Zero Tolerance for Error

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THE PEOPLE AT OTTAWA MOULD CRAFT, LTD., ONTARIO, CANADA, have a contract to mold and assemble filtration products—some with military specifications. They use an ultrasonic welder to weld three very light, separate and distinct layers of media into each filter, all of which weigh a few grams.

The operator of the sonic welder checkweighs every set of filters before they are placed on the welder to be absolutely sure all three media discs are present. Because it would be impossible to ascertain after the discs are welded into the part, Ottawa Mould Craft needed a checkweigh system that allowed no room for human error. Accuracy is supremely important. With the proper filters inserted, the masks protect against a range of chemical, biological, radiological, and nuclear contaminants.

To guarantee accuracy, GTR Scales, Ltd., of Arnprior, Ontario, came up with an innovative solution. Jeff Wallace, GTR sales director, says, "We didn't know for absolute sure if the solution would actually work. It worked on the back of a napkin." That solution? GTR incorporated a Rice Lake platform into the base of the welder and interfaced the CW-90 checkweigher with the welder. If the weight of the set of filters does not fall into the allowable tolerance, or "accept band" of the CW-90, the welder will not operate.

Today, the Rice Lake base continues to stand up to the sonic frequencies and pressure produced by the welder, and David Veal, Ottawa Mould Craft vice president, reports that the ingenious solution is working perfectly—each and every time.

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GTR Scales' solution guarantees the checkweighing step occurs before welding. If the weight of the set of filters does not fall into the allowable tolerance, or "accept band" of the CW-90, the sonic welder will not operate.