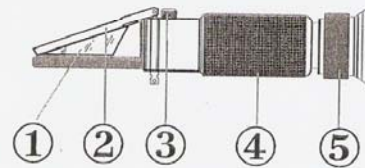




HAND REFRACTOMETER

1 - COMPONENTS

- 1-Prism
- 2-Cover plate
- 3-Setting screw
- 4-Mirror tube
- 5-Eyepiece (adjusting ring of diopetre)



2 - INSTRUCTION FOR USE

Calibration

2-1: Aim the front end of the refractometer in the direction of bright light and set the adjusting ring of diopetre until the scale can be seen clearly.

Adjustment of the ZERO line.

2-2: Open the cover plate, put one or two drops of distilled water on the prism.

Close the cover plate and press it lightly. Then adjust the setting screw to make the light and dark limit coincide with the ZERO line. "ATC" models must be calibrated at a temperature of 20°C (68°F).

The calibration of our refractometers can be made with our master liquids which are available for purchase.

Utilisation

2-3: Open the cover plate, clean the surface of the prism with a soft cotton cloth, put one or two drops of the solution to be measured onto the prism. Close the cover plate and press it lightly, then read the corresponding scale of light and dark limit indicating the value of the measured solution.

2-4: In case of the temperature has a lot of variation, you should control the ZERO point every 30 minutes

2-5: After the measurement, clean the remaining liquid on the surface of the prism and the cover plate with a damp gauze. After drying, store the instrument carefully.

3 - TEMPERATURE COMPENSATION

The reference temperature is 20°C (68°F). Refractometers with "ATC" have an automatic temperature compensation.

For refractometers without automatic temperature compensation, the compensation can be made aid of the table.

This table is for BRIX scale only.

4 - PRECAUTION

4-1: Do not wash the instrument with water in order to avoid water entering inside.

4-2: Handle gently and do not touch the optical surfaces

4-3: The refractometer must be stored in a dry, clean and non-corrosive environment.
Avoid strong shocks.

5 - ACCESSORIES

- 1-Suction tube
- 2-Screwdriver

TEMPERATURE CORRECTIONS FOR SUBTRACT SOLUTION FOR THE BRIX REFRACTOMETERS ONLY	
REFERENCE TEMPERATURE 20°C	
% BRIX	
TEMPERATURE °C	TEMPERATURE °C
	0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85
	subtract from the measured value
0	0.02 4.58 8.20 11.81 15.41 19.01 22.61 26.21 29.81 33.41 37.01 40.61 44.21 47.81 51.41 55.01 58.61 62.21
1	0.03 4.59 8.21 11.82 15.42 19.02 22.62 26.22 29.82 33.42 37.02 40.62 44.22 47.82 51.42 55.02 58.62 62.22
2	0.04 4.60 8.22 11.83 15.43 19.03 22.63 26.23 29.83 33.43 37.03 40.63 44.23 47.83 51.43 55.03 58.63 62.23
3	0.05 4.61 8.23 11.84 15.44 19.04 22.64 26.24 29.84 33.44 37.04 40.64 44.24 47.84 51.44 55.04 58.64 62.24
4	0.06 4.62 8.24 11.85 15.45 19.05 22.65 26.25 29.85 33.45 37.05 40.65 44.25 47.85 51.45 55.05 58.65 62.25
5	0.07 4.63 8.25 11.86 15.46 19.06 22.66 26.26 29.86 33.46 37.06 40.66 44.26 47.86 51.46 55.06 58.66 62.26
6	0.08 4.64 8.26 11.87 15.47 19.07 22.67 26.27 29.87 33.47 37.07 40.67 44.27 47.87 51.47 55.07 58.67 62.27
7	0.09 4.65 8.27 11.88 15.48 19.08 22.68 26.28 29.88 33.48 37.08 40.68 44.28 47.88 51.48 55.08 58.68 62.28
8	0.10 4.66 8.28 11.89 15.49 19.09 22.69 26.29 29.89 33.49 37.09 40.69 44.29 47.89 51.49 55.09 58.69 62.29
9	0.11 4.67 8.29 11.90 15.50 19.10 22.70 26.30 29.90 33.50 37.10 40.70 44.30 47.90 51.50 55.10 58.70 62.30
10	0.12 4.68 8.30 11.91 15.51 19.11 22.71 26.31 29.91 33.51 37.11 40.71 44.31 47.91 51.51 55.11 58.71 62.31
11	0.13 4.69 8.31 11.92 15.52 19.12 22.72 26.32 29.92 33.52 37.12 40.72 44.32 47.92 51.52 55.12 58.72 62.32
12	0.14 4.70 8.32 11.93 15.53 19.13 22.73 26.33 29.93 33.53 37.13 40.73 44.33 47.93 51.53 55.13 58.73 62.33
13	0.15 4.71 8.33 11.94 15.54 19.14 22.74 26.34 29.94 33.54 37.14 40.74 44.34 47.94 51.54 55.14 58.74 62.34
14	0.16 4.72 8.34 11.95 15.55 19.15 22.75 26.35 29.95 33.55 37.15 40.75 44.35 47.95 51.55 55.15 58.75 62.35
15	0.17 4.73 8.35 11.96 15.56 19.16 22.76 26.36 29.96 33.56 37.16 40.76 44.36 47.96 51.56 55.16 58.76 62.36
16	0.18 4.74 8.36 11.97 15.57 19.17 22.77 26.37 29.97 33.57 37.17 40.77 44.37 47.97 51.57 55.17 58.77 62.37
17	0.19 4.75 8.37 11.98 15.58 19.18 22.78 26.38 29.98 33.58 37.18 40.78 44.38 47.98 51.58 55.18 58.78 62.38
18	0.20 4.76 8.38 11.99 15.59 19.19 22.79 26.39 30.00 33.59 37.19 40.79 44.39 47.99 51.59 55.19 58.79 62.39
19	0.21 4.77 8.39 12.00 15.60 19.20 22.80 26.40 30.01 33.60 37.20 40.80 44.40 48.00 51.60 55.20 58.80 62.40
20	0.22 4.78 8.40 12.01 15.61 19.21 22.81 26.41 30.02 33.61 37.21 40.81 44.41 48.01 51.61 55.21 58.81 62.41
21	0.23 4.79 8.41 12.02 15.62 19.22 22.82 26.42 30.03 33.62 37.22 40.82 44.42 48.02 51.62 55.22 58.82 62.42
22	0.24 4.80 8.42 12.03 15.63 19.23 22.83 26.43 30.04 33.63 37.23 40.83 44.43 48.03 51.63 55.23 58.83 62.43
23	0.25 4.81 8.43 12.04 15.64 19.24 22.84 26.44 30.05 33.64 37.24 40.84 44.44 48.04 51.64 55.24 58.84 62.44
24	0.26 4.82 8.44 12.05 15.65 19.25 22.85 26.45 30.06 33.65 37.25 40.85 44.45 48.05 51.65 55.25 58.85 62.45
25	0.27 4.83 8.45 12.06 15.66 19.26 22.86 26.46 30.07 33.66 37.26 40.86 44.46 48.06 51.66 55.26 58.86 62.46
26	0.28 4.84 8.46 12.07 15.67 19.27 22.87 26.47 30.08 33.67 37.27 40.87 44.47 48.07 51.67 55.27 58.87 62.47
27	0.29 4.85 8.47 12.08 15.68 19.28 22.88 26.48 30.09 33.68 37.28 40.88 44.48 48.08 51.68 55.28 58.88 62.48
28	0.30 4.86 8.48 12.09 15.69 19.29 22.89 26.49 30.10 33.69 37.29 40.89 44.49 48.09 51.69 55.29 58.89 62.49
29	0.31 4.87 8.49 12.10 15.70 19.30 22.90 26.50 30.11 33.70 37.30 40.90 44.50 48.10 51.70 55.30 58.90 62.50
30	0.32 4.88 8.50 12.11 15.71 19.31 22.91 26.51 30.12 33.71 37.31 40.91 44.51 48.11 51.71 55.31 58.91 62.51