Avery Weigh-Tronix solutions

Waste, Mining & Aggregates

Sand & gravel company replaces worn scale with specially designed Avery Weigh-Tronix scale

Scappoose Sand & Gravel – named for the city of Scappoose, Oregon where it is located, which is an old Indian name that means "gravelly plain" – supplies upwards of 650,000-700,000 tons of material annually to its customers. The finished products, which are utilized for applications such as manufacturing of concrete and asphalt for road construction, comprise the majority of most of the highways in the area.

To track the large quantities of sand and gravel that it distributes, Scappoose relies on a truck scale installed in a rectangular concrete pit. However, when electrical impulses from an extremely-close lightning storm short-circuited the electrical equipment in their already-worn scale, the company was unable to continue weighing products and was forced to estimate the quantities of material that were being shipped in trucks. Scappoose Sand & Gravel needed a replacement scale, and they needed it fast. The problem was, off-the-shelf scales didn't fit in their existing pit and redoing the pit would prove costly – at double the expense of simply replacing the scale – and require additional time. The solution, as discovered by Scappoose owner, Scott Parker, was a specially designed truck scale from Avery Weigh-Tronix.

"Avery Weigh-Tronix offered the capability of modifying a scale to fit our requirements – and to do so very speedily," Parker said.

The truck scale, suggested by Mark Hudzinski, Regional Sales Manager at Avery Weigh-Tronix, delivers a robust weighing solution paired with a remote indicator that allows an operator to program in the lightweight of numerous vehicles. The scale provides the accurate net weight of a loaded truck, allowing Scappoose to simply gather, document and store product weight information.

"The system is so easy to operate that everyone was able to learn it quickly," Parker said.

TECHNICAL

BridgeMont Heavy Duty Steel Deck Truck Scale with 1310 Indicator

- Heavy duty scale features maximum capacity of 200,000 pounds (100 tons)
- Provides 150 percent overload protection
- Offers one of the highest concentrated load capacities (CLC) in the industry, for its particular classification
- Custom designed to fit in existing concrete in-ground pit foundation
- 1310 programmable digital weight indicator allows simple data collection

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"Our employees can simply print out tickets that show the weight of materials in the truck, time of weighing and additional pertinent statistics as well as store this accumulated information on a daily basis."

The weighing system also features advanced SensorComm™ technology – a digital diagnostics tool that assists in troubleshooting in the occurrence of problems. SensorComm operates by simultaneously transmitting twelve digital signals from the weighbridge to the system indicator. If a signal is lost due to a system malfunction or damaged cable, the indicator functions as if the missing signal was still providing the same reading as the others, allowing continuous operation. Although the weighments taken when a signal is dropped aren't legal for trade, SensorComm serves as an invaluable back-up system and allows for simpler equipment calibration and maintenance.

"If an incident such as a nicked cable occurs, many scales would completely shut down," Hudzinski said. "SensorComm allows the customer to continue operations in a ghost mode, while the system sends an alert to the operator, resulting in big time savings."

"SensorComm gives us additional insurance that operations will run as smoothly as possible," Parker said.

The new weighing system was installed in July 2007 and as planned, required minimal modifications to the existing concrete structure.

"The scale was designed to sit significantly higher than the previous scale, requiring us to pour concrete bases on each of the legs on the new scale," Parker said. "Although it wasn't a major construction, everything had to be precise."

"The drawings that we provided them from the factory to revamp some of the piers in the pit were dead on," Hudzinski said. "All of the dimensions were correct. Everything went smoothly and quickly."