# MI Milwaukee 

BRIX REFRACTOMETER OPERATION MANUAL

The MR90ATC refractometer are precision optical Instruments used for measuring concentrations of Brix in honey. They work using the principle of light refraction through liquids. When passing light through a liquid the refracted angle will be shown on the scale determining the amount of dissolved solids in the liquid.


## Specifications:

Range: 38-43 Bè ; 12-27\% Water ; 58-90\% Brix
Resolution: 0.5 Bè ; 1\% Water ; 0,5\% Brix
Accuracy: $\pm 0.5$ Bè $; \pm 1 \%$ Water ; $\pm 0.5 \%$ Brix
Calibration: Open daylight plate and place 1 or 2 drops of the solution supplied with the refractometer. Close the daylight plate so that the water spreads across the entire surface of the prism without air bubbles or dry spots. Hold daylight plate in direction of the light source and look into the eyepiece. Turn the calibration screw until the boundary between the upper blue field and the lower white field meet exactly on the $78.78 \%$ in the brix scale. Temperature: The MR series refractometers are adjusted to read at a temperature of $20^{\circ} \mathrm{C}$ ( $68{ }^{\circ} \mathrm{F}$ ). The prism and sample must be at the same temperature for accurate readings. If temperature of your sample changes it is suggested to use refractometers with Automatic Temperature Compensation. They will adjust automatically within the $10-30^{\circ} \mathrm{C}$ range.
Warranty: Each refractometer is warranted from all defects in materials and manufacturing
for a period of 1 year from the date of purchase. If during this period, the repair or replacement of parts is required, where the damage is not due to negligence or erroneous operation by the user, please return the parts to either dealer or our Office and the repair will be done free of charge.

Note: We reserve the right to modify the design, construction and appearance of our products without advance notice.

