

IR CALIBRATION

STANDARDS SELECTION

Reference chemistry for standards should closely match the product being calibrated. A unique milk like A1/A2 or ultra-filtered should not be calibrated against standard fluid milk.



MISCALIBRATION

Multiple factors can lead to miscalibration - not using 'clean water' in a zero setting, improper manual adjustments, clogged homogenizer.



DRIFT

Milk residue can build up in the instrument over time causing small variances in results.



CHANNEL USAGE

Improper use, such as using a single channel to calibrate products over a wide range of concentrations.



TIPS

DAILY

Zero-setting with clean water and purging the instruments with enzymes

Run pilot samples for each channel, i.e. 4%, 20% and 40% fat in their respective channels

BIANNUALLY

Perform instrument preventative maintenance (PM) and standardization of instrument

WEEKLY

Calibrate each active channel with at least 5 different samples

Check the homogenization step for consistency

MONTHLY

Standardize instrument with blue recalibration fluid

Perform a carryover check to ensure high fat measurements do not effect low fat measurements

