Processing is a broad industry that includes the production of such treats as candy, ice cream, syrups/toppings, icings, pastry fillings, etc. In this industry, the sweetener component typically accounts for the largest portion of the product cost. The concentration of the sweetener is checked periodically from the raw ingredient stage and throughout the entire process.

**The Problem:** Confectionery products can be quite thick or viscous, are often highly colored, and even opaque. The manual, or Abbe refractometer, projects a visible shadowline on the crosshairs in the instrument. This shadowline is often blurry. Operator misinterpretation of the shadowline can result in significant measurement errors.

**The Solution:** Reichert automatic digital refractometers are ideal for measuring Brix. Here is why:

- ✓ Sample color or opacity does not effect automatic refractometers. Fully automatic refractometers are also known as reflected light refractometers because they utilize the light that is reflected by the sample for analysis. ✓ Reduced operator error. An electronic detector is used instead to take the measurement.
- ✓ Temperature may be controlled via an external water bath circulator on the AR6 Series, ARIAS, or MARK models or by a built in Peltier Thermal Control System on the AR7 Series.

### **Product Recommendations:**

**AR7 Series** Automatic Refractometers, Reichert Cat # 13107000 & 13107700

**AR6 Series** Automatic Refractometers, Reichert Cat # 13106000 & 13106600

**ARIAS OptiMatrix 500** Semi-Automatic Refractometer, Reichert Cat # 1310499SA **ABBE**

**MARK III**, Reichert Cat # 1310488M