

Features of Milk O Tester

Electronic Milk Tester is a simple, economical, fast and accurate milk fat testing instrument. It does not involve corrosive chemicals. It works on light scattering principle with manual homogenization. It operates on 230 V AC with battery back up.

1. Technical Specifications

Measuring range:	0 - 13	% of FAT
Capacity:	120	Sample per hr.
Accuracy:	0 - 5 %	0.06 % of FAT
	5 - 8 %	0.10 % of FAT
	8 - 13 %	0.20 % of FAT
Repeatability:	0 - 5 %	0.03 % of FAT
	5 - 8 %	0.04 % of FAT
	8 - 13 %	0.08 % of FAT
Sample Volume:	0.5	ml
Dilutant Volume:	6.5	ml
Power Supply:	220 / 240	V AC
Ambient Temperature:	5 - 45	deg C.

2. Principle of Measurement.

Electronic Milk Tester is based on the photometric measurement of light scattered by the milk sample. The light is scattered by the fat globules acting as small prism.

To eliminate protein effect on light scattering, it is dissolved in EDTA solution.

All the fat globules do not have the same size. To bring globule size in required dimensions, manual homogenization is done. This will bring all fat globules size in the range of 0.5 to 1.5 micron.

Light rays from a photo-lamp passed through a layer of fluid in the cuvette and scattered according to the sample of the fat globules. More the fat present, more light is scattered. The rays that do pass through the cuvette strike a photocell, producing a current proportional to the light intensity. This current is fed to an electronic circuit and a digital read out of fat percentage is flashed on the screen.

3. Scope of Supply

Milk O Tester

First charge of chemicals for preparing 10 ltrs of dilutant

Interconnecting pipe

Glassware.

Operation and Maintenance Manual.