TECHNICAL AND ECONOMIC CONSIDERATIONS OF SUGAR LOSSES FROM LONG-TERM SUGARBEET STORAGE

Jeffrey L. Carlson Southern Minnesota Beet Sugar Cooperative, PO Box 500, 83550 County Road 21, Renville, MN 56284

Stored beets are materially different that fresh ones. In storage the beets lose sugar through respiration, degradation (internal metabolic processes) and deterioration (attack by microbes). They also experience physical changes including dehydration, freezing and thawing. This paper looks at how these changes affect the extractable sugar and factory operations. It also discusses how these changes should be taken into account when analyzing the risk/reward for different operational and capital improvement strategies.