

We keep an eye on your quality

UC-ViS – Ultra Compact Vision Inspection System
with Double Snap Feature



3P Cans



2P Cans



Ends



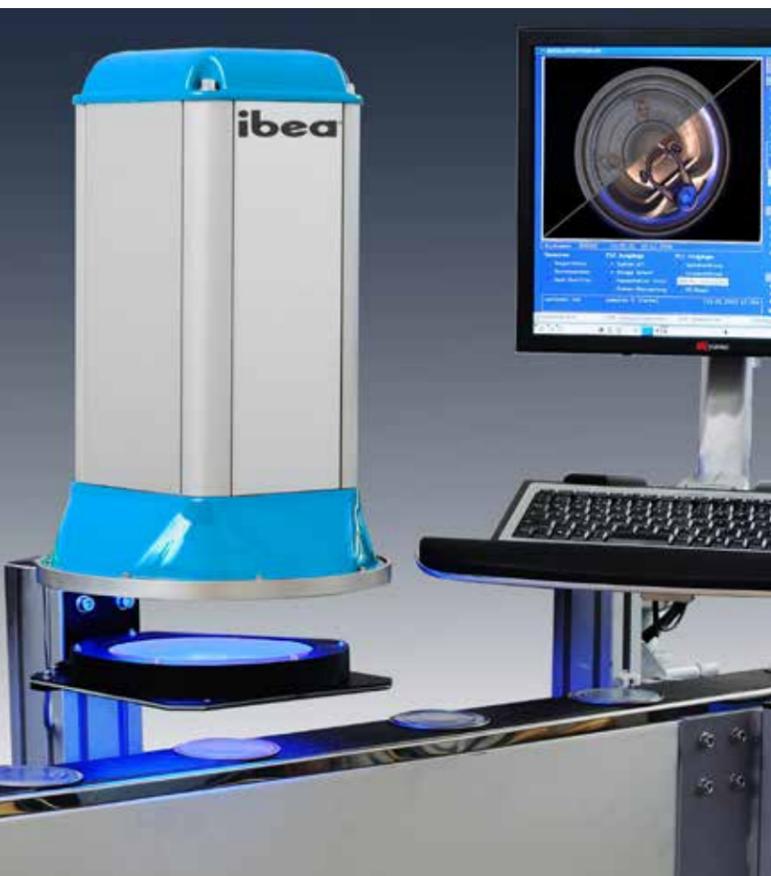
EOE

ibea[®]
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ibea Vision Inspection Systems

Inspection – simple and reliable

The ibea Ultra Compact ViS is an inline single-lane inspection system, and the result of more than 20 years of research and development. With this system we have succeeded in reducing the size of our compact vision inspection system significantly. For the complete PC system is now an integral part of the imager a separate computer rack is no longer needed. Thus, the new Ultra Compact ViS consists only of the imager, the attached monitor, keyboard, and mouse. It is therefore easily integrated to existing production lines and only requires a very small area for installation. The system was developed for high performance production (up to 3.000 parts per minute). Its standard version is fit for the inspection of curved or square products with maximum diameters of 190 mm and heights up to 300 mm. Such as jar lids, EOE, TO-caps, 2P-,3P or DRD-cans.



ibea's UC-ViS features many software standards and innovations dedicated to the packaging industry. The user software allows for working on different tasks simultaneously in order to concentrate on various product colors or designs, and ultimately to allow for the possibility of a quick product changeover. Job modifications are possible anytime, even while the system is in inspection mode. Comprehensive accessories, e.g. the camera lift or the zoom lens (auto save) mean additional flexibility for product change lines.

The Ultra Compact ViS offers an ultra fast optical inspection for dimension, flaws, color fastness, decor, texture, deformation, damage, completeness, fit, position and so on. It is also dedicated for changing decors or highly reflecting surfaces and materials.



ibea's Ultra Compact ViS is fit for a wide variety of applications, e.g. the inspection of metal packaging or punching parts.

Highest quality, smallest size

The system is built up modularly. Each module such as illumination dome, beam splitter or cameras can be adjusted precisely to the requirements of your product and maintains variability for your changing needs. A gear clock operated "Real Time System" (RTS) controls the image scan, illumination and up to 3 ejectors.

Included in the delivery package is a lifetime software licence with free updates. The software is network-compatible, which means, that the system can be configured and monitored via internet and intranet. The operator menu is self-explanatory, very clearly arranged and therefore learnable without training. Additional features e.g. the indicator browser for subsequent inspection of faulty images show ibea's long term know-how in the development of high quality control systems. The system can be handled during inspection.

All ibea components comply with the highest industry standards and secure system stability in harsh production environments for a long-lasting, maintenance-free, around the-clock performance. ibea uses only high quality camera, lens and illumination equipment – a key concept in developing sophisticated image inspection systems. The illumination elements are geared exactly towards the product needs by using durable LED's for the inspection of highly reflective products. Through remote diagnostics we are capable of checking functions and settings at lightning speed.



Especially for the multi-lines use we have developed the ibea Compact ViS. Learn more about it on www.ibea.de

Ultra Compact ViS – the features

- Standard version fit for products max.190 mm in diameter and max 300 mm in height, other sizes possible on request
- Clock rate up to 3.000 ppm
- Full remote control via Intranet or Internet
- Fully operational during inspection
- B&W or color cameras with up to 5MPix
- Integrated modular color or white flash
- Software with Indicator Browser for intuitive fault evaluation
- Lifetime free software updates
- Built-in PLC (3 ejectors per system, reject ibea's Ultra Compact ViS is fit for a wide surveillance, mass error, system error, etc.)

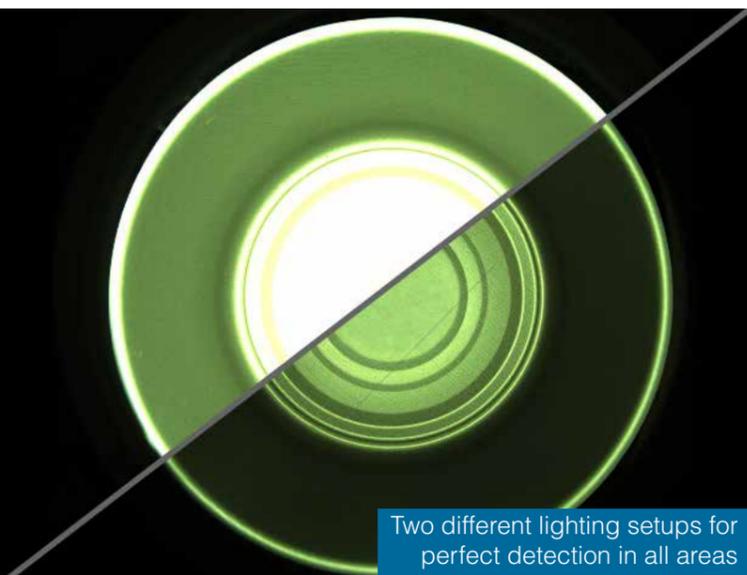
Double Snap Feature

DS for brighter wall on difficult lacquers

The new ibea double-snap-feature gives you the opportunity to take a second image just a moment after the first with different lighting. Based on this you are able to setup the lighting perfectly for the panel/flange area in the first picture and for the body area in the second picture. This feature increases the detection capabilities for small defects with difficult lacquers like shiny gold or blank for up to 20%.

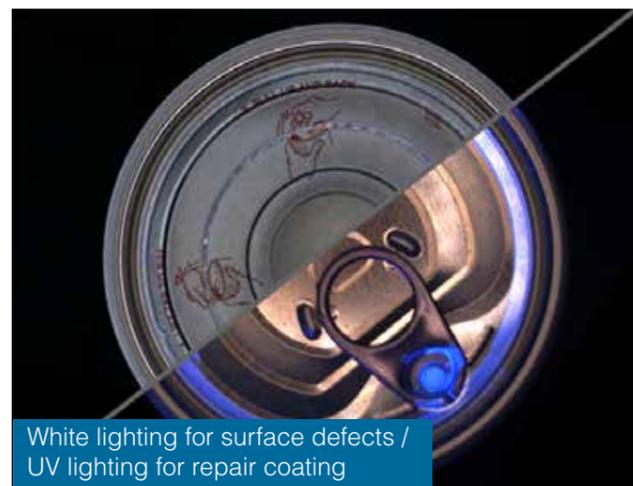
Technical information about DS-Feature for can inspection

- Perfect lighting setup for wall and for panel/flange because of 2 separate pictures
- Up to 20% better detection of small defects on shiny lacquers
- Still up to 5Mpix cameras (BW or Color)
- Clock rate up to 1000 ppm and 2m/sec. conveying speed
- Separate rejection of wall and panel defects possible because of 3 pusher signals



DS for UV lacquer detection

The new ibea double-snap-feature gives you the opportunity to take a second image just a moment after the first with UV-light. In this picture you are able to secure that the EOE end is well protected by UV-lacquer. This feature can alternatively be used to take two pictures with different lighting settings for a perfect inspection of the end surface and the tab even if they are in different lacquers like blank metal tab and white end.



Technical information about DS-Feature for end inspection

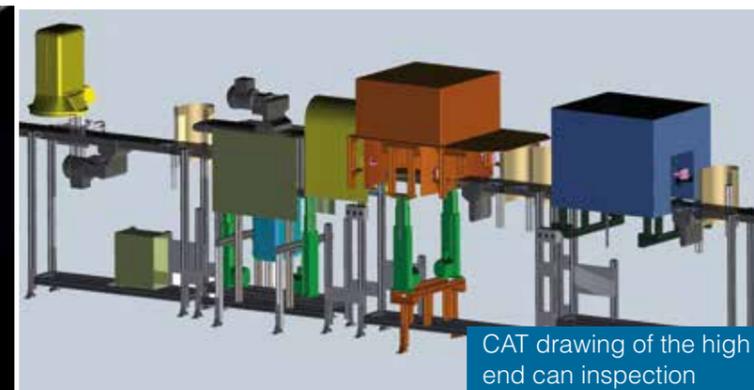
- Simultaneous inspection of surface defects and protection lacquers
- Or two pictures with different lighting for tab and end surface for perfect inspection on different lacquers
- Still up to 5Mpix cameras (BW or Color)
- Clock rate up to 1000 ppm and 2m/sec. conveying speed
- Separate rejection of wall and panel defects possible because of 3 pusher signals

More ibea systems for 100% can inspection

High-End Can Line

The ibea high end can inspection line is developed to secure the quality of two-piece or three-piece cans. The system has a modular structure and consists of up to 4 imagers (inspection stations) mounted on to 3 conveyors:

- Inside imager
- Outside panel imager
- 360° décor imager
- 360° seam imager



The system is able to detect the following defects:

- Scratches
- Dirts
- Dents
- Lacquer defects and splashes
- Rivet defects
- Other anomalies



Ibea leak detection systems

The Vacuum/Pressure Measurement Systems VPMS and LPT 7000 by ibea are especially designed for leak-testing cans and ends. They are working with different measuring methods to determine if there is a leakage.

1. Measurement discrepancies in pressure VPMS

After application of vacuum or pressure a first gauging, via pressure sensor, is taking place before adhering to a stipulated waiting period and a second gauging. The difference of the two readings determines if the product is ok or has a leak.

2. Light-leak testing – LPT 7000

After putting a vacuum on the product it will be charged with very bright light on the outside. In the next step a picture will be taken of the hollow part of the product. If any light reaches the inside of the product it has a defect. Even very small defects can be detected by using this method, without waiting for different pressure values.



ibea - product quality systems

Testing methods applied by ibea systems

- Standard image processing applications:
inspection by camera of surface, texture, geometry, shape and dimensional accuracy, color, 2D and 3D measurement, holographic imaging, roughness, measurement of position and torsion, leak tightness
- Image processing, special applications:
Heat-flow thermography by direct application of heat or ultrasonic initiation for structure checks, crack detection or the detection of other anomalies; UV light for fluxing agents or coating checks — crack detection, X-Ray
- Acoustic inspection:
initiation by a hammer system
- Eddy current measurement:
castings

What ibea systems inspect

- Ceramic tubes, ceramic insulators
- NoX sensors
- Sprinkler glasses, Sprinkler bodies
- Glass ampoules, plastic ampoules
- Syringes, syringe parts
- Laparoscopes, Biopsy forceps
- Catheter, Artery tubes
- Toothpaste caps or shoulders
- Blister packaging
- Tablets - color, cracks, size
- Silicone sealings and plastic sealings
- Metal packaging
- Plastic packaging
- Heavy ceramics and fine ceramics

Put our know-how to the test

Feel free to send us samples of your faulty products that need inspection. Please give us a short description of your conveying system, possibly including photographs. Please also include conveyor speed and part rate. We will prepare a comprehensive offer specified to your needs, including needed accessories — all for an attractive price!

About Ibea

ibea develops and implements inspection systems for a perfect quality check — modular, future-proof, and flexible. It is our aim to ensure a trouble-free production around the clock. Our focus is on producing systems, which are stable and maintenance-free. As a systems integrator we offer you comprehensive professional service from consulting to implementation.