

## NewsAnalysis: QUALITY CONTROL

# Equipment Manufacturers Weigh in on Quality Control Best Practices



**Douglas Canfield, president of Casso-Solar, suggests inspecting the laminating line prior to starting the manufacturing process.**

**W**hen it comes to ensuring quality control, how often should glass fabricators inspect machinery and equipment in the laminating and tempering process, and what steps need to be taken to do so?

According to Jay Campbell, glass solutions specialist at Bilco Manufacturing in Zelienople, Pa., maintaining a quality manufacturing process requires machinery inspections prior to production.

"Cleanliness is a significant contributor to a higher-quality product. Well-maintained conveyors and deck rolls don't leave marks on the glass," he explains. "A washer that receives regular maintenance will clean the glass better; inoperable heating elements may reduce the ability to control heating effectively—all of this, and more, can be minimized with a proper maintenance plan."

Douglas Canfield, president of Casso-Solar Technologies in Nanuet, N.Y., agrees, saying inspecting the cleanliness of the machine assembly and the clean room is key in preventing imperfections. To do so, he says, fab-

ricators should have a quality washer.

Bilco sales engineer Bob Lang warns that, when it comes to laminated glass, it's also best to touch base with specialists. "Interlayer suppliers have extensive quality control training programs relating to best practices for laminating glass," he explains. "The technical department of the interlayer supplier should always be consulted prior to the startup of a laminating production operation."

These experts say ensuring quality control isn't as simple as just maintaining cleanliness. They suggest fabricators be thoroughly involved in the process to prevent the company from taking on a deficit.

Campbell says the sheer cost of the products being fabricated stresses this importance. "Laminated glass is typically among the higher-cost goods that a fabricator produces," he explains. "Lites rejected at the end of the laminating line have a more significant impact to the business owner's profitability."

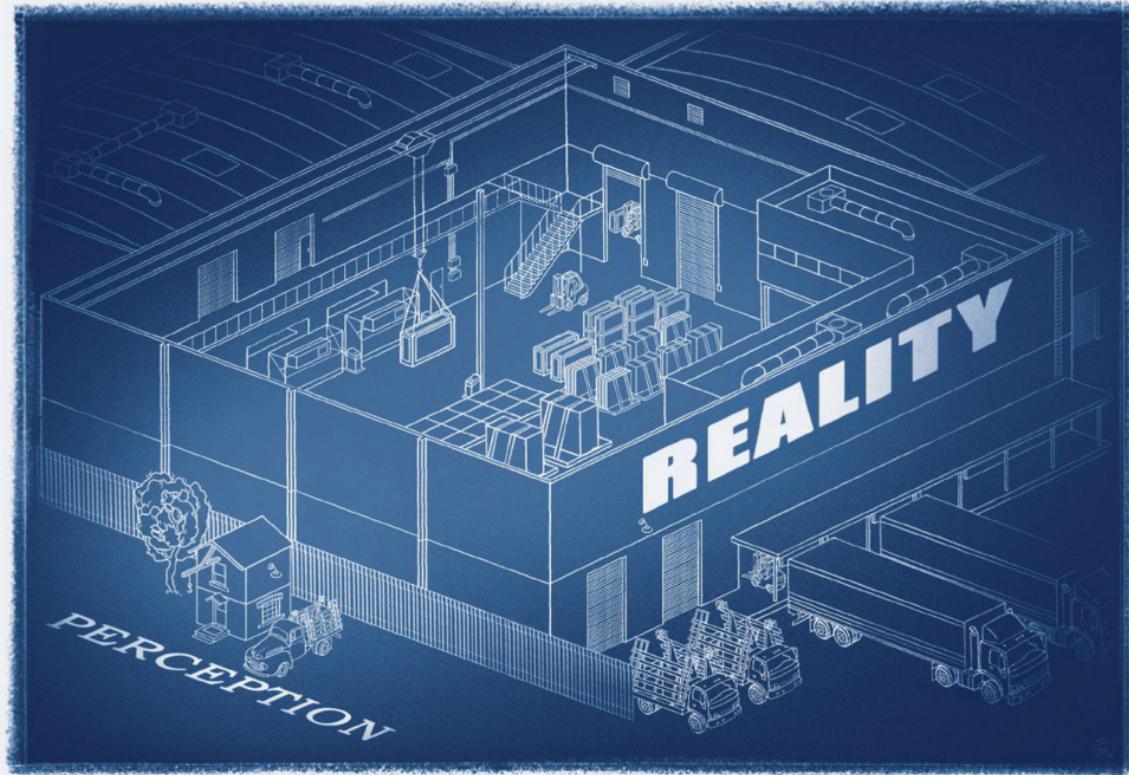
Canfield adds, "If you have a finished product, and it's going to be a reject, you

don't want to lose it for that reason." The "reason" he's referring to is not taking the time to inspect the product. He advises using the lighting in the lay-up room to ensure no dirt is on the glass before it goes into the laminating process.

Canfield also says fabricators should monitor the process continuously for another reason: shifting. "... When the glass comes out of a press line, or if it's going through multiple lines, if they shift, they can potentially cause a defect," he says. "For high-end value decorative laminates such as images, fabrics and metal meshes for specific art, it's very important [the glass] stays in position." Since every piece is specific, a slight shift in the glass could throw off the entire design.

If a fabricator isn't inspecting for quality control, the consequences could be bigger than the monetary value of the defected glass. Kevin Lear, sales engineer at Bilco, stresses "Potential issues relating to poor quality control are customer rejects and delamination. Both can tarnish the fabricator's reputation."

—Katherine Coig ■



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