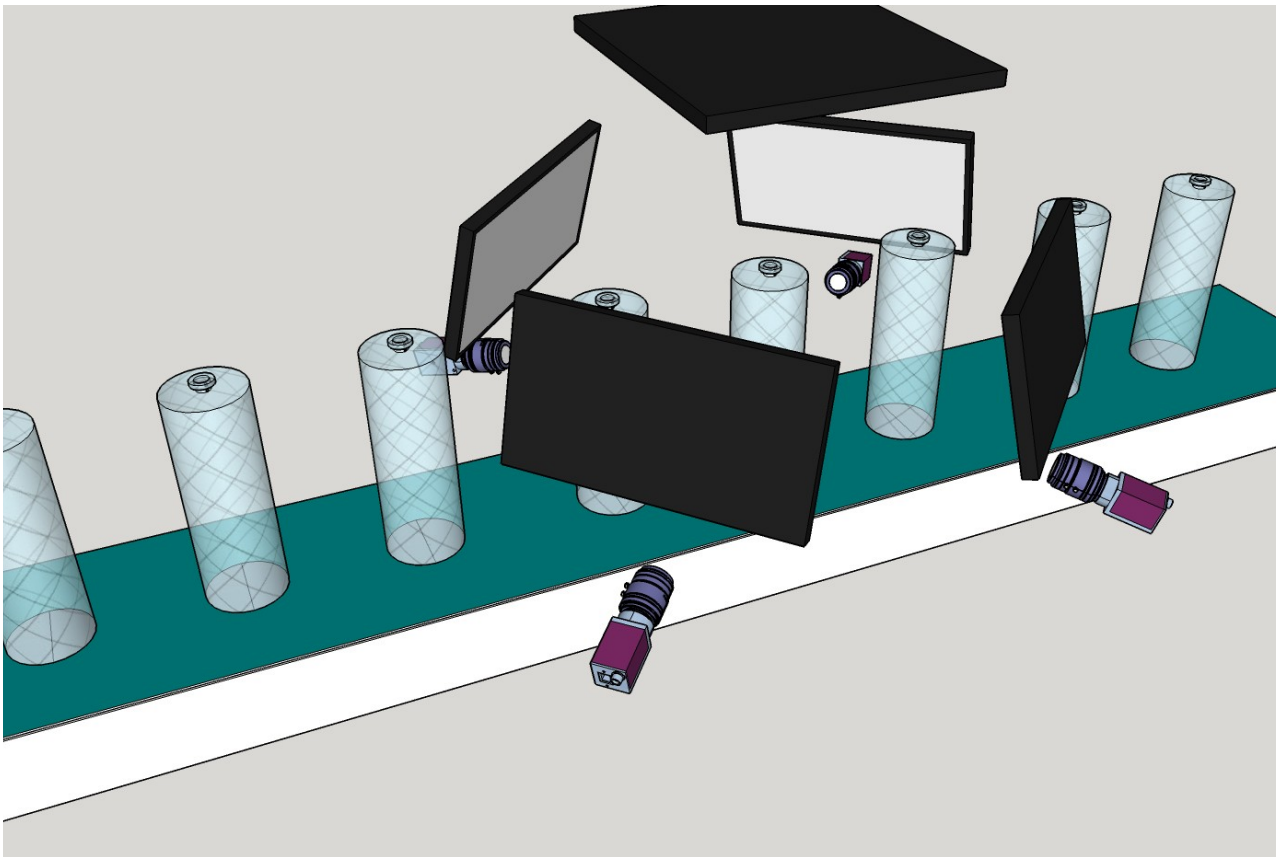


360 degree inspection



Main features

- 4 cameras
- Moving objects
- LED illuminators synchronized with the movement of objects created in collaboration with Genesielettronica
- 360° reconstruction without rotation of cylindrical objects
- Recognition of the rotation angle of objects

Applications

- Quality control of labels
- Orientation of moving cylindrical objects

Operating principle

The images of the object are acquired from different angles using 4 cameras. The illuminators are synchronized with the cameras and the movement of the object so that the images are acquired at the pre-established point and with the switching on of the appropriate illuminators. An encoder ensures the necessary synchronization between the movement of the object and the cameras.

Subsequently, the images are combined to reconstruct the entire surface of the object (Figure 2). All the necessary quality control algorithms are thus applied to the reconstructed



Figura 1: esempio di una configurazione dimostrativa con tavola rotante

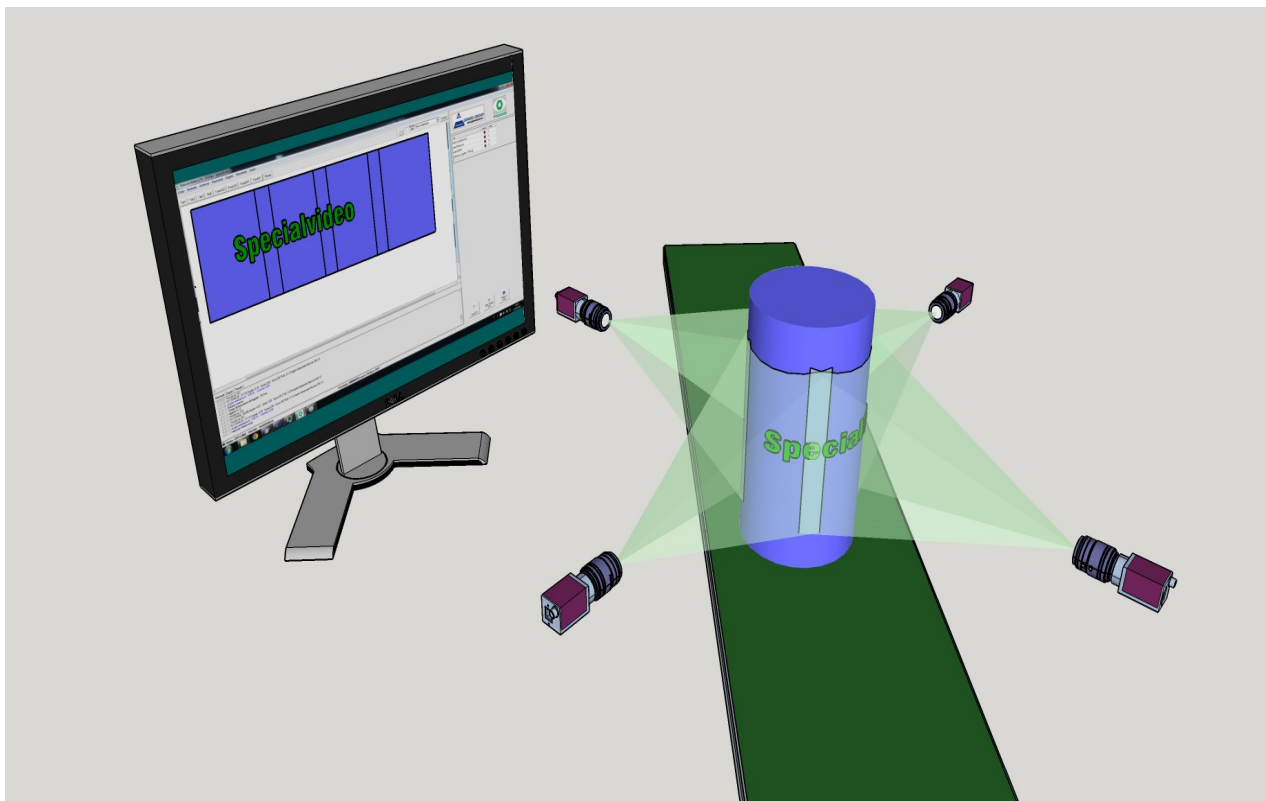


Figure 2: 360° reconstruction of the object by editing 4 images

image, such as searching for the angular position of the product, checking the quality of the print, etc. An example of the reconstruction result can be seen in the image Figure 3 where the technique was applied on a bottle of fruit juice. The images show the result of the reconstruction.

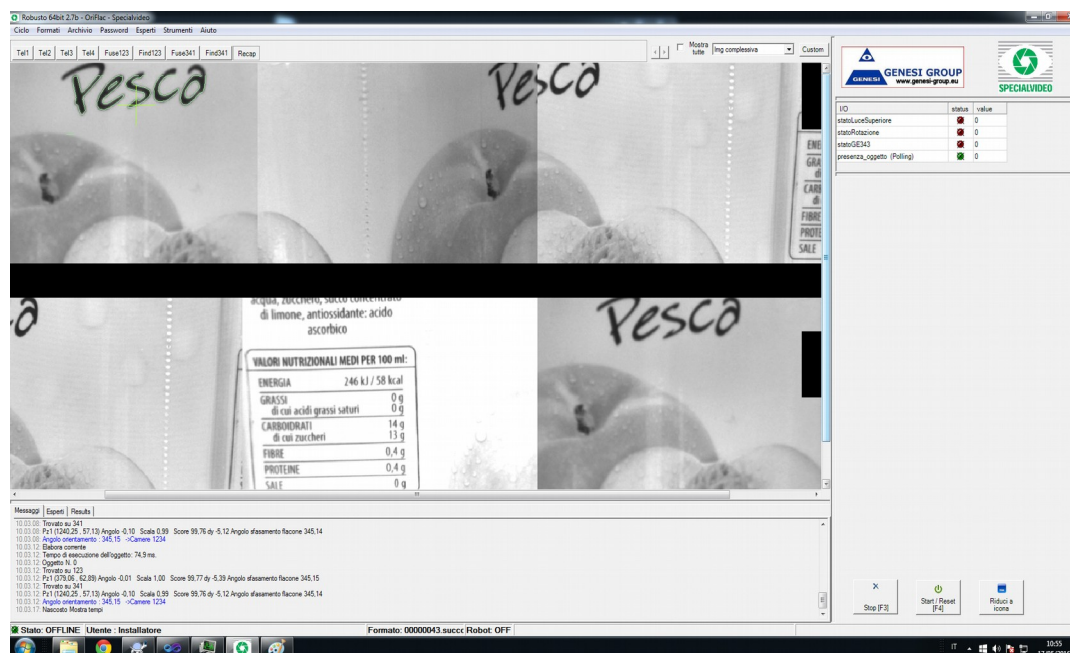


Figure 3: example of application on fruit juice labels