IN-LINE CHECK WEIGHING

DELIVERING ACCURATE PACKAGE WEIGHT VALIDATION

Sasco Process Automation

SASCO WEIGHING SYSTEMS

SASCO'S IN-LINE CHECK WEIGHERS offer an automated or manual solution for checking the weight of packaged commodities. These scales are normally found at the off-going end of a production process and is used to ensure that the weight of a pack of the commodity is within specified limits. Any packs that are outside the tolerance are taken out of line automatically.

A checkweigher can weigh in excess of 500 items per minute (depending on carton size and accuracy requirements).

Checkweighers can be used with metal detectors and X-ray machines to enable other attributes of the pack to be checked and acted upon accordingly.

An automatic checkweigher incorporates a series of conveyor belts. These checkweighers are known also as belt weighers, in-motion scales, conveyor scales, dynamic scales, and in-line scales. In filler applications, they are known as check scales.

Typically, there are three belts or chain beds:

- **An infeed belt** that may change the speed of the package and to bring it up or down to a speed required for weighing. The infeed is also sometimes used as an indexer, which sets the gap between products to an optimal distance for weighing. It sometimes has special belts or chains to position the product for weighing.

- **A weigh belt.** This is typically mounted on a weight transducer which can typically be a strain-gauge load cell or a servo-balance (also known as a force-balance), or sometimes known as a split-beam. Some older machines may pause the weigh bed belt before taking the weight measurement. This may limit line speed and throughput.

...

...

- **A reject belt** that provides a method of removing an out-of-tolerance package from the conveyor line. The reject can vary by application. Some require an air-amplifier to blow small products off the belt, but heavier applications require a linear or radial actuator. Some fragile products are rejected by "dropping" the bed so that the product can slide gently into a bin or other conveyor.

It is usual for a built-in computer to take many weight readings from the transducer over the time that the package is on the weigh bed to ensure an accurate weight reading.

Sasco offers a broad range of rugged and accurate In-Line Check Weighers all of which can be tailor made to meet customers' specific requirements, with three configurations being central to Sasco's product offering, namely the CW100, CW200 & CW300 In-Line Check Weighing Systems.
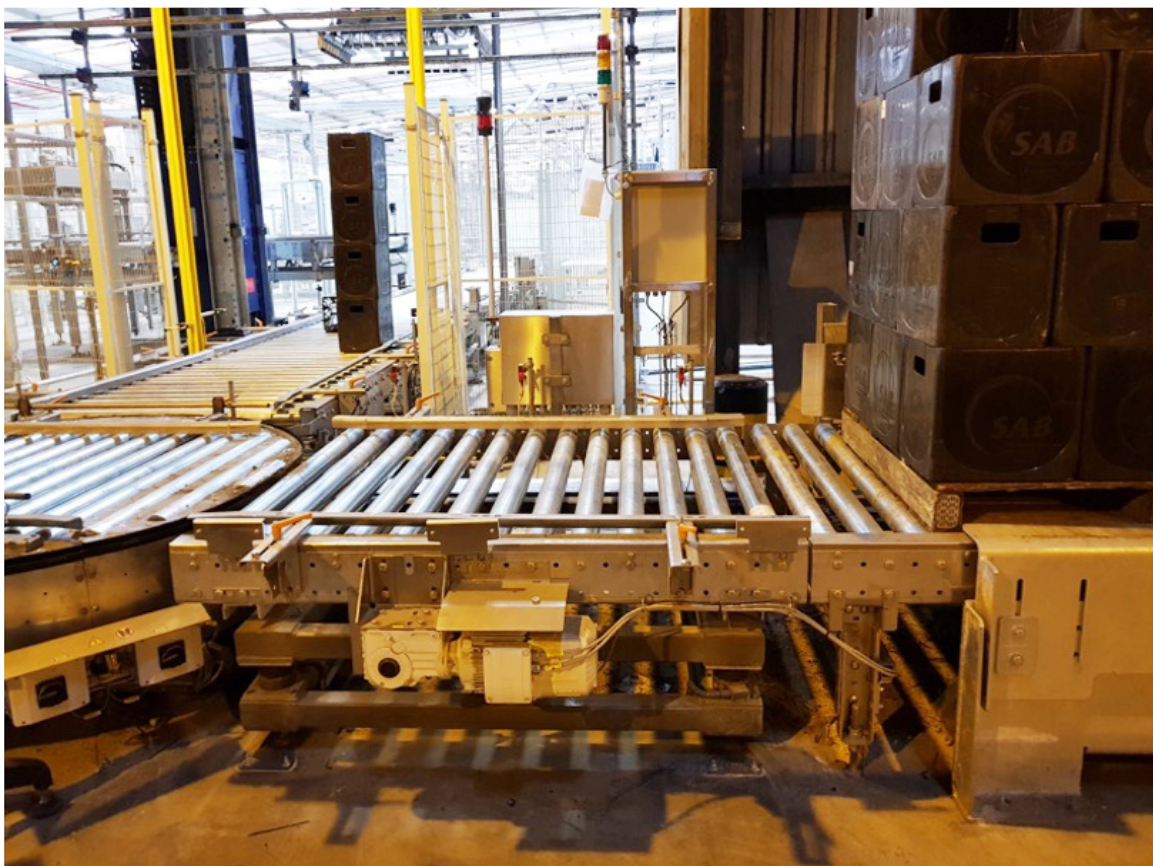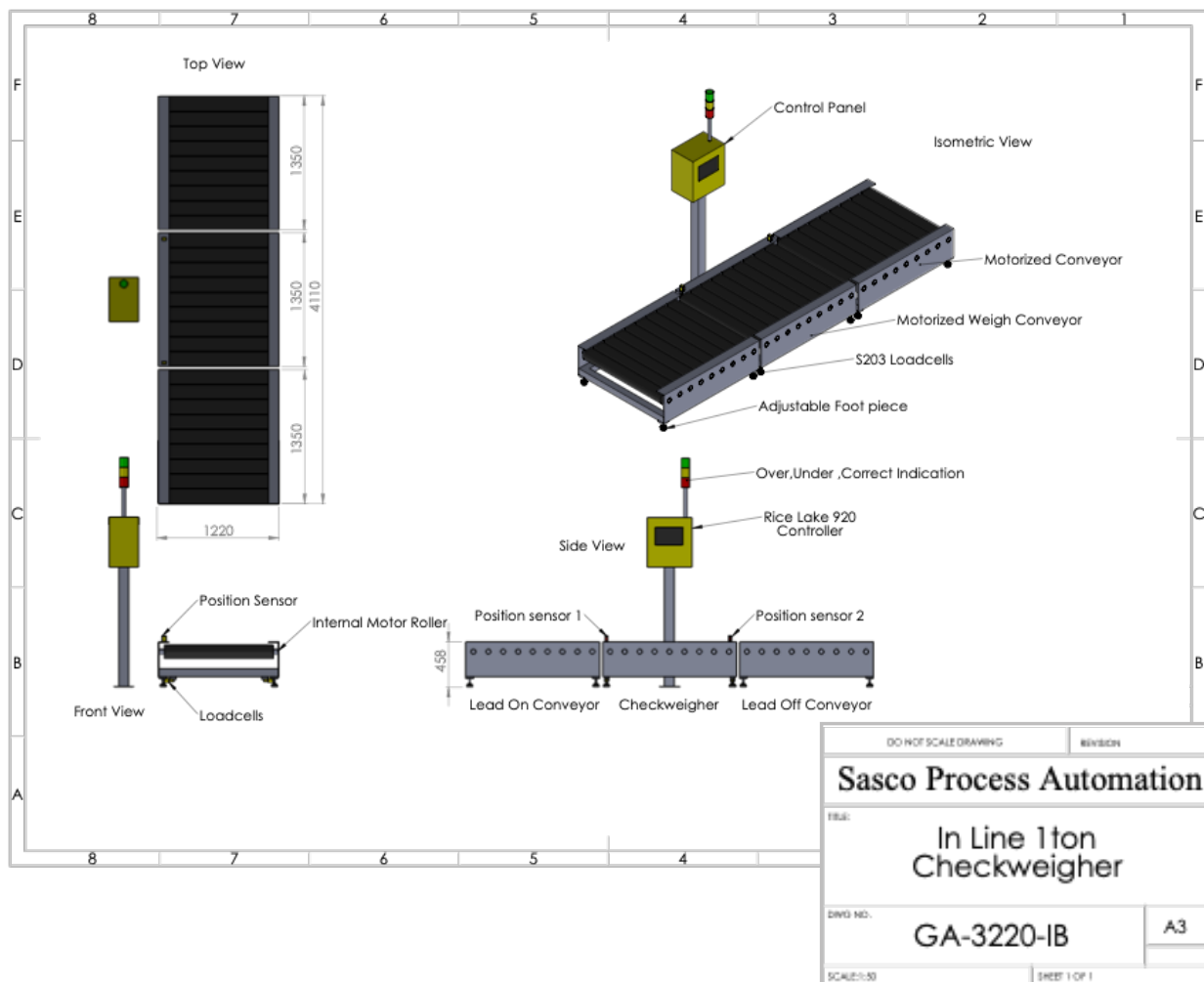

In-line Check Weigher

Product Overview

Sasco In-Line Checkweighers have the following key component options, which are reflected in our range of standard check weighing product range and bespoke product options.

IN-LINE CHECKWEIGHER MECHANICAL OVERVIEW

Standard Product

DELIVERING ACCURATE PACKAGE WEIGHT VALIDATION

The Sasco In-Line CheckWeigher range comprises both bespoke products and the following standard base products:

Product Number	CW - 100	CW - 200	CW - 300
Controller	L337 / 920i Controller	L337 / 920i Controller	1280 Controller
Applications	Static or in motion check weighin applications	Static or in motion checkweighing with an automated rejector and position sensor	Static in motion and fully automated in line checkweighing system with an automated rejector and conveyor control
Specifications			
Conveyor Checking	Single	Triple	Triple
Load Cells	4	4	4
Display Weighings	Yes	Yes	Yes
Capacity	1 -10,000kg	1 -10,000kg	1 -10,000kg
Totalizer	Standard totalizers, total weight, number of weighings per day.	Standard totalizers: total weight, total weight per product, number of weighings per day.	Standard totalizers: total weight, total weight per product, number of weighings per day.
Rejection Control	Manual	Automatic	Automatic
Position Sensors	No	Yes	Yes
Load Cell Assemblies	None dampened	Dampened	Dampened
Conveyor Control	None	Basic	Advanced
Reporting	Basic	Basic	Advanced
Touch screen	No	No	Yes

Controller Features Comparison

	L337 Controller	920i Controller	1280 Controller
Applications	The key attraction of the L337 is its menu of standard program options covering bagging, bulk weighing, check weighing, sample weighing and counting applications.	Highly flexible Controller, full graphics, open connectivity for most network interfaces, 100 configurable set points, 2- 14 slot cards & programable by the user using iRite software.	Limitless programming applications, Freescale MX 6 processor, Programable IRite to store and retrieve iRite applications in addition to 150 built in program applications
Display Size	5 inches	4.6 inches	7 inches
Display Type	Numeric and Graphics	Numeric and Graphic	Numeric and Graphic
Language	English	English	Multi Language
Mounting	Panel, Wall, Desk	Panel, Wall, Desk	Panel, Wall, Desk
Key Pads	Ability to plug one in	Ability to plug one in	Touch screen keypad and the ability to plug one in
Built in Web Server	No, Optional	No, Optional	Yes
Environment	IP65	IP66, Nema, Type 4X	IP66, Nema, Type 4X, IP 69
Digital Filter	Motion filter and digital filter	Software selectable, three stage, adaptive or dampening	Software selectable, three stage, adaptive or dampening
Input Power	AC or DC	AC	AC or DC
Load Cells Operated	16 load cells	16 load cells	32 load cells
Scales Operated	2	4	8
Memory	257MB	1 MB	485 MB
Configurable Set points	99	100	100
Soft Keys	None	5 soft keys, 10 users defined, 14 preset functions	22, 10 users defined
I/O Digital Channels	Two	Four	Four
Ports	Up to two serial interfaces	One RS-232 and One RS-485	Two RS-232 and Two RS-485
Options	Multi optional	Analogue In, Analogue Out, Digital I/Relays, Thermocouple	Analogue In, Analogue Out, Digital I/Relays, Thermocouple
Standard Comms	USB, RS232, Ethernet	Ethernet TCP/IP, Serial streaming	Ethernet TCP/IP, RS232, RS485, USB, Wireless, Bluetooth
Communication Options	R232, RS485, RS422, RS4220, PROFIBUS and Modbus and Ethernet	Device Net, Allen-Bradley, Ethernet/IP,ControlNet,PROFIBUS,PROFINET, Ethernet TCP/IP,Wireless LAN	Ethernet TCP/IP, RS232, RS485, USB, Wireless, Bluetooth
Ticket Formats	Standard formats only with limited user defined fields	Format of 1,000 characters	4 programmable up to 1,000 characters

Application Example

A major South African citrus processing plant required a system of weighing bar coded crates of citrus arriving at the plant so as to ensure that the correct weights of daily produce were accurately recorded against the appropriate grower, with under weight batches being rejected.

Sasco's solution was to supply an inline check weigher linked to the customers ERP system via a wireless connection. The pack house mostly packs fresh produce for numerous local farmers, all produce being exported.

SMART SUPPORT
0861 422 134
OR +27 83 680 0722

E-mail: info@sascoafrica.com
Web: www.sascoafrica.com
24 hours, 7 Days a week

GROUP SUPPORT H/O
2 Blackburn Street
Apex Industrial | Benoni