

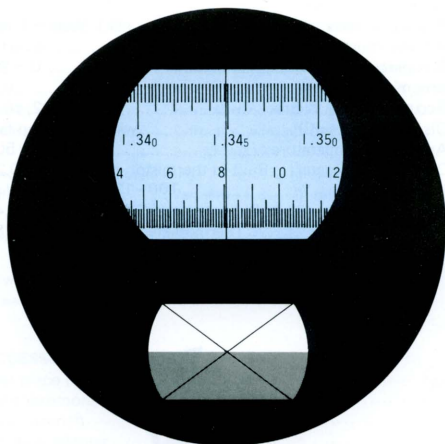
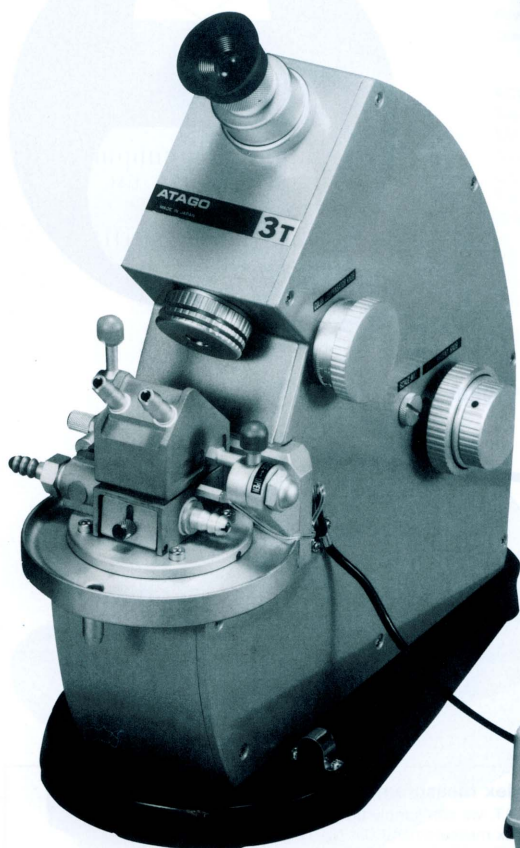
CAT. NO. 1230

# ABBE PRECISION REFRACTOMETER 3T

The Type 3T has been developed to give improved measuring accuracy and ease of use.

This has been achieved by making fundamental improvements to the optical system, utilising a larger scale, incorporating a high intensity lamp and using a Double control knob to give quick and finer control.

This latest model is the result of 44 years research and experience together with the comments of users of the Abbe Refractometers.



With Digital Thermometer !



## FEATURES

### 1. Digital thermometer for more accurate measurements.

- (a) A Digital thermometer has an accuracy of  $\pm 0.2^{\circ}\text{C}$  divisions.
- (b) Thermistor is inserted in the main prism.

### 2. Lighting

- (a) Built-in four position light intensity switch.
- (b) High intensity tungsten lamp.
- (c) Capable of measuring semi-opaque samples.
- (d) Independent, scale illumination of constant intensity.

### 3. High accuracy obtained using a large scale.

- (a) The scale is four times larger than those used in conventional instruments of ATAGO.
- (b) The minimum scale division of 0.0002 enables measurements of refractive index of 0.0001 to be made. Similarly, using the Brix scale which has divisions of 0.1%, enables readings of 0.05% to be obtained.

### 4. Double control knob for easier operation.

- (a) Fine control knob for fine adjustment gives greater accuracy and enables the operator to bring the boundary line into the centre cross more quickly.
- (b) This facility gives quicker operation and better reproducibility of measurements.

### 5. Able to measure solid and liquid samples.

- (a) The high intensity lighting is suitable for the measurement of both solid and liquid samples.

### 6. Safe electrical system.

- (a) The transformer and electrical wiring are housed within the main body. This avoids any possibility of damage due to sample spillage.
- (b) The power supply cable is fixed to the main body of the instrument.

### 7. Built-in air dryer and moisture removal device.

- (a) A large cartridge drying chamber containing silicagel is incorporated to prevent moisture condensing on the inside of the instrument.
- (b) Means are provided for using compressed air to remove external moisture droplets.

## SPECIFICATIONS

Refractive index range .....	nD 1.3000 ~ 1.7100
R.I. minimum scale .....	nD 0.0002
Brix percentage range .....	0 ~ 95%
Brix minimum scale .....	0.1%
Accuracy of R.I. & Brix .....	$\pm 0.0001$ , $\pm 0.05\%$
Dispersion (nF-nC) .....	with conversion table
Applicable temperature .....	0 ~ 50°C
Digital thermometer .....	Built-in thermistor in the prism $\pm 0.2^{\circ}\text{C}$
Input .....	100 ~ 120, 220 ~ 240 V a.c.
Size and weight .....	Refractometer 12 x 31 x 34cm, 9kg Thermometer 8 x 10 x 11cm, 0.8kg

## ACCESSORIES

Test piece (Refractive index standard) .....	1pc
Monobromonaphthalene (4 ml) .....	1pc
Thermometer (Digital type) .....	1pc
L-Wrench (for regulating scale) .....	1pc
Illuminator lamp (6V 1.2A) .....	3pcs
(8V 0.15A) .....	3pcs
Instruction manual .....	1pc
Air purger .....	1pc

\*Specifications and design of outer appearance are subject to change without notice.



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