

Title Automated official grain inspection system
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Abstract

A prototype automated grain inspection system that delivered official results on selected quality factors for corn and wheat was constructed at an export grain elevator. Currently it can be used only at an elevator with a single shipping scale. Each measurement was representative of 5,000 bushels of grain shipped, so 8 or more measurements were obtained for each subplot. Testing of the system during normal elevator operation indicated that it produced results comparable to those of the standard manual laboratory. However, more frequent measurements should reduce the random error in subplot results and should allow the elevator to have fewer sublots rejected. The system can also collect statistics that are not readily available from a manual laboratory.