



Accurately Weighing Africa



# THROUGHPUT WEIGHERS

ENSURING HIGHLY ACCURATE WEIGHT DISCHARGES



## **SASCO** WEIGHING SYSTEMS

SMART SUPPORT

0861 422 134

OR +27 83 680 0722

E-mail: [info@sascoafrica.com](mailto:info@sascoafrica.com)

Web: [www.sascoafrica.com](http://www.sascoafrica.com)

24 hours, 7 Days a week

GROUP SUPPORT H/O

2 Blackburn Street

Apex Industrial | Benoni

Phone: +27 (0) 11 746 6000

Fax: +27 (0) 11 746 6100

**SASCO THROUGHPUT WEIGHERS** also known as hopper scales and batch weighers are common for many industrial sites. Most types of products are stored in bins, hoppers, or silos before transfer to a process plant, packaging plant or a transport vehicle.

Using a weighing system enables accurate monitoring and management of the product while transferred to or from a storage bin or silo. By installing a Throughput Weigher or installing load cells under an existing hopper control of in transfer weight product around site can be achieved, either using a controller with batching functionality or using a batching software package. Throughput Weighers also ensure good product traceability.

Throughput Weighers are all designed as flexible solutions to carrying out operations that involve weighing a continuous flow of products. Throughput Weighers are designed to function in dusty, wet and hazardous environment in food processing plants.

Throughput Weighers are mainly, but not exclusively, used in the agricultural food industry all over the world for the intake and out-loading of more or less free flowing solid and liquid products such as grains, sugar, salt, fertilizers, molasses, mix juice etc.

Throughput Weighers are designed for weighing a continuous product flow into batches for packing and other purposes. The unit consists of a surge bin, weigh hopper support frame, load cells and a controller.

The material enters the weighbin through the open infeed gate or valve and accumulates in the weighbin. Once the preset tip weight has been reached the infeed valve or gate closes. The controller waits for the material and weigh hopper to settle before recording the gross weight. The discharge gate then opens and the controller waits for the product to fully discharge before closing the discharge gate. Once the scale is stable the controller records the zero weight and calculates the nett weight of the batch and the cycle then repeats.

...

...

Sasco offers a broad range of rugged and accurate Throughput Weighers designed to withstand harsh environments, all of which can be tailor made to meet customers' specific requirements.

There are three configurations central to Sasco's product offering, namely the HS100, HS200 & HS300 Throughput Weighers

Sasco Throughput Weighers provide solutions for nearly all ranges of applications including, stock control, automated and manual road and rail truck loading, and continuous feed control for plant processes.

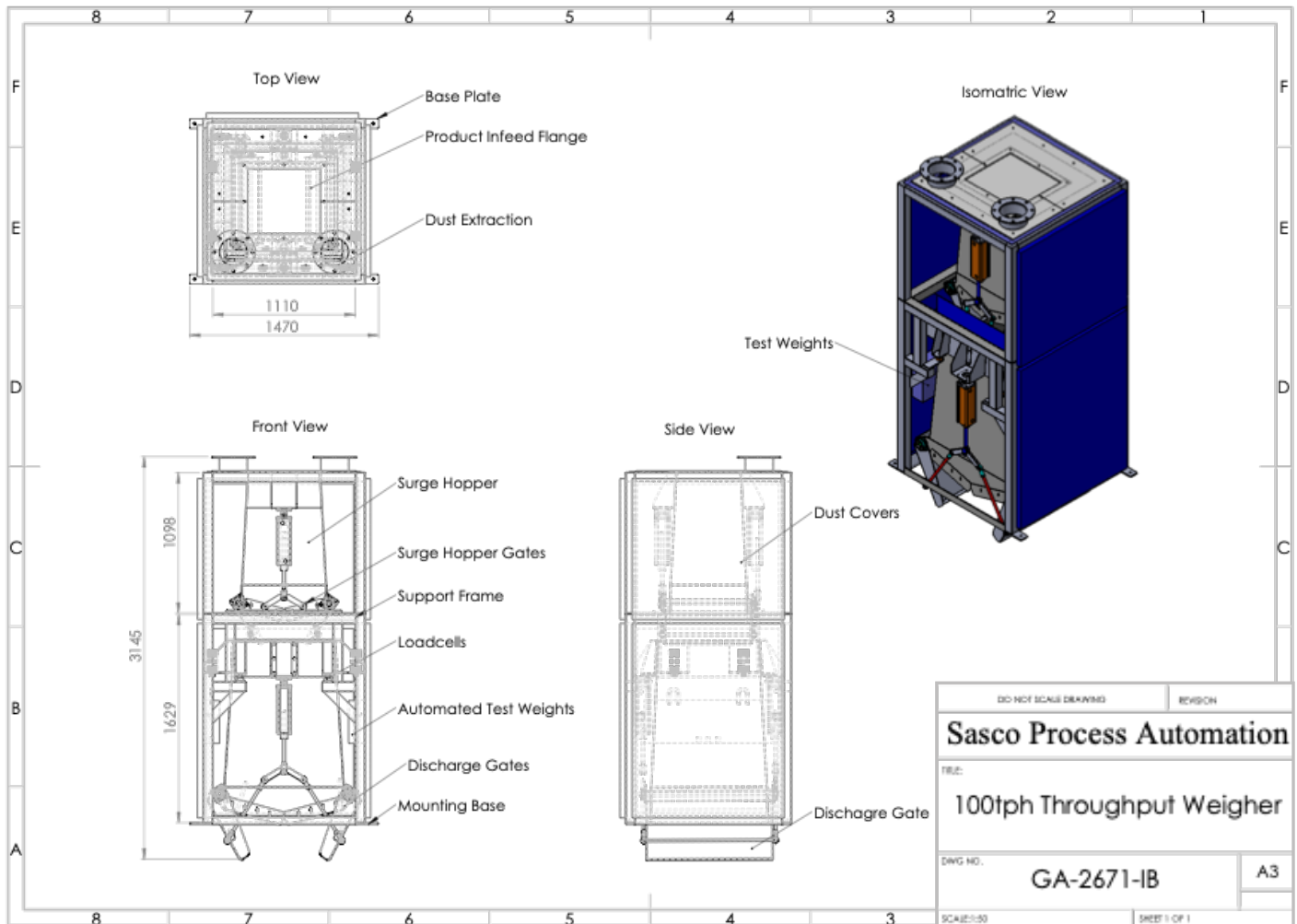


*Throughput Weigher*

# Product Overview

**Sasco Throughput Weighers** have the following key component options, which are reflected in our range of standard weighing products and bespoke.






## HOPPER SCALE MECHANICAL OVERVIEW



# Standard Product Range

## DELIVERING ACCURATE IN-MOTION BULK WEIGHING

Sasco's Throughput Weigher range comprises both bespoke products and the following standard base ranges

Product Number	HS - 100	HS - 200	HS - 300
Controller Options	 <b>L337</b>	 <b>L337</b>	 <b>1280 Controller</b>
	 <b>920i Controller</b>	 <b>920i Controller</b>	
Applications	Standalone throughput weighing application with basic reporting to a printer	Integrated throughput weighing application interface to a dcs or plant control system	Advanced throughput weighing application with silo management and integration to a dcs. The 1280 features easy entry of users fields via the touch screen. Reporting to a usb is possible and on request the standard application can be customized to suite the client's needs.
Solid Weighers	50L,100L,400L, 1000L + custom built	50L,100L,400L, 1000L + custom built	50L,100L,400L, 1000L + custom built
Liquid Weighers	50L, 150L, 300L, 600L, 1000L + custom built	50L, 150L, 300L, 600L, 1000L + custom built	50L, 150L, 300L, 600L, 1000L + custom built

# 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, with open connectivity for most network interfaces, 100 configurable set points, 2- 14 slot cards and 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, Multiscale
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	Extensive and all supplied as standard
Ticket Formats	Standard formats only with limited user defined fields	Format of 1,000 characters	4 programmable up to 1,000 characters



# Application Example

## THROUGHPUT WEIGHER

A large Southern African Sugar Mill required a way of measuring the throughput per hour and the total amount of sugar that is produced after the drying cycle before the sugar gets stored in the silo or transferred to the packing plant .

The main weighing challenges were:

- **High Volumes:** Due to the high volumes in the plant the customer was concerned that the scale would need to be able to cope with these volumes.
- **Reliability:** Reliability of the weigher was also critical as it was to be installed directly inline between the process plant and the packaging plant, so any breakdown or stoppage would halt the whole the packaging process.

Sasco's solution was:

- The surge and weigh hopper supplied were designed to be self-cleaning ensuring less sugar build up in the weighbin minimizing the time needed to clean the scale during a sanitation stop.
- We supplied them with a 100tph VHP throughput weigher with a patented bottom gate design ensuring a perfected seal in a harsh environment or when product quality is less than perfect.
- We fitted the weigher with certified automated test weights ensuring quick and easy scale checks. The weigher is interfaced to the clients remote reporting systems, enabling management to easily view the production rate in the comfort of their office.



SMART SUPPORT  
0861 422 134  
OR +27 83 680 0722

E-mail: [info@sascoafrica.com](mailto:info@sascoafrica.com)  
Web: [www.sascoafrica.com](http://www.sascoafrica.com)  
24 hours, 7 Days a week

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

This brochure contains a general guide of the product only and shall not form part of any contract unless specifically agreed by Sasco Africa in writing in each case on the Order Acknowledgement. The specification of the product described herein may vary from time to time and may be altered without notice.