

Oregon Test Data of Automatic Bulk Weighing Devices using Proposed Material Test Methods

First year test after adopting material testing for Automatic Bulk Weighing Systems (ABWS) in Oregon.

Note: During this cycle all scales also had a static test performed in conjunction with material test.

Configuration	Product Weighed	% error	Correction made
Duel Hopper w/ Diverter	Fish	6.2	Filtering
Single Hopper w/ Conveyor	Fish	2.7	Belt timing & filtering
Duel Hopper w/ Diverter	Fish	4.3	Rebuild supports
Duel Hopper w/ Diverter	Fish	1.5	Filtering
Single Hopper w/ Conveyor	Fish	0.8	Filtering, calibration
Single Hopper w/ Conveyor	Fish	1.7	Belt timing
Duel Hopper w/ Diverter	Fish	0.5	Filtering
Duel Hopper w/ Diverter	Fish	3.1	Diverter timing & filtering
Duel Hopper w/ Diverter	Fish	0.3	Filtering
Duel Hopper w/ Diverter	Fish	0.2	Passed ***
Weigh Hopper w/ surge Hopper	Nuts	2.2	Gate timing
Weigh Hopper w/ surge Hopper	Nuts	1.3	Gate timing
Weigh Hopper w/ surge Hopper	Nuts	0.4	Calibration
Weigh Hopper w/ surge Hopper	Nuts	0.1	Passed ***
Weigh Hopper w/ surge Hopper	Nuts	5.2	System rebuild
Weigh Hopper w/ surge Hopper	Nuts	0.5	Filtering
Weigh Hopper w/ surge Hopper	Nuts	3.0	Supports rebuild
Weigh Hopper w/ surge Hopper	Nuts	0.2	Passed ***
Weigh Hopper w/ surge Hopper	Nuts	0.3	Calibration
Weigh Hopper w/ surge Hopper	Beet Seed	0.8	Gate timing, calibration
Weigh Hopper w/ surge Hopper	Beet Seed	0.7	Filtering

Note: Most devices that had corrections of: filtering, belt timing, diverter timing, gate timing, supports and system rebuild would not of had problems identified with a static test.

% rejected using material test: 85.7

% rejected if static test only 19.0

Note: Two grain weighing systems were evaluated after the initial first year of testing (50K & 100k scales)

Single Hopper w/ Conveyor	Grain	1.6	Belt timing & filtering
Single Hopper w/ Conveyor	Grain	0.5	Filtering