



# BBULL COMPACT VISION

Single Camera System for Fill Level and  
Cap Quality Inspection on Transparent Containers

# PRODUCT DESCRIPTION

## General

**BBULL COMPACT VISION** is a low-cost camera-based inspection system, specially designed for the quality assurance at the bottling of glass and PET bottles.

Additionally to the underfill and overfill inspection the detection software includes the detection of missing or incorrect applied caps. Thus the majority of faults can be detected, that lead to customer complaints because of wrong filling or leaking bottles.

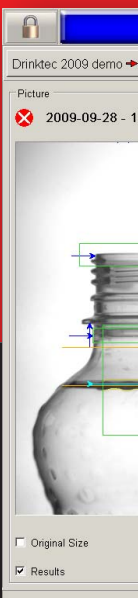
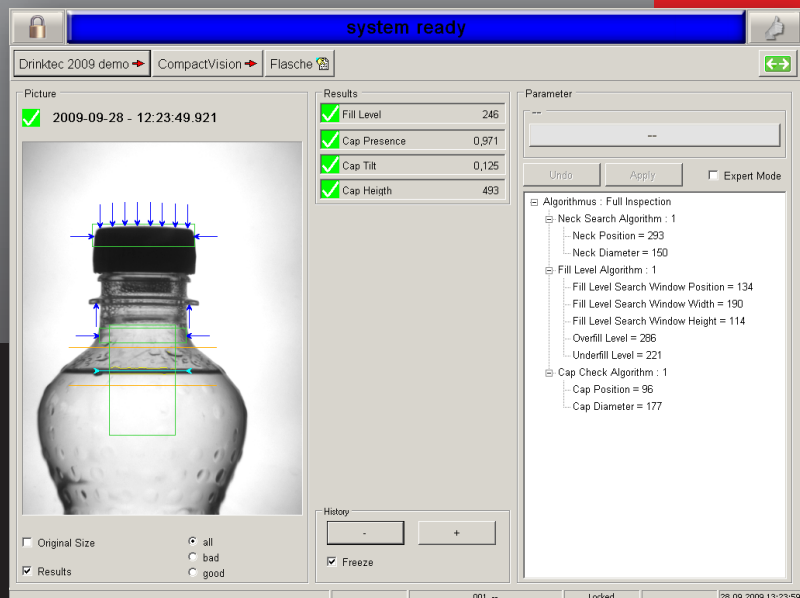
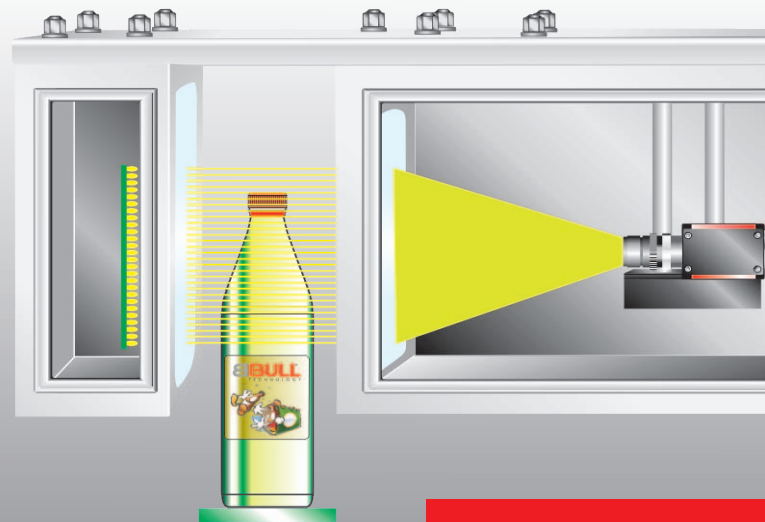
The operation and service menus are designed in simple and intuitive structure. This guarantees a fast and easy learning how to work with the inspection system, even for unexperienced operators.

## Application

- fill level inspection for under- and overfill with analogous analysis
- cap quality inspection (presence, height, position)
- leakage inspection by detection of incorrect applied caps
- basic software for filler and closer monitoring

## Features

- standardised low-cost design of hard- and software components
- simple operation and set-up with adjustment at the life image
- high resolution for fill level and cap inspection
- system stability by application of windows XP embedded
- tracking module for rejection of faulty containers
- inputs for external sensory
- interface for remote operation and maintenance



# System Design

- Nema 4X Inspection bridge with spindle height adjustment
- high-resolution b/w camera
- low-wearing LED background illumination
- encoder set for pusher tracking
- acknowledge trigger integrated in inspection bridge
- network interface for remote operation and maintenance

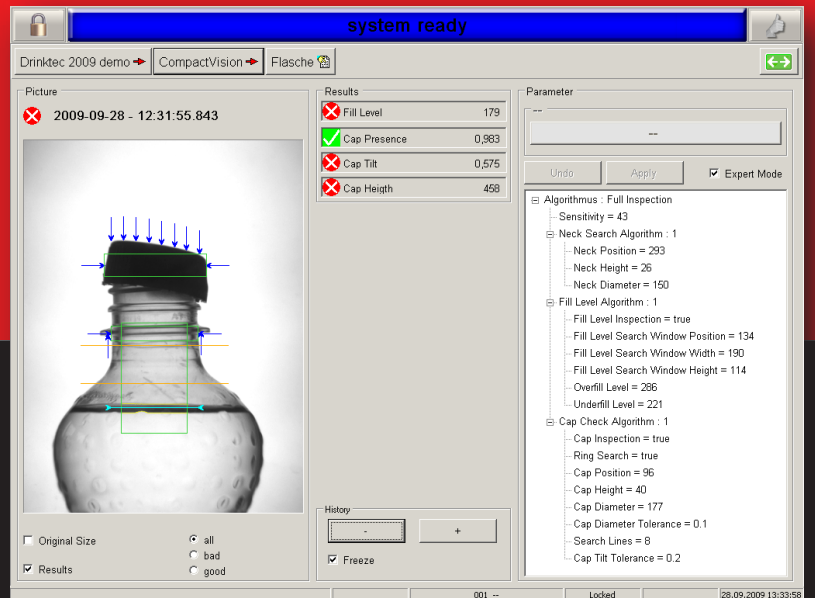
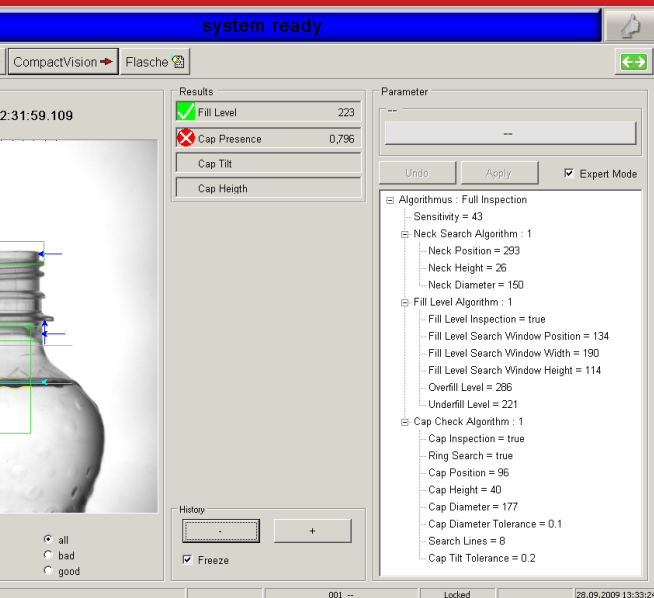
# Software

- Windows-XP embedded operation system
- simple, easy to learn operation and set-up
- standardised inspection algorithms for fill level and cap inspection
- different appraisal for foaming and non-foaming products
- different appraisal for clear and coloured, for transparent and non-transparent liquids
- fault levels individually adjustable
- adaptation of inspection windows in real time operation
- stop signal on serial faults
- format related storage of parameters
- user-management
- expert mode with advanced features
- zoom-function in the image
- multi-lingual user interface
- remote operation and maintenance via network
- basic software for filler and closer monitoring
- stop signal for consecutive faults (only in combination with monitoring software)



# Installation Place

- In single transportation
  - ➔ post filler / closer
  - ➔ post pasteurizer
  - ➔ post labelling machine (no labels in inspection area)



# TECHNICAL DATA



Max. line speed in bottles per hour: \_\_\_\_\_ 72.000  
Power supply in V/Hz: \_\_\_\_\_ 230/50  
Power consumption in VA: \_\_\_\_\_ < 100  
Surrounding temperature in °C: \_\_\_\_\_ 5 – 42  
External inputs: \_\_\_\_\_ 2  
Pusher output: \_\_\_\_\_ 1  
Network interface: \_\_\_\_\_ Ethernet  
Data protocol: \_\_\_\_\_ acc. to Weihenstephan  
Dimensions inspection bridge (WxHxD) in mm: \_\_\_\_\_ 130x310x640  
Weight in Kg: \_\_\_\_\_ 20  
Inspection technology: \_\_\_\_\_ b/w fire-wire camera (640 x 480 pixel)  
Illumination: \_\_\_\_\_ pulsed LED flash  
Enclosure: \_\_\_\_\_ IP65

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