

Novamerican Steel verifies product and scrap weight efficiently

When Novamerican Steel Inc. opened its LaSalle, Quebec plant in 2003, the quality steel products and services company recognized a need for increased efficiency in the final stages of its steel production and distribution.

The company's product line includes slit coils, mechanical and structural tubing, sheets, blanks, pallet racking and many additional offerings. Novamerican also provides numerous steel services, including leveling and cutting-to-length, tempering, as well as roll forming, stamping, and manufacturing capabilities. Once the finished products are ready to be transported from production to distribution, the company needed to complete several steps to ensure each product met its target weight.

"Before we moved to this plant, we used to weigh coils at our slitting station by using a portable scale located on a crane hook," said Bill Lothian, foreman at the LaSalle branch of Novamerican Steel. "When the coil would come off the line, the crane would lower the product onto the portable scale, then once the weighment was gathered, it would lift the product to take it into stock for shipping."

Novamerican was seeking an upgraded system for the new plant, which would save the company significant crane time. As a customer of Avery Weigh-Tronix since 1996, the company looked to this weighing solution provider to develop a more efficient method.

"Novamerican Steel asked us to build scales suitable for weighing their 80,000 lb. rolls of steel, which are transported from the production line on 'coil carts' running on 'railway-type' rails," said Brian Curran, Avery Weigh-Tronix sales consultant in Pointe-Claire, Quebec. "They also wanted an efficient way to weigh their scrap metal, which is transported on a conveyor to 'drop boxes' on the exterior of the building."

The solution Avery Weigh-Tronix devised consisted of two separate weighing systems, each made up of two scale units. The coil cart scales were installed in a pit, with the rails placed within channels. This design allowed the scale to be entirely flush with the floor, which was convenient for cart transport and helped ensure employee safety. This arrangement also only requires the product to be lifted by a crane once, cutting the lifting process time in half. The streamlined system delivered another advantage for Novamerican in that it helped expedite final inspections.

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BridgeMont BMS Steel Deck Truck Scale with 1310 Indicator

- Truck scale features rugged construction for heavy-duty applications
- Uses durable Weigh Bar technology for high accuracy and repeatability
- 1310 indicator simplifies billing and collection monitoring
- Products combine to provide a reliable, streamlined weighing process



“When our products come off the line, they go directly onto the scale,” Lothian said. “Then Quality Control checks the coil while it’s being weighed, and since the product is already tagged and scaled, we can put it directly into stock.”

The drop box scale system uses BridgeMont BMS Steel Deck Truck Scales, which are designed to deliver high accuracy, reliability and repeatability in heavy use applications. This scale was specially designed into sections measuring 16 feet long by 8 feet wide, with several modifications specially suited for Novamerican Steel’s application. The scales feature 12-inch wide strips running lengthwise to ensure the drop box’s steel runners will operate smoothly. In addition, the scale was designed with inverted angle bars to help guide the box’s placement, and stoppers were added at the back end to keep the boxes from falling off the scale – and into Novamerican’s building.

Aside from the smooth design, the efficient, accurate weighing process simplifies billing and scrap collection.

“The conveyor takes our scrap metal into a box on the scale, so that our scrap dealers can pick up their materials directly and we can replace drop boxes as needed,” Lothian said. “Since all materials are immediately weighed, the amount due for each box of scraps is much easier to determine.”

Both scale systems are interfaced with a 1310 indicator combined with a closed circuit television monitor, which is a Measurement Canada requirement for the company to achieve Legal for Trade Certification. This monitor allows operators to view scale transactions at all times, and when the target weight for each drop box is reached, the operator can direct the scrap chute to an empty box and immediately call their recycler to replace the full one.

In addition, if the target weight needs to be altered – for example, during the spring thaw – the operator can easily modify the 1310’s programming to comply with government regulations.

With simple operation and reliable performance, the scale system has proven to be a valuable tool for Novamerican Steel.

“Everything we’re doing now saves crane time,” Lothian said. “When we were looking for an upgrade, that was exactly what we had in mind.”

For more information on Novamerican Steel Inc. products and services, visit www.novamerican.com.