

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



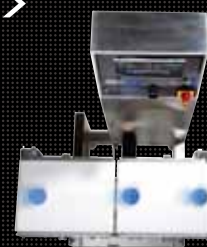
Core function
Increased accuracy and
stability by significantly
enhanced weigh cell features

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



1980

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



2012

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

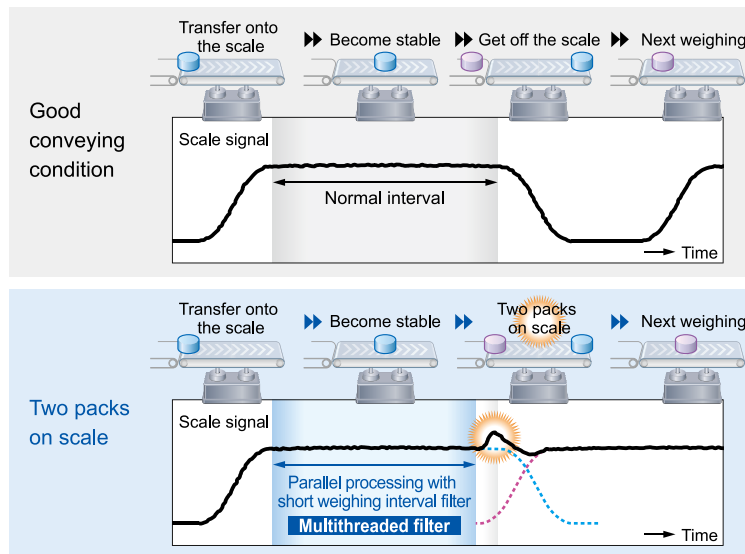
Improved Productivity

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.

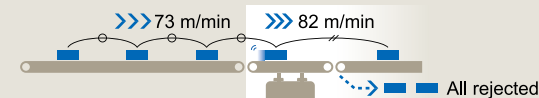


Example Rejection down, yield up with SMF

High speed production line at 200 products/min

Conventional checkweigher

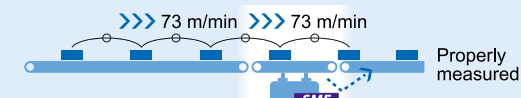
Product spacing is normally established by increasing the checkweigher conveyor speed, compared to the normal line speed, to prevent two products being on the weigh scale at the same time.



- 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 p/min × 60 min/hour × 8 hour/day × 25 day/month × 12 month

- 28,8 million products × 0.12% = **34,560 products** / year
- With change of feeding amount due to increased accuracy:
28,8 million products × 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

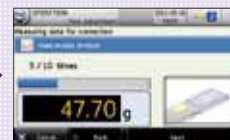
Product Registration Navigation simplifies parameter setting procedures with step-by-step illustrated instructions.



• 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.

Operators

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?



I'm concerned with
increasing material costs.

A SMF is effective for minimizing material waste.

SMF reduces double product errors with the net benefit of lower product rejects and material costs.

I want to use a
checkweigher
in our overseas factory.

A The SSV's control is multilingual.

11 different languages are selectable on-screen for interface including English, Spanish, French, German, etc.



Corporate manager

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

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.

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

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 ?

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.



Quality control manager / Site supervisor

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
Stainless steel High protection Painted Low cost 	Waterproof  Non waterproof	Force balance High speed and high accuracy  Strain gauge Low cost (Non waterproof) (Waterproof)	Stainless steel High protection Painted Low cost 	Color LCD touch screen 


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
Line height is adjustable by changing screw legs.



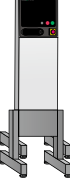
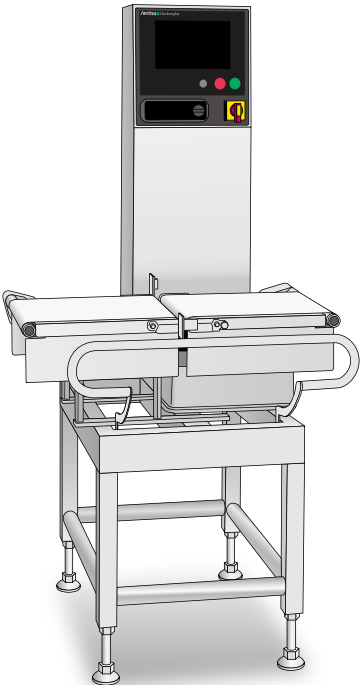


Plate for anchor
Secures units firmly in position.




Remote indicator
Can be placed in more convenient location.

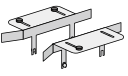




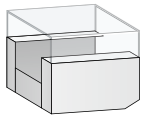
Cross plate
Provides smooth product transitions and prevents product accumulation.




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.

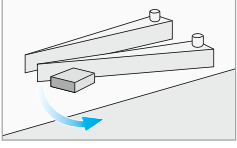

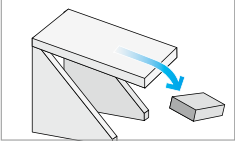

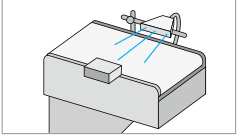

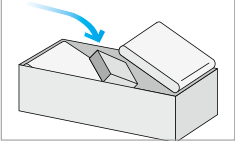

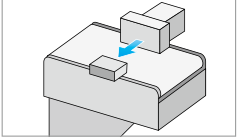

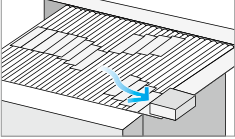



Mobile monitor
Allows real-time viewing of measurement and evaluation data from remote location. (software only)





CE & FCC marking

Rejector

<p>Flipper</p> 	 <p>Highly versatile</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;"> Cartons Thick bags </div>	<p>Dropout</p> 	 <p>For thin products</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;"> Thin bags Sheets </div>
<p>Air jet</p> 	 <p>High speed</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;"> Light individual-packaged products </div>	<p>Up and Out</p> 	 <p>For thin products</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;"> Thin bags Sheets </div>
<p>Pusher</p> 	 <p>Gentle handling</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;"> Cartons </div>	<p>Carrier</p> 	 <p>For open-topped containers</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;"> Cans Jars </div>

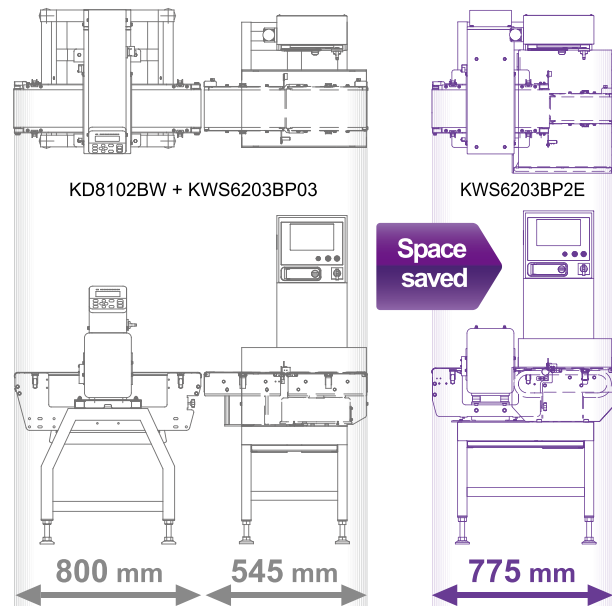
with Metal Detector

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

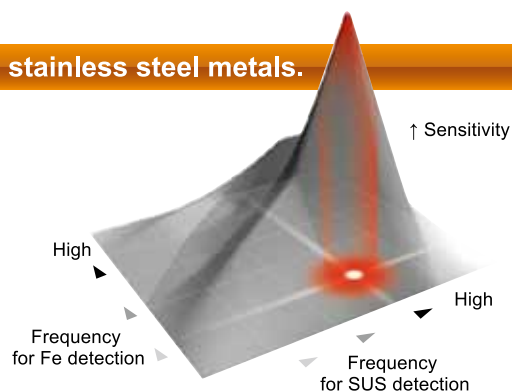
Both metal detector and checkweigher are controlled by the standard touch screen control panel.



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 duw-h and standard duw.

Standard duw

Simultaneous dual frequency metal detection
— optimized for both stainless steel and ferrous metals at the same time.

High Sensitivity duw-h

Enhancement to standard duw includes improved signal processing and head design for optimal sensitivity and system stability.



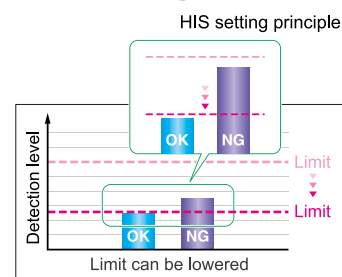
■ Features of duw-h series

High sensitivity and high stability

The search head's design features a high resistance to mechanical vibration and electrical noise, creating an optimized magnetic field. With detection software tuned for the improved head, the duw-h series supports three times better signal to noise ratio and an increase in contaminant detection by two ranks (in-house comparison).

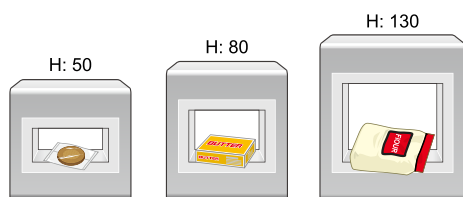
Enhanced automatic settings

- **HIS (High Sensitivity) setting**
Automatically analyzes product and contaminant properties during the auto-learn process. Detection limits are set precisely and reliably for optimal contaminant detection.
- **Auto-limit function**
Automatically set the best evaluation limit.
- **Auto-tracking function**
Prevents false rejects by compensating for product/temperature changes.

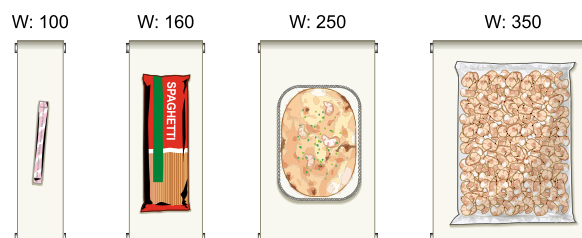


■ A wide size range for various applications

◆ Pass height of detection head (typical examples)



◆ Belt width (typical examples)



*The illustrations are examples of available applications only.



Anritsu Industrial Solutions USA Inc.

1001 Cambridge Drive Elk Grove Village, IL 60007-2453

Phone (847)419-XRAY(9729) Fax (847)537-8266

<http://www.detectionperfection.com>

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ISO 9001 CERTIFICATE No.JQA-0566

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- To ensure proper operation, read the Operation Manual before using the machine.
- In addition to daily inspection, an annual maintenance check should be carried out.

Specifications are subject to change without notice.

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