

BAIRD & TATLOCK

RICHMOND'S IMPROVED MILK SCALE

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Calculation

The normal use of the slide rule was to calculate total solids and hence, water-soluble solids, from determination of specific gravity and fat, since fat was the easier and quicker component to estimate.

Using the slide rule in Figure 2 as an example–

1. The hydrometer reading at the temperature found is placed against the 60°F arrow mark. The true specific gravity is then found against the temperature of the reading - e.g. a reading of 30 at 75°F is equal to a (specific gravity) reading of (10)32.1 at 60°F.
2. The arrow below the % fat line is placed against the fat content and the % total solids will be found against the specific gravity – e.g. a milk sample of specific gravity 32.1 and 4.7% fat will have a total solids content of 13.8%.