

Quality Metalcraft Streamlines Operations and Improves Accuracy with Avery Weigh-Tronix Forklift Scale System

Quality Metalcraft, Inc. (QMC), located in Livonia, Michigan, has served the automotive industry for nearly half a century and is now the world's leading automotive engineering, prototype and low volume production facility. The company combines state-of-the-art machinery with traditional, "old school" finishing techniques to deliver quick turnarounds on high quality components, ranging from small brackets and simple fabrications to large body-in-white components & assemblies.

Each process begins with a flat laser blank, which arrives at QMC's 250,000 sq ft manufacturing facility with an identification tag that is scanned upon arrival. In order to confirm material costs, each metallic component is weighed twice: once as it arrives and once after it's been processed.

To determine and record these weights, QMC used to employ a central floor scale used by all forklift operators and handwritten documentation. Ron Hassen, Plant Manager at QMC, said this process used to be both time-consuming and, at times, inaccurate.

"We used to take the flat sheet on a skid via forklift to the scale, weigh it and tag it. Then the operator would take it over to the laser station for processing, and after it was finished, bring it back on the skid, weigh it and tag it again," Hassen said. "This consumed a massive amount of extra time; plus, we couldn't identify at which stage a work order was during processing. We also discovered our floor scale had been inaccurate – on some occasions, as much as 10 percent of the time."

Improving this process would concern two specific areas: the weighing process needed to be streamlined to save forklift operators time, and the scale needed to provide high accuracy so that QMC would only pay for the amount of materials actually received. In addition, the company wanted to employ an efficient way of tracking each job throughout manufacturing, which would improve plant communications and process visibility.

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Avery Weigh-Tronix Forklift Scale

- Provides dependable, legal-for-trade weighing of heavy loads
- Utilizes Weigh Bar® electronic weight sensors for reliable, repeatable results
- Weighs en route, saving operators time and improving productivity
- Withstands frequent jolts to produce accurate results, even if the forklift mast is tilted



Fred Durling at Standard Scale & Supply Co. in Detroit, Michigan suggested a forklift scale system from Avery Weigh-Tronix, which installs directly on forklift and provides legal-for-trade weighing of loads up to 10,000 lbs.

“One concern QMC had was that they felt they might be paying for both the flat steel and the skid it was placed on,” Durling said. “Along with making sure they were getting their money’s worth – and charging customers appropriately for the materials used – they didn’t want to have operators waiting in line at a central scale to weigh materials. The Avery Weigh-Tronix forklift scale is a built-in system that allows operators to accurately weigh materials in-motion.”

Durling added that this solution is of particular importance in an economic downturn. “When fewer workers are doing double- and triple-duty, trying to conserve costs, companies need a system like this that saves them time,” he explained. “With this forklift scale, QMC can have one employee working at receiving during certain times of the day while maintaining a workload that otherwise may have required an extra two to three individuals.”

Avery Weigh-Tronix forklift scale systems utilize Weigh Bar® electronic weight sensors for reliable, repeatable weighing of heavy loads. This design is ideal for busy plant environments because it features no flexures, hydraulics or springs – allowing it to withstand frequent jolts and deliver accurate results, even if the forklift mast is tilted.

The benefits of being able to weigh loads in-motion extend beyond time savings. The company has now implemented a wireless scanner that allows the forklift operator to scan the flat laser blank when it arrives, instantly assigning materials for each job number an initial weight. This job can now be tracked via the company’s computer system throughout processing: an employee at the laser station can email the forklift operator to request materials

corresponding to a job number, and the forklift operator instantly can pick up and transport the materials, logging the weight along the way. Once the metal has been processed, the forklift operator can scan it again and log the new weight under the same job number, allowing them to keep a running total of the materials used at all times.

This electronic documentation keeps employees up-to-date on each job, a significant advantage at QMC, where at any moment 250 production parts may be rolling out the door. Plus, the scale system’s reliability provides QMC with the dependable results they need.

“The accuracy of Avery Weigh-Tronix’s scale is tremendous,” Ron Hassen said. “It also helps us maintain an accurate tally of the material weight in stock. For example, if someone orders 50 parts, we’ll know if we only have enough material for 20 parts.”

The streamlining of QMC’s processes and legal-for-trade accuracy the Avery Weigh-Tronix forklift scale provides has delivered an exceptional solution for QMC.

“This system allows us to know how much our materials weigh, instantly record the weight and know in which processing stage each work order is at all times – so we know when the work order will be done,” Hassen added. “Keeping track of these jobs throughout our three-building manufacturing facility saves us significant time while helping us maintain accurate records.”

For more information on Avery Weigh-Tronix products and distributors, visit www.wtxweb.com.

To learn more about QMC, visit www.qualitymetalcraft.com.