

(Continued from Page A32)
 tifies the instrument and operator. The results along with chemical reference values are keyed into a spreadsheet program. The print-out includes all results, chemical reference values, differences, mean differences and the standard deviation of differences. It is

dated, identifies the instrument and batch, and also shows the slope and intercept changes generated by a simple linear regression.

Calibrations are only adjusted if necessary.

The "auto-cal" feature is used to make adjustments which are recorded on the original data form.

Programmed "Machine Evaluations" assist operators in determining whether to recalibrate.

Once each month, calibrations are adjusted even if all parameters are in tolerance. Whenever adjustments are made, the new calibration is validated by analyzing a second set of samples. Regression

equations are easily skewed by outliers. Operators are encouraged to check results carefully in order to ensure that one or two "bad samples" are not included in the calibration.

Pilot samples of known composition are used to monitor instrument stability and accuracy at regular intervals during routine analysis of samples. Pennsylvania DHIA tests pilot samples hourly during routine operation of instruments. Pilot samples (two levels) are prepared weekly by collection of a raw milk sample from a local farm.

The sample is skimmed and reblended to obtain two fat ranges. "Target" values are assigned by analysis of three separate vials in triplicate on each instrument. Targets may differ slightly among instruments. Both levels are tested at start-up then staff alternate between the high and low sample hourly.

Target values are posted on the machines and test results are recorded on a print-out which is dated and identifies the time, machine, and operator. The lab may also want to consider using UHT milk (if readily available) as an additional check. This milk is stable for long periods (4 to 6 months) and therefore allows for a common point of reference for a longer period of time.

A variety of procedures are in place to ensure that staff are able to perform all of their duties.

A documented training program is in place, operators are given routine competency exams, and a number of standard operating procedures are available.

Safety procedures and training are also enforced. Staff also participate in relevant meetings and workshops including those organized by National DHIA.

Most equipment maintenance is done in-house. Detailed schedules and records of all repairs are maintained. Parts which are subject to wear are tracked according to sample out-put and are replaced when required.

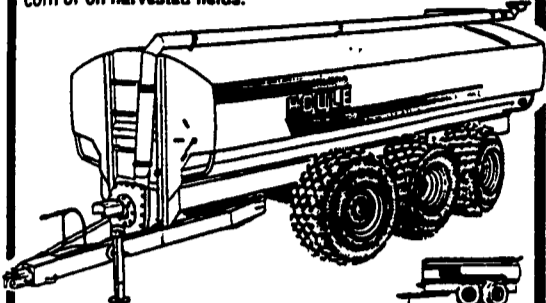
In addition to the routine QC records, Pennsylvania DHIA tracks important instrument parameters (i.e. purge readings, homogenization, calibration coefficients, etc.) in a log book for easy reference. This is an excellent tool for monitoring trends and for early identification of potential instrument problems. Calibration and other QC records are kept on site for a minimum of two years.

According to quality certification, the facility is well maintained and well suited to the number and type of analyses being conducted.

Please feel free to contact PA DHIA at 1-800-344-8378 if we can assist with your dairy operations.

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24" dia. mixing propeller: Providing a full time bottom agitation up to 21 500 US G.P.M. even while loading a spreader.

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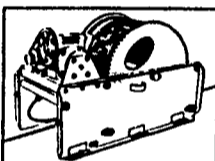
Bottom gear box with oil bath protected by a greaseable 3 seals mechanism on each shaft. Available in 5 versions for concrete pits.

CABLE SCRAPER SYSTEM FOR FREE STALL BARN

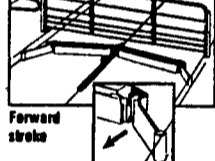
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- Lowers maintenance & repair costs



Drive unit with SS Cable (H D Drive unit with chain also available)



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Alley scraper is controlled by a multi-function clock which allows you to clean the barn continuously or at preset intervals - AUTOMATICALLY!

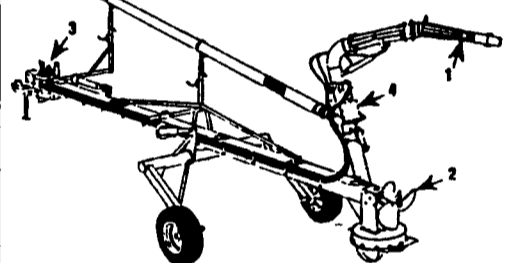
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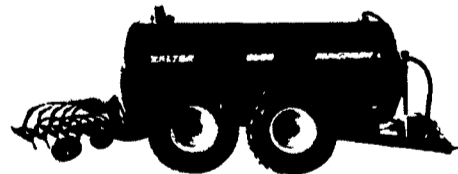
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