IP69K Fully Stainless Steel Torsion Base

Bench base solutions for food processing and beyond.

BSF & BSG =

Frequently Asked Questions

1. How is the new ZK375 BSG Checkweigher base now IP69K?

New for 2022, we have now upgraded the load cells used in the BSG torsion base to improve its water ingress protection. This new fully stainless steel load cell, along with a few other small changes to the BSG base design, now makes our lower cost BSG base fully IP69K wash down even with the weight pan removed.

This new affordable robust 3000d approved BSG torsion base design can now be used in areas where regular hot, high pressure, steam water is being used to clean them.

2. What is the new load cell now used in the BSG bases?

The new IP69K 3000d BSG torsion base design now uses a new, fully stainless steel Zemic MB6G load cell that now makes this base fully IP69K.

3. If both the BSG and BSF are now IP69K approved, what other differences is there between the two base?

Apart from cost, the main difference between the BSG and BSF design is the resolution offered by both. The BSG base design is on 3000d NTEP approved and the more expensive BSF base design is 5000d NTEP approved.

4. Will this now allow you to offer IP69K washdown protection at a lower price point?

Yes, the new BSG base design can now provide all the IP69K advantages of the BSF base but at the lower BSG price.

5. What load cell cable length now comes standard with just the BSG base only version?

The new BSG 3000d torsion base design comes standard with 10 ft (3m) length of cable.

6. Why are there now only two BSG base capacities & base sizes available?

The new load cell used in this BSG design provides ample resolution to cover all the old BSG base capacities with just two part numbers. This also allows us to hold more stock of the right BSG base to better cover customer demands.

12 lb BSG 3000d base $8.75'' \times 8.75'' (220 \text{ mm x} 220 \text{ mm})$ can be used for the following capacities:

- > 6 x 0.002 lb (3 x 0.001 kg) NTEP approved
- > 12 x 0.005 lb (6 x 0.002 kg) NTEP approved
- > 3 x 0.001 kg NTEP and UK/EC approved
- > 6 x 0.002 kg UK/EC approved

100 lb BSG 3000d base 12" x 14 " (310 mm x 350 mm) can be used to cover the following capacities:

- > 30 x 0.01 lb (15 x 0.005 kg) NTEP approved
- > 60 x 0.02 lb (30 x 0.01 kg) NTEP approved
- > 100 x 0.05 lb (50 x 0.02 kg) NTEP approved
- > 15 x 0.005 kg UK/EC approved
- > 30 x 0.01 kg UK/EC approved

7. What is NSF ANSI 3-A and why is it important for the food industry?

NSF stands for National Sanitation Foundation, ANSI stands for American National Standards Institute and 3-A stands for Sanitary Standards Committee which has its roots in the Dairy industry. These standards are used to monitor and control sanitation through cooperation with federal authorities, manufacturers and users.

3-A criteria is used throughout North America and it is gaining worldwide recognition.

NSF/ANSI Standard 3-A 14159-1 -2010 specifically refers to hygiene requirements for the design of Meat and Poultry Processing Equipment.

8. What grade of stainless steel is used in the BSG & BSF?

The BSG & BSF is manufactured using food grade AISI (American Iron and Steel Institute) 304 stainless steel and finished with a fine brushed surface finish that is under Ra 0.8 µm as specified with in NSF/ANSI Standard 3-A 14159-1 -2010.

Using a fine grain brush finish under Ra 0.8 µm helps to stop microorganisms from taking hold and growing on the surface.



9. What is pickle and electropolish finished and why do we use it on the checkweigher?

The main food contact areas where raw food comes in to contact with the stainless steel - such as the weight platter and column - are normally subjected to a pickled and electro-polished finish. This helps to remove any impurities on the surface of the stainless steel, while smoothing and rounding the peaks found within the fine brush finish. This results in a finish that is much easier to clean and prevents bacterial microorganisms from growing on the surface of the scale.

An ideal surface finish is under Ra 0.8 µm.

Before electropolishing

After electropolishing

10. Why is the base flat with open corners?

The base structure has a flat bottom to stop unwanted food particles from bouncing up inside the scale base while being high pressure cleaned.

Corners of the base are left open to allow any food particles that find their way into the base to be easily washed out during the cleaning process.

11. Why have rounded corners on the top pan?

Rounded corners improve cleaning and reduce food trap areas while also adding strength and rigidity to the product.

12. What is meant by torsion base design and what advantages does it give over other bench bases?

The torsion base is a unique Avery Weigh-Tronix design, which protects the load cell from accidental damage, shock loads and overloading. This design protects the load cell better than any other bench base on the market today. Based on past data, the failure of the load cell when used in this base design has resulted in a failure rate of less 0.001% over the last 20 years.

13. What is IP69K?

The IP69K rating is used in applications where high pressure & high temperature wash-down is used to sanitize equipment.

- IP6xx refers to the product's ability to resist ingress of dust.
 IPx9K refers to the product's ability to resist ingress of high tomporture up to 176°E (20°C and high program storm (20°C).
- temperatures up to 176°F/80°C and high pressure steam / water at 1160-1450psi / 80-100 bar
- IP69K is a worldwide recognized standard which defines the ingress protection of the enclosure base and external options. The BSG, BSF and Diamond stainless steel bases have been third party IP69K (IEC 60529) certified by TRAC Labs. Do not be misled by brands that state their products are designed or equal to IP69K without certification.

Avery Weigh-Tronix

www.averyweigh-tronix.com

Avery Weigh-Tronix is an ITW company



Avery Weigh-Tronix is a trademark of the Illinois Tool Works group of companies whose ultimate parent company is Illinois Tool Works Inc ("Illinois Tool Works"). Copyright © 2022 Illinois Tool Works, All rights reserved. This publication is issued to provide outline information only and may not be regarded as a representation relating to the products or services concerned. This publication was correct at the time of going to print, however Avery Weigh-Tronix reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service at any time.