ELECTRON MACHINE CORPORATION
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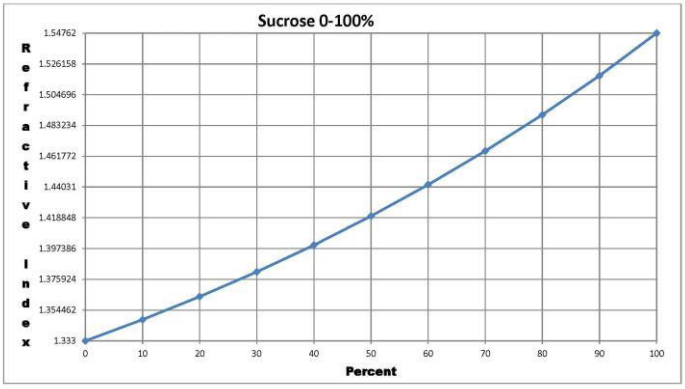
Ice Cream Application:

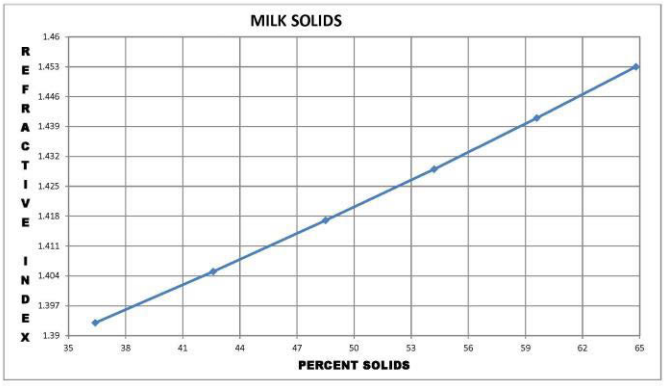
Introduction:

The Electron Machine Corporation has been accurately measuring milk and sugar concentrations in the food industry for over 25 years using our rugged and reliable refractometers. The refractometer directly measures dissolved solids, which can be easily converted to Brix. This measurement is unaffected by bubbles or suspended particles.

System:

Electron Machine Corporation recommends using three MPR E-Scan refractometers installed in the dairy line, the sweetener line and in the mixing vessel. We offer a variety of pipeline adapters in addition to a weld-in configuration for direct measurement in the mixing vessel. All installation options are designed and manufactured to appropriate 3-A Sanitary Standards.





Application:

The Electron Machine MPR E-Scan refractometer is used to measure both the dairy concentration as well as the sweetener (sucrose, fructose, etc.) Brix level going into the mixing tank. This in-line measurement allows real-time trimming of both ingredients to meet the final target concentration in the mixing tank. Additional measurement of the mixed product is used for further adjustments to the composition before packaging.

KEY BENEFITS:

- **Accurate Process Control**
- **Reduced Product Waste**
- **Economical Operation**
- **Decreased Offline Testing**
- **Consistant Packaging Supply**

Conclusion:

By installing the Electron Machine Corporation MPR E-Scan a factory can insure an accurate process control resulting in consistent ice cream quality. Thus, increasing profit from economical operation. By maintaining a desired process concentration there will be a decrease in offline testing and an increase quality control. This results in the ability to optimize work force man hours and eliminate unnecessary product waste saving the factory time and money.