

THE GOOD, BAD, AND UGLY TRUTH=

WHAT'S LURKING BENEATH THE SHINE

*This front sidebar to the main article on **page 14** shares insights from a veteran in the scale industry to help you make informed decisions – learning the differences between the low-cost scales and the high-end U.S. branded names and discovering why some new brands are so inexpensive.*

By Boon Lim

Many junior and even senior scale technicians may not be aware of the manufacturing side of the scale business. This is where my time in various factories in China and also other parts of Asia may help share insights for our industry — specifically the lurking monster of low-cost scales that will bite you if you or your customers purchase them.

The top brands for load cells are already very inexpensive (thanks to pricing pressures) and have good accuracy grades. A couple of Chinese brands are also increasingly popular, matching the accuracy of the U.S. branded names. The problem is the small unknown brands that use substandard materials and test multiple cells simultaneously for temperature compensations instead of testing individual cells. These inferior cells are very cheap (below the already low price of the better name-brand cells). The same goes with Analog to Digital processors; there's a big difference in accuracy and noise generated by the high-end U.S. chips compared to China-made chips at less than 10% of the cost.

An upper-tier scale starts with a great load cell, a good A.D. chip, software, and hardware design (including the scale housing). When cheap Chinese scales are half or one-third the price of the known brands, it is literally impossible to build with components that meet specifications. That includes large load cells for floor, tank, and even truck scales. I believe it's crucial for those in our industry to know the differences.

I recently had several email exchanges with a large truck scale dealer, the owner, who assured me, "You can cut analog load cell cables for truck scales to length." I spent half a day explaining the temperature compensation process to him and why he should never cut those cables.

The above conversation is why sharing our experiences is important for keeping our industry honest.

The next page article does not target the low-end consumer scales or the high-end industrial process systems. It is mainly educational for those in our industry to understand the market trends that are so cost driven and to share insights on why some new brands are so inexpensive. Not all that shines is gold — so buyer beware!

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