

PRECISION, ACCURACY and PRODUCTION RELIABILITY

HIGH SPEED AUTOMATED CHECK-WEIGH SYSTEMS

All Advance Weight System, Inc. automated check-weighers have been time proven in a wide variety of *production environments*. Designed to render trouble free, dependable service with minimal operator interface; these systems will render years of trouble free reliable service.

The following examples show just a few of the custom systems we do. Some are done over and over for various customers, each with their own unique changes to perfectly suit our customer's needs!



SMALL PART CHECK-WEIGHER SYSTEMS

When the setpoints for a piece are ± 50 mg (0.05g Gram) and repeatability is critical, Advance Weight Systems, Inc. has the answer. A line of check-weighers that have proven capability to measure parts weighing less than a gram at up to 60 ppm.

STATIC GATED CHECK-WEIGHER SYSTEMS

This is truly a universal check-weigher, it can be used to check-weigh anything from soup, (packaged soup) to nuts, (packaged hardware). This product line is an "off-the-shelf" design, usually only needing some minor engineering changes to fit your needs. The weigh hopper accommodates packages/products up to 6" by 6" by 2" tall and 500 grams or less. It can sort as fast as 45 ppm depending on product size, shape, and weight. Pictured, is a two-class sorting system. A three class system can also be done in this configuration.



INJECTION MOLD CHECK-WEIGHERS

Ask for information on this subject

In injection molds, there are several things this check-weigher does for the industry.

- ◆ Checks to see that all the plastic pieces were removed from the die. If they were not, it could cause great damage to the die.
- ◆ Checks to make sure that there is no extra weight, as this could mean that some parts of the die came out with that batch, again could cause permanent damage to the die.
- ◆ Checks to see if the batch to batch is consistent. If not, it could mean that the density of the plastic is varying.



PARTS BAG CHECK-WEIGHING SYSTEMS

When it is important to guarantee that the right amount of parts are in each bag for your customers, down to a #6 washer, then this is the system for that application. You need a system that will deliver the accuracy and repeatability that is the hallmark of Advance Weight Systems, Inc. products. This system has rugged dependability for any *production environment*.





Golf Ball (Any Small Sphere) Check-Weigher

Ask for information on this subject.

This is a moderately fast check-weigh system composed of a dual roller-chain conveyor and paddles. The conveyor is indexed every second using a "Geneva Mechanism", with the indexing taking only a ¼ second to fully move the sphere in place to be weighed, leaving ¾ of a second to fully weigh the sphere.

This system works well with most any material with a sphere diameter of 1 inch to 2 inches.

METAL BILLET CHECK-WEIGHING SYSTEMS

Those in the forging industry know how critical it is to know the weight of each billet before it enters the forging die. This system is designed to sort the over-weight and under-weight billets out of the process, and off line. These systems are designed to handle billets that are not *square in profile... *(they must have a length greater than their diameter). If they approach the point where length = diameter then the [Static Gated Check-Weigher](#) must be considered.

Small Metal Billet Static Check-Weigher



This system is designed to sort the over-weight and under-weight billets out of the process at a rate of 30 parts per minute. This system is designed for billets that are 300 grams and less in weight, accuracy of ± 0.02 grams, (± 20 milligrams.)

Small Metal Billet Conveyor Check-Weigher



This system is designed to sort the over-weight and under-weight billets out of the process at a rate approaching 60 parts per minute. This system is designed for billets 500 grams and less in weight, with an accuracy of $\pm 0.05\%$ for a 500 gram part.

Large Metal Billet Walking Beam Static Check-Weigher



This system is designed using walking-beam technology to sort the over-weight and under-weight billets out of the process at a rate approaching 40 parts per minute. This system is designed for billets 10 kgs and less in weight, with an accuracy of $\pm 0.02\%$ with a 10 kg part.



CONVEYOR SCALE SYSTEMS

For a product which can be weighed "on the fly", our line of conveyor scales deliver the accuracy and part-to-part repeatability that is the hallmark of Advance Weight Systems, Inc. products. Our conveyor scales coupled with our [AWSI-v700 SetPoint Controllers](#) are used by various OEM accounts.

CONVEYOR EXAMPLES
**Food Grade
Check-Weigher**


This is a three lane system, each with its individual Weigh-Cells, Setpoint Controllers, Input Conveyors, Scale Conveyors, Output Conveyors, and Sorting Conveyors. Sorting took place at 30 packs of lunchmeat per minute per lane. That is 90 packs of lunchmeat per minute total!

**Large Forged Conrod
Check-Weigher**


This system is designed to sort the over/under weight forgings out of the process at a rate approaching 20 parts per minute. This system is designed for conrods of 8 kgs in weight, with an accuracy of $\pm 0.05\%$.

**Glass Parts
With Air Blow-Off
Check-Weigher**


This system is designed to sort the over/under glass spot-light backs, out of the process at a rate approaching 40 parts per minute. This system is designed for parts 500 grams and less in weight, with an accuracy of $\pm 0.02\%$.

DIE-GUARD CHECK-WEIGH SYSTEM

A cost effective way to protect expensive parts used in die casting operations. More dependable than any other method of Die Protection.



CAULKING-TUBE CHECK-WEIGH SYSTEM


Ask for information on this subject. This system was developed for a major adhesives corporation. It utilizes an "over the product walking beam design" and weighs the product at about 60 pieces a minute with an accuracy of $\pm 0.1\%$.

SORTING GATES

For reference only Our sorting gates are generally furnished as 2 class, 3 class and 5 class

- ◆ **2 CLASS** Gates are the most common needed by our customers, this arrangement sorts either "GOOD" or "BAD".
- ◆ **3 CLASS** Gates sorts "OVER", "CORRECT", and "UNDER" weight.
- ◆ **5 CLASS** gates sort "SECOND OVER", "FIRST OVER", "CORRECT", "FIRST UNDER", and "SECOND UNDER".

