Operation Manual for Brix Refractometer

It's developed for working with sugar related liquids (fruit juice, softdrinks, wine, honey), help monitor to control sugar concentrations in foods and beverages. It is also commonly used for controlling the concentration of various industrial fluids (cutting lubricants and flux rinsing compounds). Whether users are checking the "ripeness" of fruit in the field, verifying product quality after harvesting, or controlling concentrations during processing and packaging, refractometers provide critical information to ensure product quality. Full ranges of measurement are available. If the model mark was listed with ATC, that means the model was equipped with ATC("Automatic Temperature Compensation") System.

Appearance list: Calibration Focus Daylight Plate Adjustment Screw Screw Lock Rubber Grip Eyepiece (Order No.NTR) Daylight Plate Focus Calibration Adjustment Screw

Rubber

Grip

(Order No.OTR)

Eyepiece

Main Prism

Assembly

Operation instructions:

1. Calibration Procedure:

- 1) Open the daylight plate and place 2-3 drops of distilled or R.O. water on the main prism. Close the daylight plate so the water spreads across the entire surface of the prism without air bubbles or dry spots. Allow the sample to remain on the prism for approximately 30 seconds. (View Picture 1)
- 2) Hold the daylight plate in the direction of a light source, then look into the eyepiece. You will see a circular field with graduations down the center (you may have to focus the eyepiece to clearly see the graduations. The upper portion of the field should be blue and the lower field should be white. (View Picture 2)
- 3) While looking into the eyepiece, turn the Calibration Screw until the boundary between the upper blue field and the lower white field meet exactly on zero or Standard Reading. Once completed, the instrument is calibrated for your current ambient room temperature(20°C about 68 °F). When working temperature of the room or environment (not the sample) changes by more than 5° F, we recommend recalibrating to maintain accuracy. (View Picture 3).

2. Basic Operation Procedure:

- 1) Operation procedure is done after calibration and it is done in essentially the same manner as calibration. Open the daylight plate and place 2-3 drops of tank water on the main prism. Close the daylight plate so the water spreads across the entire surface of the prism without air bubbles or dry spots. Allow the sample to remain on the prism for approximately 30 seconds. (View Picture 1)
- 2) This step is same with the Step 2# in Calibration Procedure. (View Picture 2)
- 3) Take the reading where the boundary line of the blue and the white fields cross the graduation scale. The scale will provide a direct reading of brix in the sample. (View Picture 4) Recalibration occasionally to maintain accuracy.
- 3. Picture list (The following Scale is only for reference. The picture here is only as users' reference. Please find the actual specific appearance and scale in our products. Thanks!)

