

## **Justifications for Investment in the Neltec ColourQ**

### **Measurement at Centrifugals**

After installation of an instrument in this position, you will notice much higher variations in the sugar colour than expected. The centrifugals have different performances, so you will see significant differences between the centrifugals. Within each discharge from a centrifugal you will also see significant differences (unless you now wash too much).

1. The instrument detects bad sugar immediately, whether from a bad pan or from malfunction in a centrifugal. You may adjust the process just seconds after the bad sugar comes out of the centrifugals, instead of producing high colour sugar for extended periods.
2. You will get reliable information about the colour of the current production. Manual samples of wet sugar are often misleading, due to the colour variations within each charge and between centrifugals.
3. With the instrument it is easy to adjust and correct the spraying system to reduce the colour variations within each charge.
4. Trim each of the centrifugals to optimal performance. See immediately how changes in the filling level, cleaning of the screen, and adjustment of the plough affect the colour of the sugar leaving the centrifugal. Well-trimmed centrifugals produce lower colour with the same washing, or the same colour with less washing.
5. Take advantage of the instruments early indication of variations in the quality of the incoming beet, cane, or raw sugar to make adjustments in the juice purification.
6. Trim the general level of wash water to avoid unnecessary melting of good sugar.
7. Make dynamic adjustments to the level of washing and the filling of the centrifugals according to the quality of the massequite.
8. Reduction of unnecessary washing will increase your throughput. This is an easy way to increase capacity.
9. Avoid bad sugar or massequite in the drier.
10. Avoid frustrating hours waiting for laboratory results, when you expect the sugar is out of specifications.
11. Save costs by reducing the frequency of the lab measurements.
12. Protect the silos from receiving sugar out of specifications.
13. Avoid waste from running with a large margin to the upper colour-limit. Run confidently closer to the limit.

14. Sugar of 'remelt quality' is detected early, allowing it to be purged rapidly from the process.
15. Early detection of high-colour sugar allows rapid troubleshooting and easier management of the problem.
16. The rapid response to any adjustment gives the operators a better understanding of the process.

### **Measurement after drier**

1. Automatic detection of bad sugar, whether from a bad boil or from malfunction in a centrifugal. You may adjust the process as soon as the sugar has been dried. Decisions about adjustments in the process will be based on facts.
2. Avoid bad sugar in the silo. Any sugar with colour outside the specifications may be remelted instead of ending up in the silo.
3. Save wash water, when the sugar has low colour.
4. Save washing time and produce more sugar with your centrifugal capacity, when the sugar has low colour.
5. Direct different qualities to different silos.
6. Avoid frustrating hours waiting for laboratory results.
7. Reduce the frequency of the lab measurements.

### **Measurement of sugar leaving mill**

1. Insure yourself against shipping sugar outside the customers' specifications. Try to calculate your costs by just one complaint in terms of:
  - a) Wasted man-time
  - b) Costs for deduction or replacement of shipment
  - c) Indirect costs in lost customer confidence and loyaltyAlternatively, ask your insurance broker how much it would cost to insure yourself against consequential damages from delivering sugar outside specifications.
2. Improve your customer relations by continuous measurement of all sugar in every shipment.
3. Mix different qualities from different silos to meet different customers' specifications, and utilise sugar of higher colour.
4. Avoid frustrating hours waiting for laboratory results.
5. Reduce the frequency of the lab measurements.