

Specifications and Functions

- Pumping of the product is carried out using 316 St/St gear pumps.
- The filler can be purchased with any number of heads and upgraded to more in the future as production demands increase.
- The method of filling in to the bottle is either “In To Neck” using Centre Jet nozzles or “Diving” using Filling Tubes. Both types of nozzles have “Positive Shut Off” and are interchangeable for different diameters.
- The nozzle assembly is fitted with a safety switch that stops the machine filling if a nozzle misses a bottle.
- A 4” hygienic style conveyor, 6000mm long, is used to transfer bottles to and from the filler and is fitted with adjustable side guides (up and down, in and out).
- The conveyor has a 2 stage variable speed system fitted. Stage / speed 1 is set high so that bottles can be fed into the machine at high speed, then at a predetermined time, just before the front bottle hits the first gate, the conveyor changes to stage / speed 2. This Speed is slower and avoids bottle bounce against the gate. The system allows cycle time to be reduced, therefore giving higher production outputs. (The 2 speeds and the point at which the speeds change are adjustable).
- An adjustable neck clamp is used to align the bottle necks with the nozzles. If a bottle is out of position the neck clamp will not fully close and this in turn will stop the machine from filling, eliminating major spills.
- Containers are indexed in and out using adjustable pneumatic gates.
- The filler is supplied complete with it’s own built in header tank and level control system. This is easily removable for wash outs etc.
- A Servo Motor is fitted to each gear pump giving individual head control, one is also used to drive the nozzle rise and fall assembly. The use of Servo Motors result in much higher precision in both speed and positioning than many existing filling machines on the market can achieve. (Pumps can be stopped at 4000ths of a revolution and automatically adjust speed to compensate for varying viscosity's).
- A 2 speed fill option can be used so that product can be filled into the bottle at, for example, high speed for the first 95% then slowed down for the final 5%. This is useful for products that aerate easily and filling at full speed for the full volume would result in an overflow. (The 2 speeds and the point at which the speeds change are adjustable).
- The machine is PLC controlled and all operator intervention is carried out through a colour touchscreen.
- All setting data (pump / nozzle speeds, fill volumes etc.) for each product is stored in the touchscreen and is simply downloaded to the PLC by the operator on a changeover. The operator will simply choose the product required from a menu on the screen.
- Simple graphics on the touchscreen show the machine status with user friendly options to help the operator make any adjustments.
- A back up sensor is fitted to the outfeed of the filler which will stop the machine in the event of a down stream problem causing bottles to back up to the filler outfeed.
- Changeovers are fast and simple and require minimum adjustments as most of the settings are stored in the touchscreen.
- Services required are: Electrical - 415V 3ph N E / 16A or 32A Compressed Air - 80 psi.
- The machine is compact with a small footprint.
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