

Sonic-350 Checkweigher System

The Sonic-350 (also known as the TSC-350B) In-motion Checkweigher System by Thompson Scale Co. is the industry's answer to a need for a simple, rugged, yet highly accurate small package production scale. This system is capable of weighing up to 350 units per minute, with accuracies up to +/- 1 gram. The highly advanced scale controller holds 75 unique product set-up's in memory, and displays useful information on production as each unit crosses the scale.

The Sonic-350 is constructed of all stainless steel components, and is available in several configurations to meet your specific requirements:

Food Grade (compliant) Applications

Wash Down & Corrosive Applications

Hazardous Environment Applications

Whatever the application, the Sonic-350 can do the job accurately, reliably, and economically. Below are just a few of the system's standard features:

Mechanical Features:

●All Stainless Steel Conveyor and Frame Construction

All conveyor components are rated to meet USDA/FDA requirements, with easy to clean, smooth surfaces, wash down-rated components, and quick release conveyor components for easy disassembly and cleaning.

●No Photo-Eye Required to Trigger Weights

This is a significant advance over other Checkweighers. Not only do we eliminate the additional hardware and electrical circuitry required for the photo-eyes, but there is no longer a need to be concerned with exact placement and constant cleaning in dirty or dusty environments. For applications with closely spaced or difficult to handle products, a weigh platform exit photo-eye can be used, if necessary.

●Endless, Seamless Conveyor Belt

The Sonic-350 Checkweigher is designed with maintenance in mind. The USDA/FDA rated conveyor belt is easily removed for conveyor cleaning, and can be replaced without the use of tools. Removal and installation can be preformed in only a few minutes time.

●Synchronous Belt Drive System with Adjustable DC Drive

Wash-down rated (IP67) motors are driven by a high-precision variable speed DC drive controller. Speeds can be input as part of the product set-up, automatically changing the conveyor's speed depending upon product weight and size.

●**High Accuracy Load Cell.**

The Sonic-350 uses a high precision, wash down protected load cell that delivers the highest accuracy possible. Unlike other manufacturers of in-motion scales, our load cells is readily available from many local sources and from different load cell manufacturers. Again, the idea of easy maintenance is an important part of our design.

●**Accepts Wide Variety of Package Sizes.**

The Sonic-350 is available with a variety of weigh platform lengths, ranging from a minimum of 8" long x 3-1/2" belt, to a maximum of 24" long x 12" wide belt. Weigh platform length is based upon product size, production rate, and conveyor speed. Other special lengths and widths are available upon request.

●**Variety of Mechanical Accessories.**

Items such as product guide rails, in-feed accelerators, metering conveyors, and rejectors are available. The Sonic-350's frame is designed to readily accept these options by simply attaching to the frame's side rails.

TSC-350 Controller Features:

●**NEMA 4X Rated Stainless Steel Enclosure**

Meets all wash down and USDA/FDA requirements. Uses cage clamps on three sides of the enclosure to secure the door, and allows for quick access to internal components.

●**Full Alpha-Numeric Keyboard**

Wash down rated membrane keyboard has tactile feed back on all keys. Keys are large, easy to read, and provide a method to input product data and weight parameters.

●**Large, Easy to Read Back Lit LCD Display**

4.3" x 5" LCD graphics module displays each unit weight, weight zone (low, good, high) as well as total number of units accumulated in each zone. Current product number and name are also displayed. Prompts for calling statistical reports, clearing zone totals, etc. shown at the bottom of the screen.

●**Standard Low and High Reject Outputs**

Each TSC-350 includes low reject and high reject relay outputs along with adjustable timers for delay and duration of each signal. Other outputs include three zone outputs for remote light displays, and a good weight output that can be used with classifying conveyor systems.

●**Metal Detector Interface.**

As an option, the Sonic-350 can be supplied with an Eriez Magnetics brand metal detector. This detector can be integrated into the 350's framework, or offered as a separate device. Reject signals generated by the detector are interfaced to the 350 controller, and contaminated product is rejected after weighment.

●**Serial Ports**

Two remote digital display ports are included for connection of displays at operator stations away from the Checkweigher. A printer port is also included for our optional STPR statistical printer package. Other optional serial ports include a full duplex RS-232 or RS-422 port for up-load or down-load of product weight and product set up information from a remote P.C.

●**Easy to Maintain Controller**

Internally, the TSC-350 houses a fully enclosed card rack containing all logic for operation of the system. A simple layout, similar to a PLC (programmable logic controller) allows for trouble shooting and card replacement by non-technical service personnel. If an output fails to work properly, simply remove the I/O card and plug in another. The complete rack consists of; CPU card, Scale Digitizer card, I/O card, and Power Supply card. Other cards within the controller are the Keyboard Interface, and LCD Graphics module, which mount to the controller's door.

●**Optional Closed-Loop Feed-Back Interfaces**

To compliment the Sonic-350, we offer several types of feed-back loops. These include counter-driven, serial output, and servo. Contact the factory for more information on these additional features.

●**Multiple Product Sizes and Weights**

The TSC-350 can be provided with a variety of load cell capacities and weigh table lengths to meet your specific needs. Specifications on minimum and maximum weights and sizes are shown below.

Weight Range: 2 Kg., 5 Kg., 7 Kg., 10 Kg., 15 Kg.

Product Size: 0 to 10" overall length
Stable load, stable bottom surface