

OCMI:

# CAMERA CONTROL SYSTEMS IMPROVE EFFICIENCY IN OCMI MACHINES

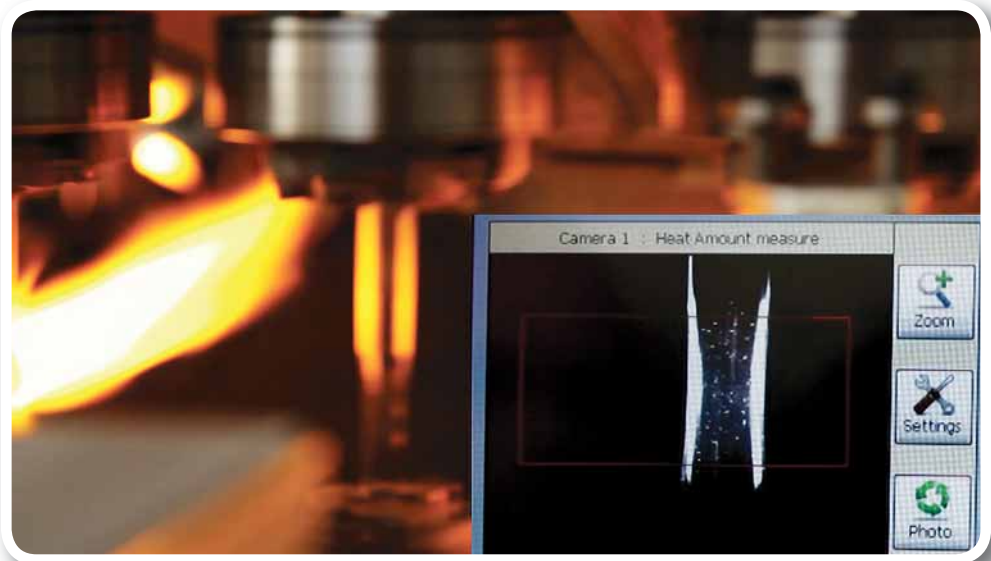


Camera control systems developed by OCMI for tube forming machines reduce glass waste, keep the sizes of glass containers inside tighter tolerances and avoid troubles during after-forming operations.

In recent months the camera control systems developed by OCMI for all tube forming machines have become a mandatory item requested by manufacturers in order to check in real time the quality of glass forming process in hot processing zone.

The main purpose of these systems used in hot-forming area is to support the operators working on forming machines in reducing glass waste, keeping the sizes of glass containers inside tighter tolerances and avoiding troubles during after-forming operations.

**OPTISTEM/2** for ampoules inspection is a special case among



the camera control systems developed by OCMI Technical Departments. Equipped with two cameras, the system offers not only a simple dimensional control with automatic rejection, but also real time correction of the oxy-

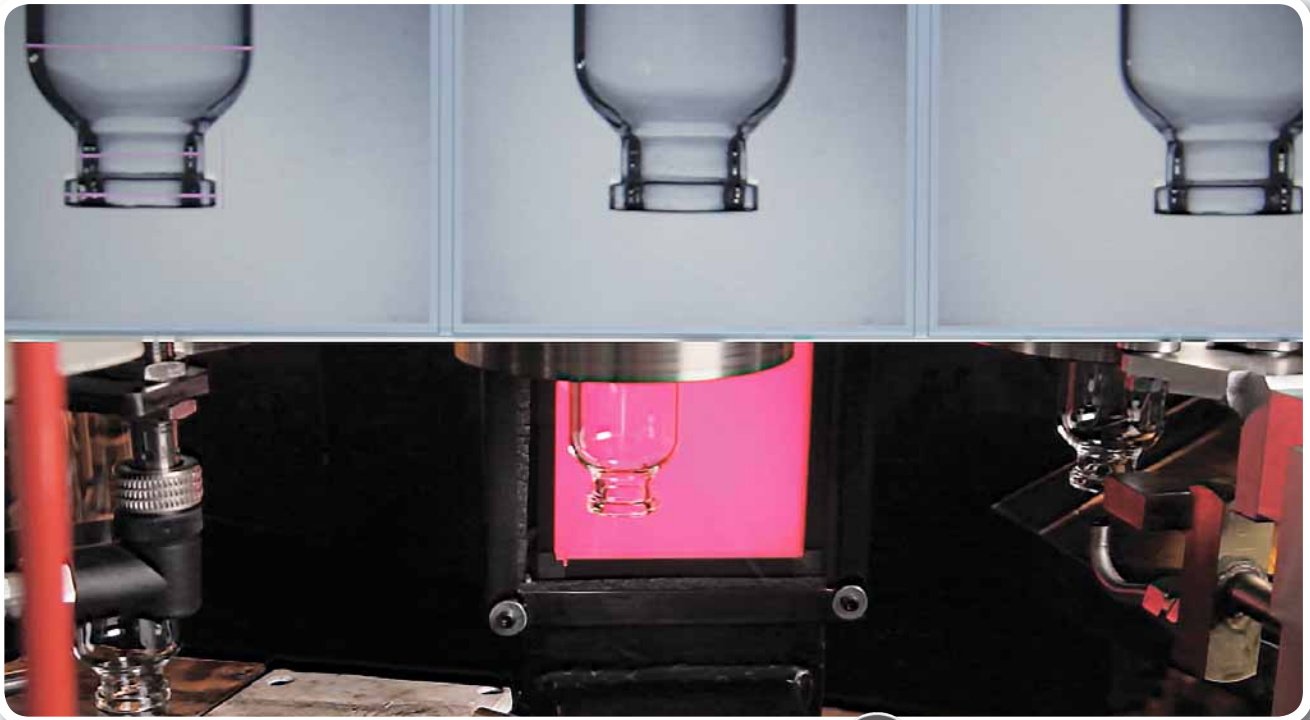
gen level in two burners before the stretching and forming station. This allows working in the stretching and neck forming area under the same temperature conditions in all glass tubes.

This vision system has been



## VISION SYSTEM

vision system



developed with the purpose of keeping the stem diameters under control and inside a tighter tolerance. The second purpose is to reduce the glass waste in the forming machine and in the after-forming line and increase the efficiency.

On the user-friendly control panel, the operator can check the trend of all diameters of the glass ampoule inside tolerances limitations.

The software allows operators to store the data about each production batch and to recall parameters of ISO type ampoules (parameters of ampoules out of ISO standards can be set manually).

The operator can choose the diameter they want to be critical for the acceptance or rejection of the product and consequently make a more accurate control on them.

**OPTISTEM/2** is available to be installed on new or exist-

ing ampoule forming machines MM30 and FA36S supplied by OCMI.

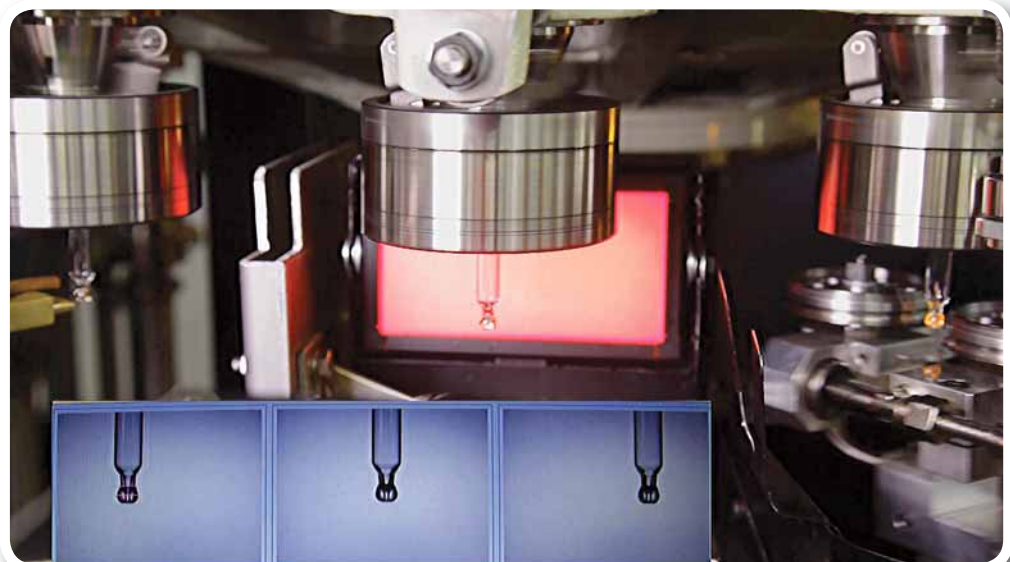
**OPTIVIAL** camera systems have been developed for both models of forming machines supplied by OCMI, FLA20/S and FLA35.

The system adopts the same user-friendly **OPTISTEM** software for the control panel and utilises a dimensional control at the end of forming process. It's possible to get the statistics divided

per each forming head and consequently detect any type of trouble on one specific head.

One of the main advantages of OCMI control systems is the flexibility of the software that can be applied to different types of productions.

In the last forming machine produced for glass droppers **OPTIVIAL** has been supplied for ball-shaped tip control and constriction. The same concept can be used for control of dental car-



tridges on the forming machine FLA20/CAR.

All camera control systems developed by OCMI for pharmaceutical glass forming machines are prepared to be upgraded with remote assistance service through Internet networking.

Most orders confirmed in the last few months by pharmaceutical laboratories and glass factories include camera control systems for hot-forming, which represents an excellent investment to improve machine productivity.

The need of controls in real time during the machine cycle is growing more and more not only in the pharmaceutical glass sector, but also in the tableware division, where OCMI manufactures and supplies the sealing/stretching machine for stemware production SA.

#### SEALING MACHINE FOR STEMWARE



The SA sealing machine is the most appreciated equipment supplied by OCMI for high quality stemware articles and is available in three versions, with 42, 48 or 60

chucks according to productivity requirements.

The last OCMI sealing and stretching machine, SA60 for stemware, was delivered in July of 2014 and equipped with a camera system for control of stem and bowl heights and automatic adjustment of upper chucks. The camera control device is installed immediately after the loading area.

In its standard version the camera detects the distance between bowl and stem in order to compare it with the expected size and adjust the upper chuck accordingly. In this way the articles will be sealed at the same height level in all sections despite the differences in bowls heights and the ware of chucks plates.

The parameters linked to the stemware to be produced are set in the touch screen installed on the main electrical cabinet. From this touch screen all the functions of the vision system are controlled and the data are stored in specific folders.

In the last machine delivered, the camera control system has a specific control panel separat-

ed from the control of the main machine. In this special case camera control can be made not only for two-piece stemware, but also for one-piece stemware. For one-piece stemware, the camera detects the height of the stem and the system adjusts the upper chuck accordingly. This upgrade was made to offer a more flexible solution to the manufacturers of both two-piece and one-piece stemware.

The software is very user-friendly and the system to set parameters can be managed easily after a short training period given by OCMI qualified engineers. ■



#### OCMI OTG SPA

Via Venezia Giulia 7  
20157 Milano (MI)  
Italy

Tel.: +39-02-3909181

Fax: +39-02-3570944

E-mail: [info@ocmigroup.com](mailto:info@ocmigroup.com)

[www.ocmigroup.com](http://www.ocmigroup.com)

