

**STEINFURTH®**

VOS 4010

...for perfect turbidity measurement in beer

Turbidity is defined as "expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through the sample." In other words, turbidity is the measurement of relative sample clarity.

Turbidity is measured by comparison to standard solutions eg. Formazin. In practice, turbidity measurement is done in cuvettes. However, the measurement can also be executed in bottles of various sizes. Different bottle holders can easily cover the most commonly used bottle diameters.

About 25 years ago it was Vos Instrumenten who developed the VOS 4000 Hazemeter. This apparatus was the widely recognized reference for measuring turbidity in beer. Distributed all over the world, many well-established breweries have been using this VOS 4000 Hazemeter. The results of the turbidity measurements are comparable no matter using the VOS 4000 or

VOS 4010. This is a major advantage, since a gradual substitution of the 4000 by the 4010 series is now possible within one chain of breweries



BENEFITS:

- Easy four-point calibration
- Large, well-readable display
- Display readings in EBC, ASBC or Helm units
- Rugged, water resistant housing
- Tall hood for measurement on bottles
- RS 232 and printer interface
- Adaptable to supply voltages 115 or 230 V AC
- Use of different optical filters possible

OPERATION:

The Vos 4010 Hazemeter makes use of the scattered light principle. Scattered light caused by haze particles is measured at an angle of 90 degrees. A light source with red filter is used, operating at a light wavelength of 650 +/- 30 nm (recommended by MEBAK!). Other wavelength filters are optional and easily exchangeable in the apparatus. Amplifier cuvette/bottle measuring detector reflex-mirror halogen lamp voltage stabilizer reference detector

TECHNICAL DATA:

Measuring range: Low 0-10 EBC : 0,01 EBC
High 9-100 EBC : 0,1 EBC

Unstable signal at: >6% variation in signal during measurement

Measuring units: EBC, ASBC and Helm

Voltage: 230 V/50 Hz, 115 V/60 Hz

Lamp: Halogen 12 V, 20W

Weight: 7,3 KG

Optional spare parts:

- hood for extra tall bottles
- green filter
- white filter

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