V120 Vision Tablet Counter

Colamark V120 vision tablet counter is an innovative revolutionary counting solution for tablets and other discrete products. Protected by various patents, V120 employs high speed imaging technology, bulk counting method, and an innovative aggregation algorithm that offers 5 major advantages:- (a) long camera distance from materials - minimum dust contamination; (b)bulk counting - fast and precise; (c) Logical allocation method - no high speed shutter needed; (d) integrated channels - no multiple layer vibrating platform needed for maximum foot print efficiency; (e) high resolution - allows detecting broken tablets and debris effectively, and rejection in small batches.

- A vision counting and aggregation method that is revolutionary from the traditional multiple channel counting method. The material flow is conveyed by a vibrating plate in a single layer manner, and is counted in batches precisely while falling down from the vibrating plate by a high speed camera. There is no need to divide the material flow into single channels like in the traditional multiple channel method.

- The first generation of vision based counter uses a difference compensation method whereby tablets are supplied and counted in bulk up to a quantity close to the target first, then a secondary dispenser dispenses exactly the difference from the target into the first batch to achieve the target quantity. This method requires the secondary dispenser to align the tablets in single channels in order to control the quantity dispensed at single pieces. This is actually similar to the process of the tradition multi-channel method and therefore is still subject to the inherited constraints of it.
- Vision counting and logical allocation technology offers the following advantages.
    - In the multi channel solution, photo sensors are placed very close to the material path thus dust contamination is always an issue. Imaging method allows putting the camera at a distance from the materials which can effectively avoid dust contamination to the camera.
    - High resolution, thus allowing detection of various sizes of materials without blind spot.
    - Effective detection of broken pieces and debris. Allows rejection in small batches to avoid capacity wastage.
    - Material transported in single layer without the need to divide material flow into single line channels and the need to space out. Thus, single vibration plate can be used instead of the traditional multi-level vibration platform. Integrated channel is also used instead of single line channels. All result in tremendous increase of material supply density and thus capacity.
    - No high speed shutter is used like in the multi channel solution, avoiding possible damage of material when hit by the shutter, and there is no need for sensitive control of high quality compressed air too.
    - Compact design offering the best capacity/foot print ratio, allowing more flexible production line layout.

Features:

Model	V120
Name	Vision Tablet Counter
Capacity	12,000 ppm
Weight	300kg
Electricity	220V 50Hz 2 kW
Dimension (for reference)	(L)1476 x (W)1196 x (H)(1900+280) mm