

Engineered Automated Counting & Packaging Solutions

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Batchmaster® Counters with patented dual view scanners can now be integrated with a vision inspection system.

Batching Systems, Inc. specializes in engineered automated packaging solutions. We have been engineering, manufacturing and integrating packaging lines for over 30 years. We offer full turnkey integration of our patented counters and weighers to virtually any type of bagger, magnetic orientation system, box handling equipment, blister carousel, clamshell system and container handling equipment.

Latest Accurate High-Speed Counting System

Batchmaster® Counters are the only counters that utilize patented dual view scanners that provide the highest accuracy count possible. Out of tolerance parts are rejected prior to entering a package. The latest Batchmaster IV counter (BMIV) is an accurate high-speed counting system that detects and rejects parts one-third smaller or larger than a target part thereby separating (sorting) the good parts from the bad. The processing unit is designed with a transparent front panel for visual inspection of gate movement and product flow. These counters can easily integrate with upstream and downstream packaging equipment. Batching Systems can provide stand-alone counters or fully integrated turnkey packaging systems.

A wide variety of fasteners can be fed and singulated with our high-speed enhanced geometry dual axis bowl feeder and change over from one part to another requires no tools and takes less than two minutes.

Other features include industrial grade stainless steel hopper, bowl and stand; integrated PLC and remote network capability; and available UL, cUL, CE, multi-language and IP65 Wash Down, Food Grade and Anti-Static options.

Benefits of the Batchmaster® IV Counter (BMIV) Include the Following:

The benefits of the Batchmaster IV counter (BMIV) include the following:

- Increased production, two to three times faster than our BMII.
- Higher scan rate and resolution at 6000 scans times per second.
- Increase up time with auto fault reset option. This option clears the PPU, homes the gates, and restarts the counter automatically.
- Few wear parts.
- Increased reliability.
- Easy to operate.
- Can accurately count a wide size range of parts from 1/16-2.75" ball up to 6" long
- Can reject product that is 30% larger or smaller than the target product.



Batchmaster® IV 200 mm 2-gate, belt-feed counter with floor level incline cleated transfer conveyor.



Batchmaster® IV 200 mm 2-gate, belt-feed counter.



Samples of fastener parts that can be counted and packaged on the Batchmaster IV system.

- Increased lifetime/expandable electronics platform, future electronics are backwards compatible.
- Gate motor programs can be accessed and adjusted from counter HMI.
- New smart motors for gates are stronger, faster and more reliable.
- New options for color verification and reject.
- Continuous software improvement, updates are free for the life of the counter.
- New 3D scanner demo software, lets you see what the counter is seeing.

Carton Filling and Vision System Marks & Counts Parts

One of our recent systems is a carton filling system designed to mark, count and dispense PVC pipe fittings into cartons. Product is loaded from existing 42" x 42" totes into a bulk feed hopper. The bulk feed hopper meters product as needed onto an inclined cleated conveyor from which the product is then fed onto a singulation conveyor. An adjustable rail and product wiper on the singulation conveyor pushes excess product onto a return conveyor, which recycles the product back to the bulk hopper. Successfully separated and singulated product will pass under an ink jet printer for marking if needed. The singulated product then feeds through our patented two-gate parts processing unit (PPU). The PPU separates the batches into the required counts. This belt feed counter can feed product at up to 600 ipm. The product size range is 1" x 1" up to 6" x 6".

The counter is integrated to a box line consisting of a carton erector, "smart" powered roller conveyor and case taper. The formed carton will feed onto the "smart" conveyor to a fill point at the counter discharge. Once filled, the carton is automatically transferred to the carton closer and taper.

Vision Inspection System Can Be Added to Inspect Small Assemblies or Orientation for Labeling

This system has an integrated vision system used for inspection. It will validate that the product was correct and in the correct orientation position for ink jetting bar codes onto the fittings. The vision system also validates that the bar code

was readable.

Parts that can not be ink jetted because of incorrect orientation are rejected and recycled. Parts that have unreadable bar codes are rejected into a reject tub before they were counted into bags or boxes. Up to 600 fitting per minute can be orientated, ink jetted with bar code and counted into bags or boxes. Utilizing an integrated vision system with our feeders and counters allows us to provide a higher level of inspection systems that are beyond volume base inspection that our dual view scanners provide for counting.

Validations of Complete Assemblies

We can now validate that screws or nuts are on assemblies or that small assemblies are complete, and if they are out of tolerance, reject them before they are counted into bags, boxes or other containers. Assemblies such as cable clamp assemblies, bolt or screws with fixed washers, sex bolts or turn buckles can be validated.

A bag filling system includes the same counting and filling system as above, but with a bagger and thermal transfer printer in place of the carton erecting, conveying and sealing equipment. The counting system is integrated to the bagger and fills the bags with the correct count of product.

Batching, scanning and filling solutions are extremely versatile and can be used on an almost limitless variety of hardware products. www.BatchingSystems.com

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Company Profile:

Batching Systems, Inc. has helped to revolutionize the automated packaging and filling industry with its patented state-of-the-art technology. The company provides batching, scanning and filling solutions by count, weight or volume for a variety of products from tablets and pills, to toys, hardware, sporting goods, crafts, plastics, agricultural products, medical devices, food, candy, confectionery, rolls and bagels. Our systems are highly engineered and rugged, offering reliable and precise count accuracy, while at the same time providing maximum operational flexibility. Batching Systems, Inc. serves a wide variety of industries — each with its own unique challenges. Our four divisions include Industrial/General Products, Food, Medical and Pharmaceutical/Nutraceutical. www.BatchingSystems.com