Automated Crouton Box Filling and Weighing System

(Non-NTEP Net Weight Filling)

System Operation

1 – Staging Conveyor – Operator will place open boxes on the continuously running conveyor. Empty boxes will slide with no damage until they are indexed onto scale.
2 – Piston A – Advances boxes to the Ball-Top Scale; 90-deg guard prevents staged boxes from catching the piston during return
3 – Static Roller-Top Scale – Receives indexed boxes from Piston A and determines accumulated box weight. Adjustable backstop ensures boxes are centered under filler.
4 – Piston B – Once box is full, this piston will advance the box to the next stage.
5 – Powered or Roller Conveyor (optional) - takes away filled boxes
6 – Proximity Sensor – Ensures a box is present before filling system is activated
7 – System Controller – Controls all aspects of the system from conveyor start/stop, piston actuation, box detection on scale, weight accumulation, signal transmission to filler and storage of all weights in SQL database. (System can be programmed to emit a pulse signal to release just a few pieces to “top-off” boxes.)