

The image is a 3D architectural rendering of a food processing facility. It features multiple conveyor belts and weighing stations. In the upper left, a curved conveyor belt carries several large plastic jugs. Below this, a straight conveyor belt moves trays of vegetables (carrots and green beans). To the right, another conveyor belt carries trays of salmon fillets. Each weighing station consists of a stainless steel table with a digital scale and a small display screen. The floor is made of large square tiles. The entire scene is rendered in a blue-tinted, wireframe style, giving it a technical and futuristic appearance.

Avery Weigh-Tronix

FOOD PROCESSING



Weighing systems for  
the demanding food  
manufacturing industry

Food  
Processing  
WEIGHING SYSTEMS

*Weighing systems for improved  
process efficiency in the demanding  
food processing environment*

## Food and Beverage Processing

**Avery Weigh-Tronix**

Whether producing, handling, packaging or shipping, it is vital that each step of the food and beverage production process is accurately documented and accounted for. An electronic scale system can efficiently weigh and document product information, allowing manufacturers to monitor, trace and control production—and all materials involved—from start to finish.

To optimise processes, weighing equipment can be used at every step, from tracking incoming raw materials and inventory, to measurement of ingredients, quality control and shipping finished goods. As well as efficiently gathering, documenting and storing weight information, high-accuracy scales can increase revenue in these applications by reducing giveaway and ensuring customer orders are accurately invoiced and managed.

### Legal-for-trade weighing

A scale system capable of legal-for-trade weighing is an invaluable asset in the food industry as revenue is commonly based upon the weight of commodities purchased or shipped. Legal-for-trade accuracy is required for business transactions where goods are bought or sold by weight, but the benefits of a legal-for-trade system extend beyond legality. The legal-for-trade approval can also be seen as a badge of reliability - proof that your scale can provide repeatable weighing of goods, ensuring customer satisfaction, precise billing and accurate inventory records.



### Hygiene is paramount

In today's global market, maintaining a pristine environment is absolutely critical to the success of food manufacturers. It is important that companies manufacturing weighing equipment for the food industry ensure that the products they supply comply with best practices and meet strict legislative requirements. Many of our products are made specifically with the food industry in mind and, with strict global approvals as well as IP washdown certification and NSF approved sanitary design, you can be assured that you're working with a partner that understands the issues that are critical to your business.









## Weighing products for food and beverage processing

### FLOOR SCALE

- › Ideal at goods in/out
- › Weighs at very high accuracy
- › Optional ramps for drive on capability

### INDICATOR

- › From simple weight display to complete process control
- › Collect, store and communicate weight data
- › Wireless data collection options

### CHECKWEIGHER

- › Avoid under and overweight packages
- › Monitor weight data for quality control and shipping
- › IP69K rated and certified by NSF to NSF/ANSI Standard 3-A

### BENCH SCALE

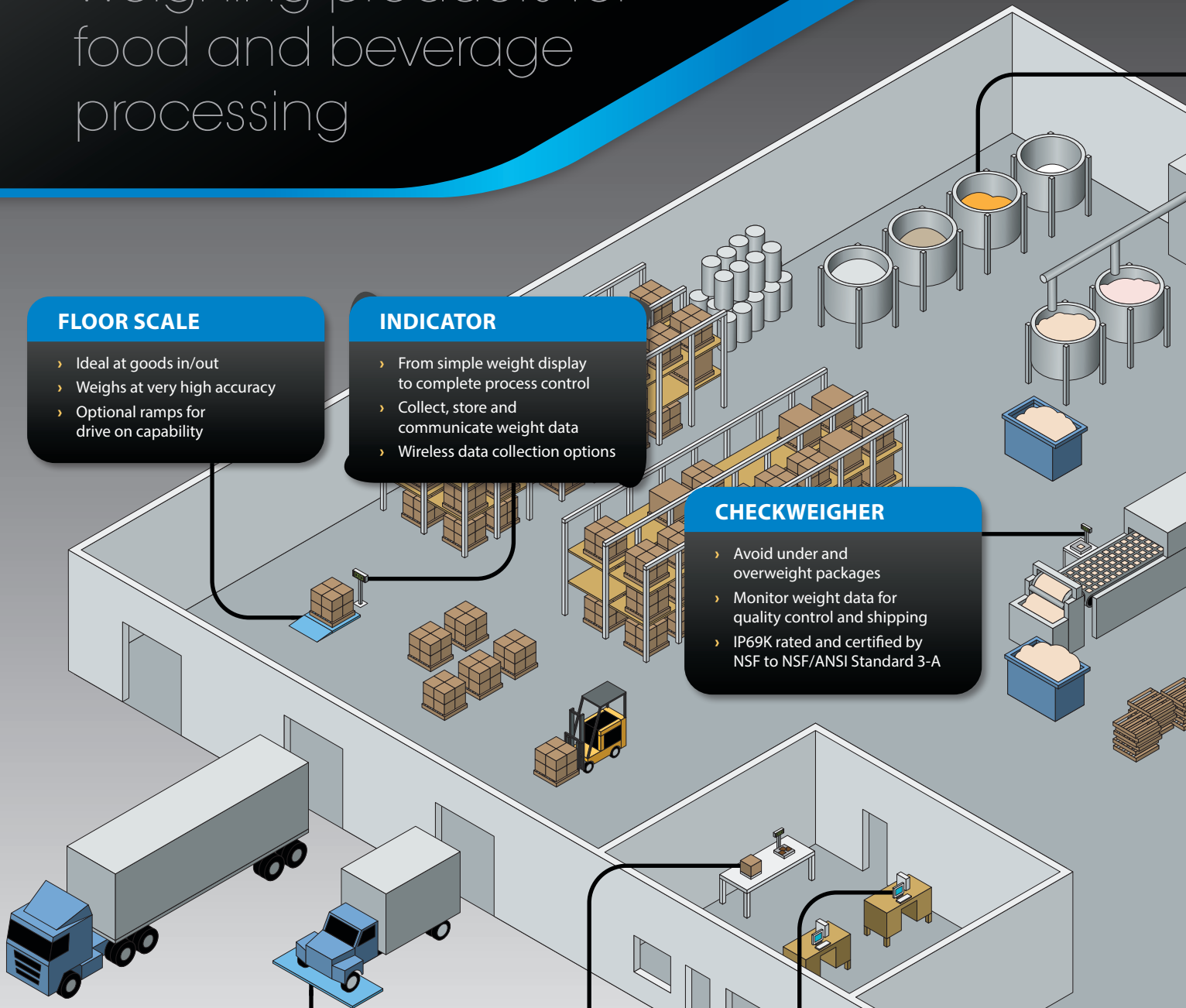
- › Checkweighing for avoiding under/overloading
- › Shipping scales interface with shipping, mailing and inventory systems
- › Bench scales for basic weighing, checkweighing and counting

### AXLE WEIGHING

- › Static and in-motion weighing
- › Avoid overloading and uneven loads
- › Improve compliance and health and safety

### SOFTWARE

- › Turn raw weight data into business intelligence
- › Increased data collection and analysis
- › Real-time management systems



**BIN/TANK/HOPPER SCALE**

- › Convert your bin, tank or hopper into an accurate scale
- › Keep a close eye on inventory at a basic level
- › Combine with a sophisticated indicator and software to automate mixing of your raw ingredients

**VEHICLE SCALE**

- › Avoid overloading penalties
- › Minimise fuel efficiency
- › Legal-for-trade weighing of entire vehicle

**UNATTENDED TERMINAL**

- › Driver operated without leaving cab
- › Extend hours of operation without extra manpower
- › Improve health and safety

**CONVEYOR SCALE**

- › Reduce lifting and increase throughput
- › Simple to install
- › Integrate with back office systems, printers and scanners

**FORKLIFT SCALE**

- › No need to stop and unload at a scale
- › Real time data acquisition for billing and management
- › Compact weighing solution

**WASTE DATA MANAGEMENT**

- › Combine software and scale solutions to create a waste management system
- › Reduce product giveaway and waste



## Checkweighers

On a food production line, fast and accurate checkweighing can make a big difference to a company's bottom line.

Underweight packages can lead to unhappy customers, while overweight packages lead to costly giveaway and overweight shipments. Whether you need to spot check raw materials or finished goods or to ensure adequate quality control, our highly accurate checkweighers provide visibility of weighing data and statistics which can help to maximise performance and profitability.

Our food-grade, stainless-steel solutions have been specifically designed to meet the stringent hygiene requirements of the food processing industry. With an IP69K rating for heavy washdown environments and NSF to NSF/ANSI Standard 3-A, these robust checkweighers withstand even the most rigorous cleaning regime. The simple operator interface and easy-to-read display combine to provide a scale which is user friendly, yet fast and highly accurate.

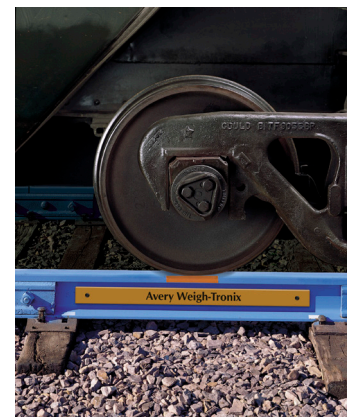


## Rail Scales

For the heaviest commodities, a rail scale can provide an ideal weighing solution and prevent over or under-loading of a train or wagon. The scales can either be modular decks that are spaced to match up below the axles of the wagons to be weighed, or sections of instrumented rail that can be installed on the existing ties and ballast.

Many systems employ the use of RFID tags and readers for more complete tracking of the data. Besides total wagon weights, rail scales also can be set up to provide readings for individual axles and even wheels.

The scale is connected to a digital instrument that will record transactions and display the weight. A variety of peripheral devices, such as a printer, PC or remote display, can be connected to the instrument.



## Vehicle Scales

Properly managing inventory and billing in food processing environments depends upon documenting and weighing both inbound and outbound freight. Whether verifying load weights for incoming ingredients or shipping finished goods for ongoing distribution, accurate weighing is essential. With the high cost of fuel, bulk carriers also have to balance the need for optimal loading with concerns about safety. Weighbridges and axle weighing systems from Avery Weigh-Tronix will help ensure that both incoming and outgoing loads are weighed quickly and accurately.

**Unattended terminals** – For increased efficiency, weighbridge controls may be integrated into a stand-alone console that facilitates unattended



weighing operations. Where allowed by local Weights & Measures, the terminals enable drivers to complete weighing transactions 24/7, without leaving their cab. The result is that your weighbridge can run smoothly without a dedicated operator. This results in reduced operating costs, extended hours of availability and improved health and safety by allowing drivers to stay within their vehicles.



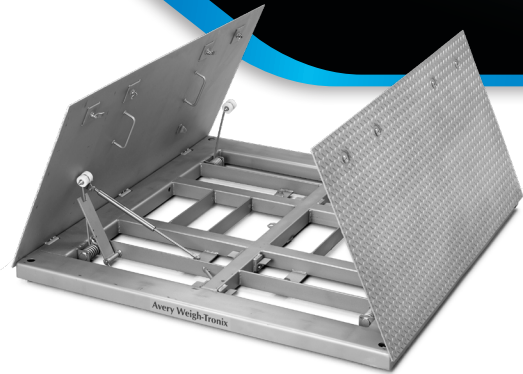


## Indicators

On a basic level, indicators collect, store and communicate weight data. More advanced digital indicators use

wireless communications to transmit data to back office systems, improving management information and control and producing instant, accurate invoices for all materials weighed.

These indicators can be linked to printers, bar code scanners, computers and other peripherals for integration into existing networks, allowing effortless data transfer and management from anywhere in the operation. Whether you require fully programmable indicators capable of complete process control or stainless steel, IP69K rated indicators for use in heavy washdown environments, we have a model to suit.



## Bench and Floor Scales

Used typically for shipping or receiving or for sorting inventory, bench and floor scales are capable of

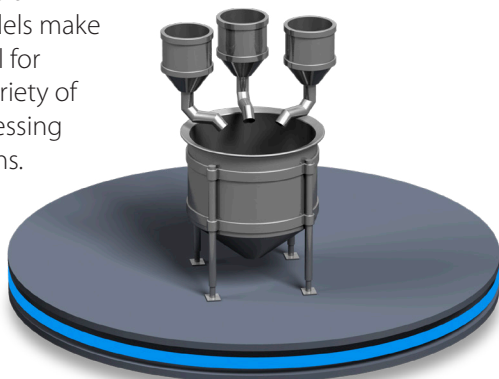
weighing goods with very high accuracy, reducing the likelihood of revenue loss. Often found within a food warehouse or ingredient store, both bench and floor scales are available in stainless steel for food processing environments where heavy washdown and strict sanitation is required. The scales also come in mild steel for warehousing or goods in/out applications where an operator might set palletised loads or totes on to a floor scale using a forklift.



## Bin, Hopper and Tank Weighers

Batching Weigh Bars allow you to convert your bin, tank or hopper

into accurate, dependable scales with minimal interruption to your operations. By adding a weight sensor to your existing storage bins, you can keep a close eye on inventory at a basic level or use with a sophisticated weight indicator and software to automate mixing of your raw ingredients. Stainless steel, watertight and explosion-proof models make these ideal for use in a variety of food processing applications.



## Forklift Scale

A forklift scale allows drivers to lift and weigh

bundled materials on the truck.

This expedites operations by enabling forklift drivers to take raw ingredients directly to storage

upon delivery or packaged goods to dispatch while tracking the weight, origin and storage location during transport. This process results in real-time data acquisition which can be used for billing and inventory management. The ability to transport and weigh materials in one simple step results in tremendous time savings and a speedy return on investment.

Optional in-cab instruments such as bar code scanners allow forklift operators to instantly capture all necessary freight data available and then transmit this information with weight data wirelessly via Bluetooth® or radio to supervisory computer systems.





## Software

Avery Weigh-Tronix scales can be paired with sophisticated software and indicators to provide additional

data collection, tracking, analysis or ingredient control. Software innovations help to facilitate efficient documentation and management of key weight, commodity and scale data, all of which can be vital for traceability.

Whether you need a simple data capture package, an integrated management system monitoring operations and first in/first out inventory in real-time or a solution which can automate batch and recipe control, we can supply a standard or tailor-made solution to suit.



## Process Integration

We can integrate scales and software into your existing network and, with local or remote access, you can easily

monitor operational performance. Systems range from applications to monitor a specific function to fully-integrated solutions for management control across your food processing operation.



## Service

Having a trusted and reliable service supplier can keep your business moving and maximise 'up-time'. We

are committed to providing high quality, lifetime service support for all of our weighing equipment. Avery Weigh-Tronix is supported by a global network of dedicated technicians on hand to install and maintain your equipment, including regular calibration, maintenance, servicing and repair.

Focusing on regular preventative maintenance keeps your equipment working at maximum efficiency and reduces the likelihood of costly emergency breakdowns which can halt production. Highly trained service technicians will work with you to identify potential issues before they arise to ensure that your equipment is running reliably and accurately. We will ensure that your equipment is both accurate and compliant.

## About Avery Weigh-Tronix

Avery Weigh-Tronix is one of the world's leading suppliers of weighing solutions. With over 250 years of experience, the company designs, manufactures, installs and services a broad range of high quality industrial products and weighing systems.

Avery Weigh-Tronix operates worldwide through a network of wholly-owned companies and international dealers and distributors, allowing us to provide a fast response and locally tailored solutions in more than 100 countries.

### More online

[www.averyweigh-tronix.com/food-beverage](http://www.averyweigh-tronix.com/food-beverage)

› Product literature & specifications



# Avery Weigh-Tronix

[www.averyweigh-tronix.com](http://www.averyweigh-tronix.com)

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