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Experiences from automated centrifuge wash water control.

The agricultural raw material is received with significant variations. During processing some of these variations can be reduced, but other variation may be introduced by the process. After crystallization the separation in centrifuges gives an opportunity to adjust the final sugar color by varying the amount of wash water to remove more or less of the crystals' surface film of mother liquor. Due to rapid changes in the massecuite, it is customary to wash more than strictly necessary, so crystals with color outside specifications can be avoided with high probability. Factories check the quality by samples taken at 1 hour, 2 hours, or larger intervals, either as snap or composite samples. The amount of wash is adjusted accordingly, but always leaving a comfortable safety margin to the color limit. Real-time colorimeters mounted so they can measure the crystal color just after wash eliminate the risk of variations between samples and ensure the measurements are representative, as all sugar is measured (except for sugar covered by discharges from other centrifugals). Such instruments have been installed in factories for real-time adjustment of the wash. Result about reduced water usage, reduced dissolution of sucrose, and other process improvements will be given. *Keywords:* sugar color, centrifuge wash water, automation, real-time measurement