Contamination Prevention Alert

Striving for Zero Tolerance

Cotton producers, ginners, warehousers and their employees are encouraged to pay particular attention to contamination prevention this harvest season. The goal is to keep any and all foreign materials out of seed cotton and baled lint.

The most recent International Textile Manufacturers Federation (ITMF) survey of worldwide cotton contamination found that there was a slight increase in contamination for most cotton growths when the survey years of 2011 and 2009 are compared. Anecdotal evidence from U.S. spinning mills and nonwoven cotton products producers tends to confirm the ITMF survey results. Some U.S. spinners have stated that they were experiencing slightly more contamination issues with the 2011 cotton crop than they experienced with the 2010 crop. Even though U.S. cotton is still considered as one of the least contaminated cotton growths, the U.S. cotton industry must be diligent if it wants to maintain that status.

High end yarn mills first look for cotton lint that is clean and pure and then take extra steps to ensure any foreign material is separated prior to processing. When cotton is seriously contaminated, separation of foreign matter is performed manually or with optical scanners resulting in significant cotton fiber waste. Clean cotton has an advantage over contaminated cotton because the extra steps to ensure that only clean lint is being spun are not necessary. That, along with a zero contamination tolerance, is why spinners are determined to scrutinize raw cotton lint from all sources.

Spinners also are willing to embrace new contamination detection technology. Currently, at least one U.S. spinner is evaluating a new system that operates as a multi-functional scanning unit capable of removing contaminants without disrupting lint flow. As the raw cotton moves from the blow room into the heart of the spinning operation, this type of multi-functionality will allow the spinner to scan for many types of foreign particles on the fly. A spinner using this technology may remove a wide range of contaminating particles such as oil/grease; colored materials like module covers; and clear, transparent or white plastics. Mills are also using bale management strategies that allow them to trace foreign material back to the source, e.g. a cotton gin and, in some cases, the grower.

New technology often brings with it new challenges. Such is the case for cotton producers, ginners and warehousers who remain our first line of defense when it comes to preventing pure cotton lint from being contaminated with foreign particles. Specifically, everyone involved in cotton harvesting, ginning and bale handling must be more aggressive when it comes to identifying and eliminating potential sources of contamination. The reward will be twofold: satisfying U.S. cotton's mill customers and maintaining U.S. cotton's global reputation for contamination-free lint.