

## FUNCTIONS OF THE **Resina®** MODEL NRK-400

The **Resina®** Model **NRK-400** is an automatic capping machine designed to take caps from bulk, orient and place them onto containers and then tighten them at a predetermined torque.

As properly spaced container enters into the capping mechanism, a set of synchronized moving gripper chains with specially shaped soft gripper blocks designed to fit the containers make contact at the strongest location on the container's shoulder or base for stability and securely conveys it through the machine. For better container stability, the machine can be equipped with double gripper chains.

At the same time, caps are placed into the machine's bulk S.S. hopper bin either by hand or from our floor mounted automatic cap feed elevator.

Caps are sorted in our "H26" style, variable speed hopper and are fed single file into the S.S Cap Chute. An electric eye is located in the cap chute to top the tumbling function of the hopper, so those caps do not back up into the hopper. As the need for additional caps are required, the electric eye signals for the hopper motor to start the hopper.

The container is conveyed into the cap application area firmly supported in the Gripper Chains. The cap on the container is stabilized in the chute end on the top with a cap wiper and on the bottom with a cap guide. The leading edge of the threaded spout picks one cap out of the specially designed cap chute end. As the container continues it proceeds to the 1st tightening station where the cap is encapsulated in our "anti-cock stabilizer" (If warranted). This device makes sure that the cap does not cross thread on the container. At this station, the discs (front and back) from the 1st tightening station make contact with the cap and turn the cap down on the container to the liner of the cap.

The 1st station is considered the cap application station. The first station is always considered the cap application station and the other stations are used for maximizing cap torque. For this reason, the first station (application station) runs three times faster than the other (torque stations).

The Torque Stations all feature, our patented Heavy Duty Mechanical Adjustable Quill Clutches. These clutches are adjustable and are designed to slip when the cap reaches the desired application torque. This guarantees uniform application torque, prevents cap scuffing, burning, and reduces tightening disc wear.

After the container passes through the last tightening station, the gripper chains release the container allowing it to continue to the end of the conveyor chain where it can then transfer to the next machine.