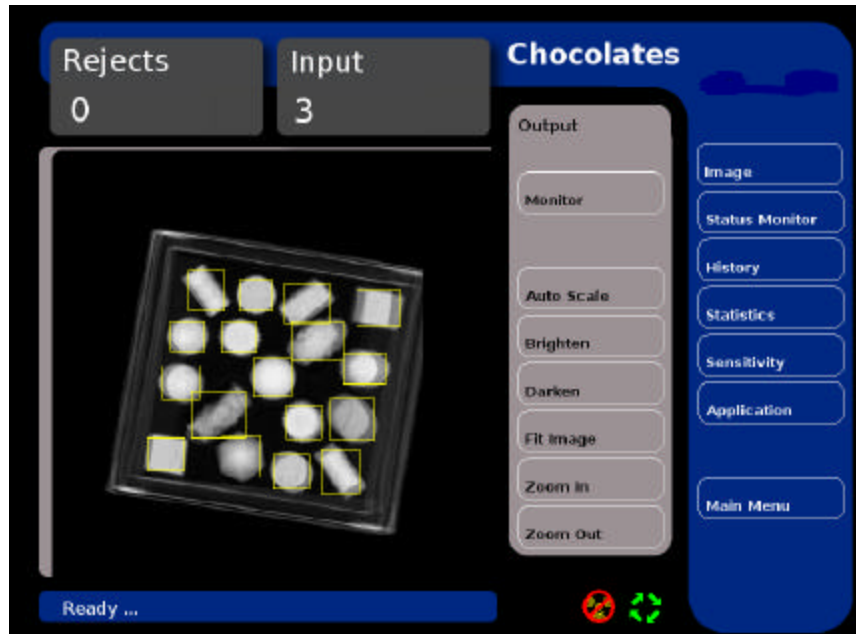


### **Novus X-Ray's *Hyper-Switch*™ Check-Weighs seemingly impossible product to verify the proper product count.**

For many years it has been an industry goal to ensure that the correct number of items are provided in a package of product. There are both legal and more importantly market driven reasons why this is important to do so.

In many cases this has proved to be impossible due to the normal production weight of a good package would vary more than the value of a single item within the package.

Novus X-Ray's *Hyper-Switch*™ processing technology now allows this to be done.



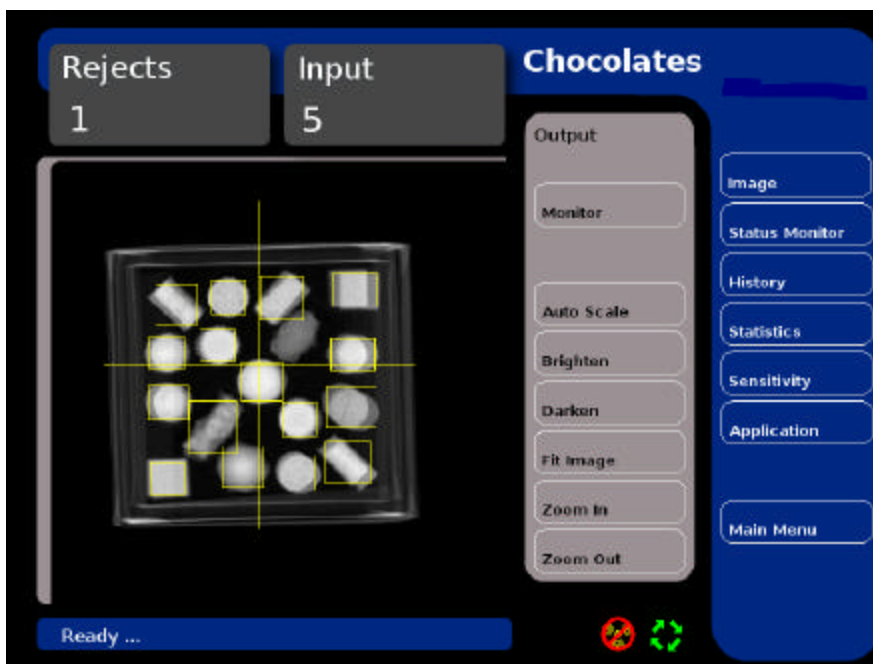
Product alignment is not critical. Image shows a good product with the objects crossing normal locations.

For example, a major producer of chocolates packages their product in seventeen separate wells which are stacked two layers deep. Each well holds a different candy, therefore the normal weight per well differs significantly.

Even if all candies were the same weight, one candy missing would be one in thirty four or 2.9% total, but if each well is examined separately each well is one in two or 50%.

*Hyper-Switch*™ is able to identify each well and when one candy is missing, the change is about 50% and vary easily detectable.

Standard check-weigh systems would only “see” at best, a change of 1 out of the 34 full box. The reason we say at best is due to the packaging. This can add considerably to the total weight. Therefore the check-weigh needs to determine better than 2% to reliably do the same job.



Even with each object location at a different target mass, a single piece missing is no problem. The yellow cross indicates the package is faulty.

Another important advantage of the **Hyper-Switch™** platform is the ability to run this algorithm in parallel with others. Therefore, other quality issues can be checked as well. Such operators include object shape, premium insertion, and contaminant detection.