

SSV series Checkweigher



SSV
series

Much more than just weighing; The SSV series provides valuable process control information.

SSV series

+ Additional benefit
Enhanced productivity
by SMF and other
features

+ Additional benefit
Improved operation
through navigation
system



Core function
Increased accuracy and
stability by significantly
enhanced weigh cell features

Proprietary technology

SMF

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Prevents unnecessary
rejection due to
double product errors,
while improving
accuracy.



HISTORY

Since 1964,
Anritsu Checkweighers
have continuously evolved.



1964

K501 series

First Anritsu checkweigher

[Main model: K501]

- Maximum speed:
150 products/min
- Scale value: 0.5 g
- Maximum accuracy: ± 0.5 g



1978

8 (Eight) series

Was very successful thanks
to its superior
cost/performance ratio

[Main model: K528]

- Maximum speed:
150 products/min
- Scale value: 0.01 g
- Maximum accuracy: ± 0.05 g



1990

Hi series

Used high-speed and high
accuracy electromagnetic force
balance for the first time.

[Main model: K621B]

- Maximum speed:
150 products/min
- Scale value: 0.005 g
- Maximum accuracy: ± 0.02 g

2000

SV series

With over 800 different models,
SV series becomes a long-selling
product for over 10 years.

[Main model: KW6003BP03]

- Maximum speed:
310 products/min
- Scale value: 0.005 g
- Maximum accuracy: ± 0.015 g



2011

SSV series

[Main model: KWS6003BP03]

- Maximum speed:
310 products/min
- Scale value: 0.001 g
- Maximum accuracy: ± 0.01 g





Easy to follow

Operation guidance

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Enhanced intuitive navigation functions including Smart Guide make daily usage and maintenance simple.



Enhanced accuracy and stability

New force balance

Minimum scale value is 0.001g.
 Maximum accuracy is $\pm 0.01g$.
 Resolution quadrupled*.
 Temperature resistance improved.



* in house comparison

Easy to use

Color LCD touch screen interface

8.5" color LCD touch screen interface significantly improves daily use.
 System has 6 selectable display modes.



Useful features

USB interface
 Ethernet interface

Equipped as standard

SMF

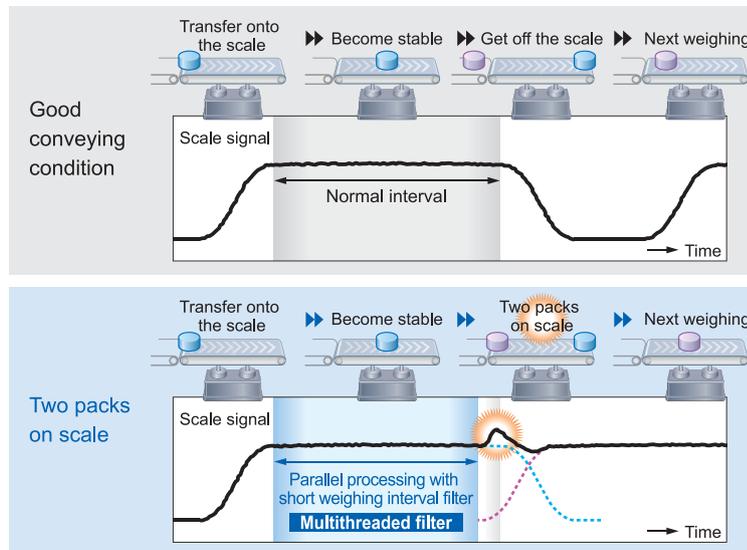
Improved Productivity

Anritsu proprietary technology

Smart Measurement Function minimizes double product errors by using multi-threaded filters, achieving high accuracy



Point Accurate weighing



Conventional checkweighers use the weigh cell signal, after signal processing, to determine the weight of each product as it passes over the weigh table. If two packs are on the weigh table at the same time, a "double product error" will occur and the system is forced to reject both products since each individual product weight cannot be determined. Anritsu SSV series checkweigher advancements use innovative signal processing, multithreaded filtering, in conjunction with improved scale resolution to minimize "double product errors". This simultaneously minimizes unnecessary rejects and maximizes line productivity.

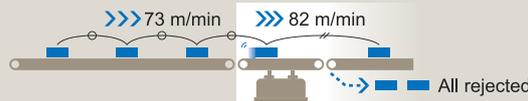


Example Rejection down, yield up with SMF

High speed production line at 200 products/min

Conventional checkweigher

Product spacing is normally established by increasing the checkweigher conveyor speed, compared to the normal line speed, to prevent two products being on the weigh scale at the same time.



- Double products are all rejected. **Double products error rate is 0.15%**
- Due to increased conveyor speed, scale accuracy reduced to **0.75 g**

SSV checkweigher equipped with SMF

Product spacing and checkweigher conveyor speed is maintained. By running slower, the SSV system provides higher accuracy even if two products are on the weigh scale at the same time.



- Double products rejection is down. **Double products error rate is 0.03%**
- Scale accuracy is maintained to **0.35 g**

Improvement rate • Double products error rate: **0.12%** • Scale accuracy: **0.4 g**

Effect on productivity

In case of the total production per year of 28,8 million products,

Calculated on 8 hours uptime per day, 25 days uptime per month, and uptime ratio of 100%.
 $200 \text{ p/min} \times 60 \text{ min/hour} \times 8 \text{ hour/day} \times 25 \text{ day/month} \times 12 \text{ month}$

- 28,8 million products \times 0.12% = **34,560 products** / year
- With change of feeding amount due to increased accuracy: 28,8 million products \times 0.4 g = **11,520 kg** / year

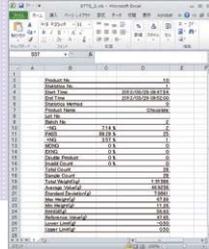
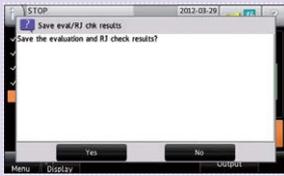
Note: This data was obtained with difficult products, unstable and having long settling times. Improvements will vary depending on packaging, product and SSV model.

Point Smart Guide makes operation easy and avoids operator errors.

• Easy-to-follow instructions make each operation simple



• Outputs e-Daily Report



Output in CSV format.



Navigation and Supervision

For checkweighers to function properly, operation checking must be performed correctly at each stage of the daily operation: at start-up, during production, and at the end of production. These procedures, although necessary, are not always strictly followed due to the time and effort involved.

Smart Guide navigates operation check and maintenance procedures in an easy-to-understand format. Moreover, when a procedure was performed incorrectly, Smart Guide will not allow to proceed further, ensuring correct operation management.

E-Daily Report

All checkweigher weight data and operation check (audit) records are saved local on the SSV checkweigher. At the end of production, the data and operation check log can be sent via **E-Reports**. The elimination of manual data collection minimizes possible errors and makes data and log management simple and efficient.

Point

Product Registration Navigation simplifies parameter setting procedures with step-by-step illustrated instructions.



• Product parameter setting



• Fine adjustment



On-screen illustrations help you understand each key procedure and are listed in a "step-by-step" methodology. If performed improperly, the navigation stops for corrective action.



Operation Guidance

Operation Support

Easy to follow

Operator-oriented, easily navigated menu structure

SSV series checkweigher

responds to issues arising from different positions.



We've increased the conveyor speed to prevent two packs getting on the scale simultaneously. Is this Okay ?

A Maintain appropriate belt speed with SMF.

Increasing the conveyor speed is not a recommended approach since when the flow increases, the weighing period decreases, which decreases weighing accuracy. With SMF, which minimizes weighing errors caused by two packs getting on a scale simultaneously, you can realize accurate weighing at proper speeds.

I use a checkweigher everyday. Ease of use is critical.



A All SSV series checkweighers come with a color LCD touch screen.

The SSV's standard 8.5 inch color LCD touch screen greatly enhances usability and system navigation. 6 standard view screens are available to quickly see product weight or trending information.



It's a bother to fill in daily reports everyday !

A You can create e-Report with Smart Guide.

The SSV checkweighers save the entire operation history onto themselves. At the end of the production, those can be output in a CSV file.

I don't want to read thick manuals, nor do I want to keep them in the facility.

A SSV's navigation makes operation easy.

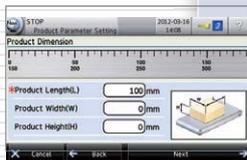
With SSV's intuitive navigation, product creation and changes are quick and easy. Manuals are not required and simplicity minimizes user errors.

The navigation system also greatly aids for data collection and HACCP compliance.

Learning new equipment can take a lot of time.

A Smart Guide minimizes training effort.

Smart Guide navigation guides the user through basic system operation. Even inexperienced operators can quickly learn the system by following the on-screen instructions.



A IP66 rated waterproof models are suitable.

SSV series has a wide lineup with different modules. Waterproof models are suitable for wet environment. The open frame structure allows for easy cleaning.

Can we use a checkweigher in wet environment?



Corporate manager

I'm concerned with increasing material costs.

I want to use a checkweigher in our overseas factory.

A SMF is effective for minimizing material waste.
SMF reduces double product errors with the net benefit of lower product rejects and material costs.

A The SSV's control is multilingual.
11 different languages are selectable on-screen for interface including English, Spanish, French, German, etc.



I want a machine for high-mix low-volume production.

Even if my company consolidates its factories, I want operators to handle both new and old machines.

A The SSV series checkweigher supports 200 different products.
Operating parameters for up to 200 different products can be stored in the memory of SSV series checkweighers. The product registration is easy to perform thanks to Product Registration Navigation.

A Operators should have no trouble with SSV.
Although the SSV series features a lot of new functions, its basic settings are the same as those of previous models. It's easy to handle for operators who are familiar with the Anritsu's previous models.

How can we improve our quality control program ?

Quality control manager / Site supervisor

A We recommend Smart Guide and QUICCA.
Smart Guide prevents operator errors by stopping procedures until the instructions are followed correctly. USB port and Ethernet are equipped as standard. With QUICCA installed, you can optimize your quality control by using ID barcode scanning and video camera monitoring.

Refer to QUICCA brochure for detailed features.



What if unexpected events occur ?

A Depend on Anritsu's global maintenance network.
We offer comprehensive and responsive service network in over 50 countries, ensuring that service, maintenance and repairs are carried out quickly and efficiently.

Q&A

What is the difference in specifications between SV and SSV ?

SSV KWS6205BP05
Display: 8.5-inch color LCD touch screen
Weighing range: 1.2 to 600 g
Maximum accuracy: ±0.015 g
Scale interval: 0.01 g

SV KW6205BP05
Display: FDM panel display
Weighing range: 2 to 600 g
Maximum accuracy: ±0.02 g
Scale interval: 0.02 g

A Above is the specification comparison of comparable models. Aside from display, minimum value of weighing range, maximum accuracy, and scale interval are improved by the new scale features.

Lineup

High Accuracy

h



SSV-h series

Equipped with a high speed/high accuracy force balance load cell. Meets stringent accuracy and reliability standards in industrial and pharmaceutical products.

Control panel exterior	<input checked="" type="checkbox"/> Stainless steel	<input checked="" type="checkbox"/> Painted
Conveyor	<input type="checkbox"/> Waterproof	<input checked="" type="checkbox"/> Non waterproof
Balance	<input checked="" type="checkbox"/> Force balance	<input type="checkbox"/> Strain gauge
Frame	<input checked="" type="checkbox"/> Stainless steel	<input checked="" type="checkbox"/> Painted

Waterproof

i



SSV-i series

Features waterproof and dustproof cabinet and components. Its hygienic design is perfect for unpackaged and fresh foods which require stringent sanitary control.

Control panel exterior	<input checked="" type="checkbox"/> Stainless steel	<input type="checkbox"/> Painted
Conveyor	<input checked="" type="checkbox"/> Waterproof	<input type="checkbox"/> Non waterproof
Balance	<input checked="" type="checkbox"/> Force balance	<input checked="" type="checkbox"/> Strain gauge
Frame	<input checked="" type="checkbox"/> Stainless steel	<input type="checkbox"/> Painted

Versatile

f



SSV-f series

Equipped with a highly versatile strain gauge load cell. Well suited for a variety of applications including heavy products.

Control panel exterior	<input checked="" type="checkbox"/> Stainless steel	<input checked="" type="checkbox"/> Painted
Conveyor	<input type="checkbox"/> Waterproof	<input checked="" type="checkbox"/> Non waterproof
Balance	<input type="checkbox"/> Force balance	<input checked="" type="checkbox"/> Strain gauge
Frame	<input checked="" type="checkbox"/> Stainless steel	<input checked="" type="checkbox"/> Painted

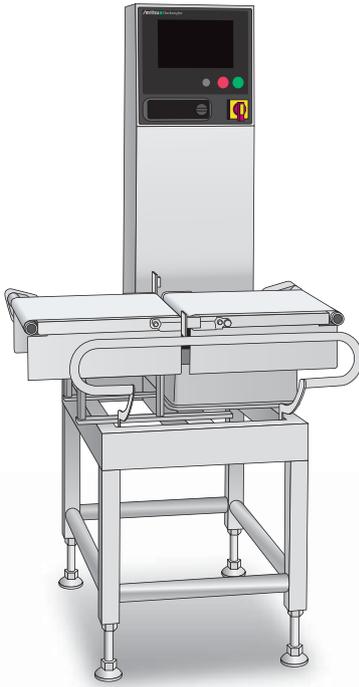
Note: Refer to separate catalogs for specifications.

Unit construction Select the best combination

Control panel exterior	Conveyor	Balance	Frame	Display
<p>Stainless steel High protection</p> <p>Painted Low cost</p> 	<p>Waterproof</p>  <p>Non waterproof</p> 	<p>Force balance High speed and high accuracy</p>  <p>Strain gauge Low cost</p>  <p>(Non waterproof) (Waterproof)</p>	<p>Stainless steel High protection</p>  <p>Painted Low cost</p> 	<p>Color LCD touch screen</p> 

■ **Option**

Contact our sales representatives for details.



Tower light (with buzzer alarm)
Supports remote monitoring.



Data printer
Prints inspection results.



Emergency stop switch
Stops equipment in emergencies.



Line height change
Screw legs allow for easy height adjustment.



Anchor plate
Secures units firmly in position.



Remote indicator
Can be placed in more convenient location.



Cross plate
Provides smooth product transitions and prevents product accumulation.



Product guide
Provides accurate product positioning on conveyors.



Wind shield (full cover)
Deflects air current from side, above and below.



Wind shield (top)
Deflects air current from above.



Wind shield (protector)
Deflects air current from side.

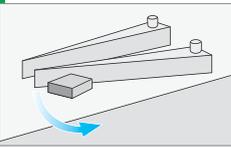
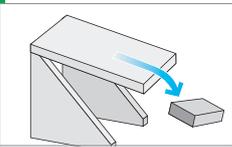
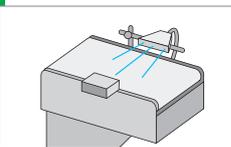
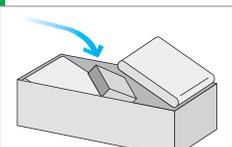
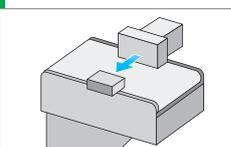
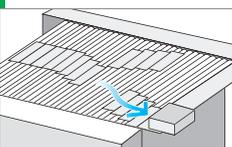


Mobile monitor
Allows real-time viewing of measurement and evaluation data from remote location. (software only)



CE **CE & FCC marking**

■ **Rejector**

<p>Flipper</p> 	 <p>Highly versatile</p> <ul style="list-style-type: none"> Cartons Thick bags 	<p>Dropout</p> 	 <p>For thin products</p> <ul style="list-style-type: none"> Thin bags Sheets
<p>Air jet</p> 	 <p>High speed</p> <ul style="list-style-type: none"> Light individual-packaged products 	<p>Up and Out</p> 	 <p>For thin products</p> <ul style="list-style-type: none"> Thin bags Sheets
<p>Pusher</p> 	 <p>General purpose</p> <ul style="list-style-type: none"> Cartons 	<p>Carrier</p> 	 <p>For open-topped containers</p> <ul style="list-style-type: none"> Cans Jars

with Metal Detector

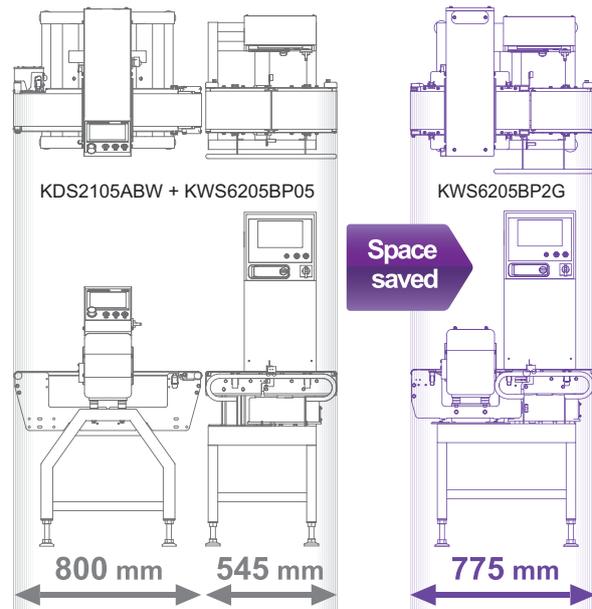
Compact and Reliable Inspection



Reduced space requirement

Minimum system length of 775 mm

Possessing an extremely small foot print, line space requirements are minimized and line integration is simplified.



Simplified Support

A single source technology, support and service provider ensures equipment consistency and reliability for the life of the system.

Simplified Operation

User-friendly single touch screen

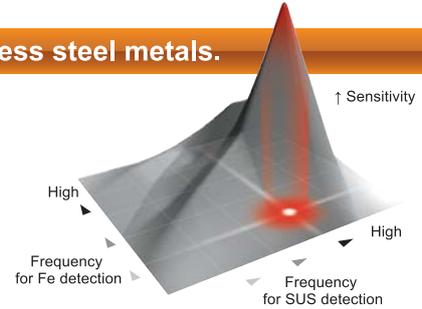
Both metal detector and checkweigher are controlled by the standard touch screen control panel.



Anritsu's exclusive "dual-wave" technology

Proper frequency is chosen for ferrous, non-ferrous and stainless steel metals.

Since metals respond differently to different magnetic field frequencies, it is difficult for conventional single frequency systems to detect both ferrous and non-ferrous metals. Anritsu has patented a dual-frequency inspection system, which automatically determines the best frequencies to maximize sensitivity for both ferrous and non-ferrous metals simultaneously.



Two Different Detection Heads

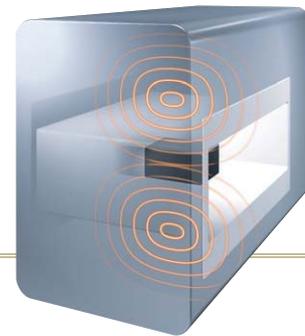
High sensitivity and functionality M6-h and M5.

High Sensitivity M6-h

Anritsu's unique dual-wave detection technology minimizes product effect to deliver high performance and stability. The M6-h is the next evolution of the industry's first simultaneous 2 frequency detection systems.

Entry M5

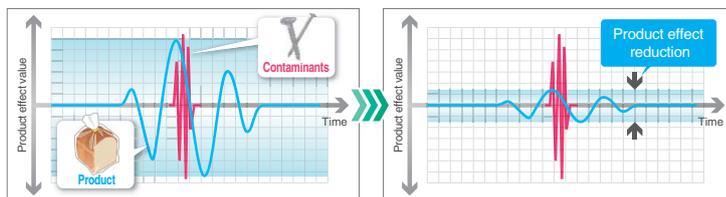
Built-in support features - Product Registration Navigation and Troubleshooting Help Screens - improve productivity and accuracy.



■ Features of M6-h series

Advanced Digital Signal Processing

Built-in digital signal processing (patent pending) better isolates product effect and minimizes its impact on detection. Outstanding detection made easy.

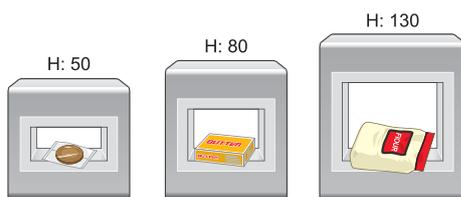


Vibration and electrical noise resistant

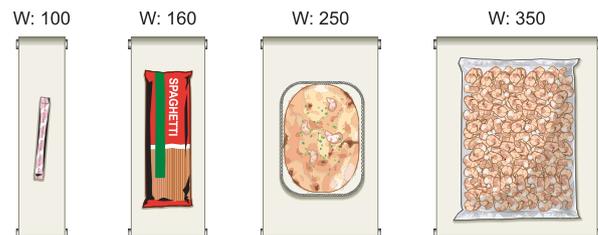
Metal detectors look for fluctuations within magnetic fields when the product passes through the detector head. Since the magnetic fields are affected by external sources such as floor vibration and inverters from nearby machines, a metal detector must be designed to handle these challenges. With this in mind, Anritsu's detection heads are designed to provide high sensitivity without sacrificing repeatability and reliability.

■ A wide size range for various applications

◆ Pass height of detection head (typical examples)



◆ Belt width (typical examples)



*The illustrations are examples of available applications only.

Dual-Lane Checkweigher



Optimize Your Production Line Efficiency

For tubes, pouches, and flow wrapped products

Ideal for dual-lane filling and packaging lines

Ideal for dual-lane filling and packaging lines for tubes, pouches, and flow wrapped products. Various weighing ranges, and conveyor lengths, widths and pitches available.

Same functions as single-lane checkweighers and excellent ease of use

Simple operation by a single indicator

- Operates each lane independently with just one indicator to meet daily production requirements.



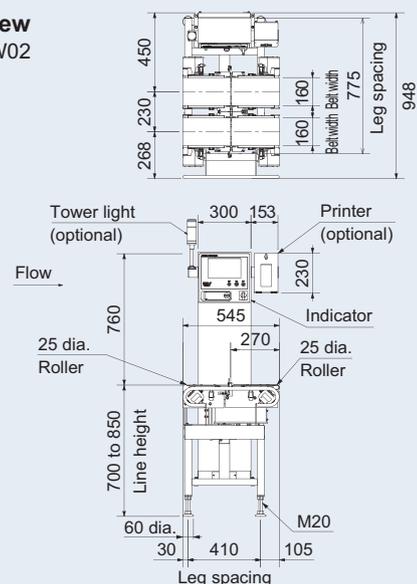
- Statistical display of average weight and weight variations help the operator understand production trends for optimizing filling processes.



- Smart Measurement Function avoids double product error, minimizing unnecessary rejects and thereby maximizing line productivity (see page 4 for details).

- Advanced load cell ensures accuracy and repeatability as high as those of single lane checkweighers.

External View
KWS5265GW02



Unit: mm



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- Some products shown in this catalog may not be available in your country or region. Contact our sales representatives for details.
 - To ensure proper operation, read the Operation Manual before using the machine.
 - In addition to daily inspection, a full maintenance inspection should be completed annually.

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