Bottom-up fill, gallon filler for viscous products or fully automatic bag-in-a-box (or pail) filling machine. Adjustable fill speed and fill volume with automatic flow shutoff. Set up to handle 1 gallon bottles. Change parts can be made to fit other bottles. Carbon steel frame with stainless steel covers. Stainless steel conveyor. Filler guides: UHMW. EXR.

Bottom-Up Fill Gallon Filler for Viscous Products or Fully Automatic Bag in a Box (or Pail) Filling Machine.

A top plate stator receives the customer’s product from the filler tank/metering pump. The lower rotor automatically divides the continuous flow of product into equal parts as it rotates. The product passes directly into the container from the filling ports under the rotor. The rotor speed is adjustable to obtain the containers per minute fill speed desired. The filler pump is adjustable to achieve the exact fill volume desired. The rotor ports continually enter and exit several radial-filling slots in the stator plate.

An empty container starts to fill at the first slot and has the required volume when it exits the last slot. All the containers receive product from the same slots and therefore receive the same volume.

The flow is automatically shut off as the machine front by the rotation of the ports on the rotor. Each slot length in the stator is equal to the circular pitch of the port in the rotor. The product metered into each slot can be varied to produce the ideal flow rate going into the container. Automatic opening and closing cutoff nozzles can be added to prevent drip and stringing where the container pass on and off the filler. The automatic closing nozzles do not affect the fill volume; they only prevent unwanted discharges of liquid products at the machine front. All nozzles close when the filler is stopped to control the fill volume. There is no seal on the container and no re-circulation of the product being filled.

The way to control the pump is through a solenoid valve. First, the pump has to be close to the valves or filler. Second, there has to be a sensor by the valves so that it sends a signal to the solenoid valve so it opens or closes. The purpose of the sensor is to detect if there is a bottle in place on the valve. Also, the solenoid valve has to be in between the product storage tank and the positive pump.

The machine has a Carbon steel frame with stainless steel Covers and a stainless steel conveyor with drive. The filler guides are made of UHMW and is set up to handle gallon bottle. Change parts can be made to fit other bottles. The capacity on the equipment will depend on the products viscosity.
*Conveyor extensions are not included.