

# FILAMATIC NEWS

NATIONAL INSTRUMENT COMPANY, INC. • 4119 Fordleigh Road • Baltimore, MD 21215 • Tel. (410) 764-0900 • Fax (410) 764-7719

Internet: <http://www.filamatic.com> • Email: [info@filamatic.com](mailto:info@filamatic.com)

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for more information

Manufacturers of Liquid  
Filling, Capping and  
Packaging Systems



## New Dual-Purpose **CAPAMATIC**<sup>®</sup> RC-400 Rotary Capping Machine Featuring A Vision System, Applies Both Sterile Snap And Screw Caps At Speeds Up To 120 CPM

The National Instrument Company has recently introduced a new dual-purpose rotary capping machine that features a vision system that enables the machine to apply both snap cap and screw cap closures. The **CAPAMATIC**<sup>®</sup> RC-400 is capable of handling a wide variety of odd-shaped containers and can achieve production rates up to 120 containers per minute.

All operations on the **CAPAMATIC**<sup>®</sup> RC-400 are electronically controlled from a touch screen control panel. Four individual servo-driven chucks and two cameras interact to insure precise cap orientation and inspection of the container.

The **CAPAMATIC**<sup>®</sup> RC-400 capping machine can handle both snap caps ranging from 13mm to 25mm and screw caps from 15mm to 48mm. Specifically, this capper accommodates two keyed snap caps, 15mm and 20mm in size and screw caps 33mm in size.

Snap caps are fed randomly from the feeder bowl to the feeder chute inline with no radial orientation. Then they are transported to the rotating stripper plate, where a vision system registers the cap orientation. This timesaving feature permits the caps to be fed without rotational orientation. A camera captures an image of the cap from the stripper plate and signals the servo motor to precisely orient the chuck to pick up the cap. The chuck then descends to place the cap onto the container at the required bottle-cap orientation.

As the capped containers enter the discharge turret, the second camera inspects for proper alignment. If exact alignment isn't captured, the improperly capped containers will exit to the reject station.

The servo cap tightening system provides a superior method of tightening caps where accuracy and reliability are required. The operation has been dramatically improved using a new low inertia collet chuck\*\*. The collet chuck is fabricated from a stainless steel jawset. Its low inertia improves the performance of the cap servo feedback control systems, providing precise torque control and shorter cycle times.

A quick-change collet style chuck\*\* makes changeover from one cap size to another simple and easy. Simply push and turn the chuck 45 degrees to remove the collet and vice versa to install the next interchangeable collet. No tools are required.

The **CAPAMATIC**<sup>®</sup> RC-400 rotary capping machine is designed for use in a Class 100 clean room. It is available for use in both hazardous and non-hazardous atmospheres.

\*\*Patent Pending