

HOLCOMB, TRENT D., Amalgamated Sugar Company, 138 W. Karcher Road, Nampa, ID 83686. **Proper operation and optimization of a continuous centrifugal through continuous inline monitoring of sugar color.**

Recycling of color bodies when processing low quality beets/juice needs to be limited in order to make high quality sellable sugar. There is always a balance between sugar color and molasses purity when the sugar is being returned to the standard liquor melter. The installation of a Neltec inline color monitor has given us the ability to reduce the variation of the sugar going to the melter and also allowed us to achieve the lowest possible color without sacrificing molasses purity. Standard deviations were decreased from 156 ICUMSA to 60 and 165 to 118 on the high raw and low raw sugars respectively. Lowering low raw sugar from 550 to 300 color will reduce the non-sugar recycle by 1.70% which is a reduction of 40%, with no adverse effects to molasses purity. The secondary benefit is the proper operation of the centrifugal allowing us to determine optimum feed rate and optimum application position for water and or steam addition, e.g. turbo, neck, bottom or top sprays. This optimization gives the best distribution of the massecuite on the centrifugal screen, which is also conveyed from the inline instrumentation.