

The versatile tool for winning and retaining patients

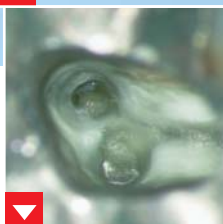
DÜRR VISTACAM INTRAORAL CAMERA SYSTEM



The new VistaCam CL with increased performance



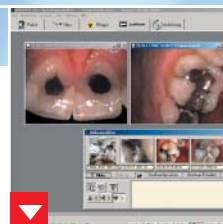
Diagnosis



Treatment



Communication



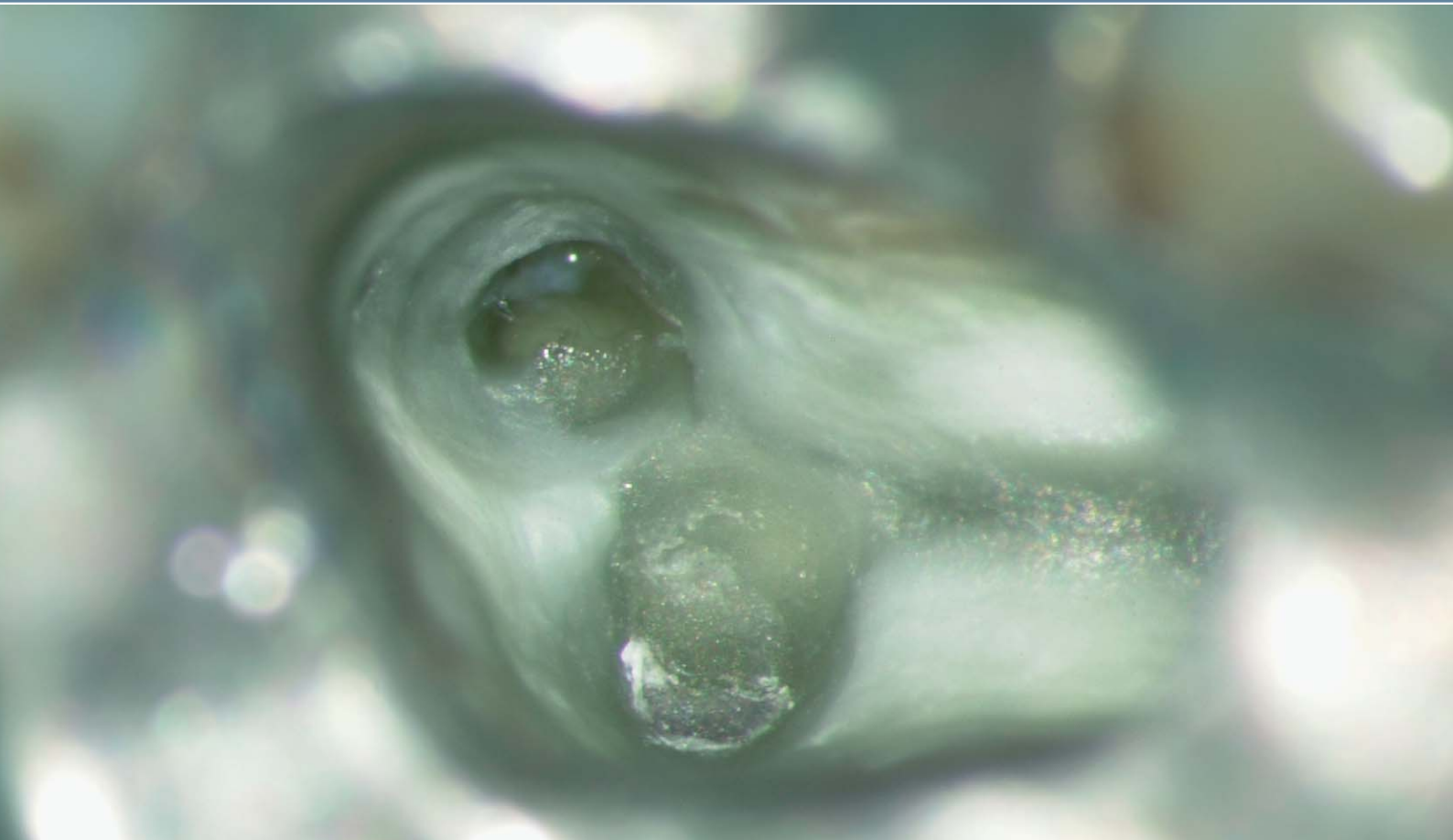
Documentation

VISTACAM

 **DÜRR
DENTAL**

Impressive pictures for the practice

NEW PICTURE QUALITY – NEW RANGES OF APPLICATION



Close-up depiction of an opened root canal system using VistaCam

Working on your own in the dark?

Successful treatment and satisfied patients depend heavily on correct diagnosis, a process often made more difficult by many factors. Incorrect interpretations can easily lead to wrong decisions. The new Dürr VistaCam, which now delivers even more brilliant picture quality, will enable you to make an accurate diagnosis more easily. VistaCam, the first intraoral wireless camera with IFC optics, diagnoses findings in the oral cavity that otherwise could be seen in most cases only under the microscope. Retaining its well-known ergonomic shape it now boasts enhanced performance:

- ▶ Pixel-free depiction of the condition of the tooth
- ▶ Light bundling for depicting lifelike colours
- ▶ Very high depth of field right down to the root canal

Apart from advances in diagnosis the increased performance of the new Dürr VistaCam extends the range of applications from communication through to diagnosis and documentation right up to therapy support. This versatility will benefit both you and your patients. Discover the new possibilities provided by the Dürr VistaCam, the impressive tool to help win or retain patients.



Diagnosis

The new VistaCam reveals more than ever before

One of the most striking features of optical technology and microprocessor technology is the breathtaking speed with which developments take place. Progress is defined in terms of "Faster, smaller, more efficient" When integrated into digital diagnostic instruments Dürr VistaCam translates such qualities into previously unattained levels of performance: "Brighter, sharper, more multifunctional".

Increased picture quality

The latest advances in microelectronics have been incorporated immediately into the camera design. For example, a new CCD Chip guarantees even brighter extraoral pictures both in full

face and in the smile line area. The brighter illumination produces pictures of greater colour fidelity even intraorally. The increased efficiency of the VistaCam reduces picture interference, and depicts colours more accurately which in turn produces an lifelike depiction of the periodontium. The quality of the images matches the quality dentists have come to expect of modern digital cameras.

Increased flexibility

With its IFC optics (iris focus control) the Dürr VistaCam CL had already combined to an unmatched extent impressive picture quality and high depth of field with the convenience of mobility. As an elegant solution in multiple-user operations it is fully portable having no cable and accom-

panies the dentist from room to room, providing support in diagnosis, communication and documentation. The new increase in picture quality now extends its range of applications still further. The needle-sharp pictures produced right down to the root canal extend the diagnostic potential of the VistaCam, enabling it to be used concomitantly for treatment and preparations in the macro area with depiction of detail down to 12 µm via the monitor. Thus the Dürr VistaCam, originally developed as an intraoral camera, can exploit its multifunctional potential to the maximum: as a tool for winning and retaining patients across the four areas of use: diagnosis, treatment, communication and documentation or forensics.



Treatment



Communication



Documentation

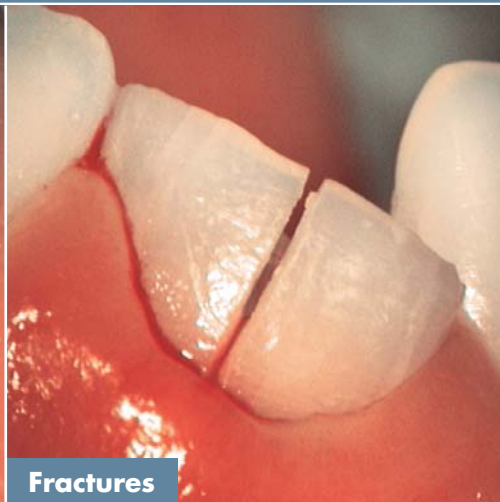


Four ways of using the VistaCam

VISTACAM WITH MAXIMUM FLEXIBILITY



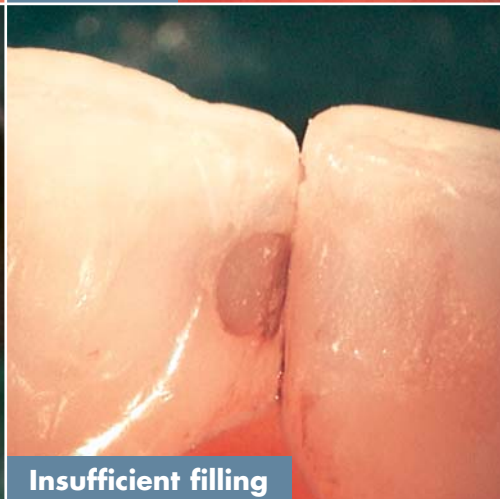
Hairline cracks



Fractures



Occlusal caries



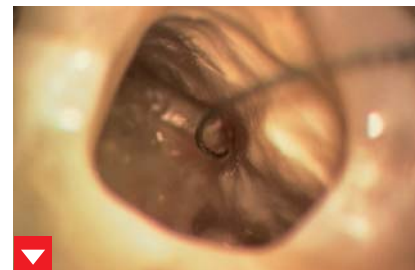
Insufficient filling

Examples of pictures

VistaCam in diagnosis

The outstanding enlargement in the macro area in particular proves advantageous in intraoral diagnosis to get a rapid picture of the condition of the tooth. Conventional laborious refocusing is not necessary with the VistaCam. The new VistaCam now offers even more features:

- ▶ Outstanding enlargement capabilities
- ▶ Optimum illumination
- ▶ Depiction of difficult to access areas



Depiction of root canals



Preparation of a tooth that is difficult to access



Checking for accuracy of fit

VistaCam in treatment

Close-ups of the area of treatment displayed concurrently on the monitor can aid preparation. For example, in endo-dontics, the root canal treatment or location of the entrances to the canal can be followed in close-up.

- ▶ Work in an ergonomic position indirectly via the monitor
- ▶ Treatment can be followed by the assistant and/or the patient
- ▶ Positional control of the retraction thread
- ▶ Indirect work on difficult to access areas with superb illumination
- ▶ Control of excavation and preparation



Demonstration of the intraoral condition



Discussion with the patient



Before and after comparison

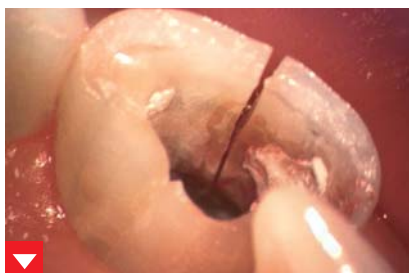
VistaCam in communication

VistaCam introduces mobility into your dental practice. The wireless camera which is fully portable (no cable) accompanies you from room to room, supporting your explanations in the run-up to planning of treatment. "A picture is worth a 1,000 words". Capitalize on the power of images summed up in that old saying when you use the VistaCam:

- ▶ Demonstration of the intraoral status as a lead-in to the planning of treatment and costs
- ▶ Demonstration of therapy and treatment successes by means of before and after comparisons
- ▶ Increasing patients' motivation
- ▶ Optimizing prophylactic measures by pointing out defects and demonstrating the successes that have been achieved



Change in the oral mucosa



Forensics: Fracture recorded before extraction



Forensics: Adjacent tooth that had been ground alio-loco

VistaCam in documentation

Used in conjunction with a PC the Dürr image processing and archiving software DBSWIN offers various ways of depicting the course of treatment and exchanging data both of intraoral video pictures and digital radiographs. However, pictures can also be printed and filed with the video version of the VistaCam.

- ▶ Documentation and follow-up of changes in the oral mucosa
- ▶ Using the VistaCam during treatment increases the patient's appreciation of the work performed
- ▶ Forensic documentation provides protection against unjustified claims for compensation.

Dürr Iris Focus Control (IFC) – the highly advanced optics for extra and intraoral as well as close-up pictures

- ▶ A quick twist simultaneously changes the iris and the focus, saving time and avoiding setting errors
- ▶ Combination of iris opening and lens focusing, geared to actual practice use, ensuring optimum sharpness at all times together with optimum picture brightness
- ▶ High depth of field, avoiding need to refocus in the mouth for maximum time-saving
- ▶ 3 ranges of sharpness – 1 lens (no need to change lenses)
- ▶ Automatic iris control for close-ups prevents overexposures
- ▶ Close-ups at 100x enlargement enable D1 lesions, cracking at the edges or cracks in the enamel to be detected
- ▶ High resolution for excellent recognition of detail down to 12 µm structure size



Adjusting ring made of metal allows precise setting

Great flexibility with just a quick twist



Front tooth area after treatment



Picture showing intraoral overview



Close-up of a crack

The flexible solution for every practice

DÜRR VISTACAM/VISTACAM CL



The evolution of the VistaCam/ VistaCam CL

- ▶ Particularly light-sensitive CCD chip with 470,000 pixels
- ▶ Pixel-free depiction of the condition of the tooth
- ▶ Light bundling for depiction of lifelike colours
- ▶ Very high depth of field right down to the root canal (identification of detail at 60 µm)
- ▶ Suitable for extraoral pictures
- ▶ Optimized control of the IFC optics
- ▶ S video signal in conjunction with the cable version
- ▶ New freeze module with enlarged memory for up to 12 pictures and quad display (4 pictures simultaneously)
- ▶ Perfect ergonomics due to reduction in weight (100/130 g)
- ▶ Centre of gravity shifted to permit effortless handling
- ▶ The camera narrows towards its tip allowing easy access to the molars
- ▶ Plastic housing without galvanic effect does not feel cold or cause fogging to the optics

Pure ergonomics



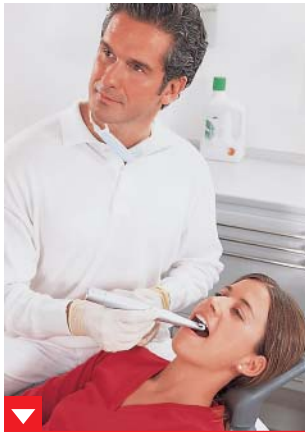
Integration of handpiece
in existing unit



Base station with flexible
handpiece holder



Fastening ring on the bar
holding the light



The VistaCam CL in operation

- ▶ You can carry out all adjustments, display the image the right way round or mirrored, select channels and switch on and off directly from the handpiece
- ▶ Tried and tested 90° metal adjusting ring for operating the Dürr IFC optics (VistaCam CL)
- ▶ 45 minutes operating time (VistaCam CL)
- ▶ Automatic activation when removed from the charger station
- ▶ Flexible installation solutions for integration in all leading units

Flexible options: Product variants

- ▶ Option of connection to video or PC systems
- ▶ Mobile as the wireless version (VistaCam CL) or inexpensively priced as the cable version (VistaCam)
- ▶ PC solution through the option of direct connection of the cable version with the PC (PC direct)
- ▶ USB II variant with frame grabber card integrated into the base station



Mobility with VistaCam CL

Easy integration into the chair – plug and play, extremely easy retrofitting of existing units

- ▶ Wireless footswitch (optional): portable and requires no cable, can be moved to different locations with the VistaCam
- ▶ No intruding light guide
- ▶ Easy to install camera mounting device with magnetic switch off

Economic multi-station capability

- ▶ 1 handpiece for several surgeries or 1 handpiece per dentist

Software

- ▶ Central archiving of the image data, e.g. with Dürr DBSWIN digital image processing and archiving software



Installation solution on bar holding the light



The tool that wins and retains patients: an overview

DÜRR VISTACAM INTRAORAL CAMERA SYSTEM

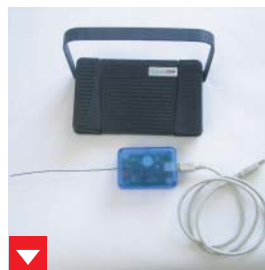
	Dürr VistaCam <i>Cable version</i>	Dürr VistaCam CL <i>Wireless version</i>
Weight:	approx. 100 g	approx. 130 g
Length of handpiece:	198 mm	213 mm
Diameter:	max. 27 mm	max. 27 mm
Power supply:	5 V	NiMH rechargeable battery
Wireless transmission:	–	2.4 GHz ISM band (no license required)
Channels:	–	5 selectable
Transmission:	2 m + 7 m extension via cable	designed for 1 surgery
Battery operation:	–	allows up to 45 min operating time
Charger station:	–	intelligent with charging state display
Multiple-user operation:	can be plugged in and unplugged	Channel can be selected
Connections:	S video/video (composite)	S video/video (composite)
Optical system:	6 LEDs with light-collecting lens, Dürr IFC optics with 90° adjusting ring light-sensitive 1/4" colour CCD sensor, non-fogging, 470,000 pixels	
Resolution:	Max. 45 LP/mm corresponds to 12 µm structure size	
Depth of field intraoral:	24 mm for structures up to 60 µm	
ON/OFF:	Automatically activated when removed or replaced or manual operation	
Image display:	Correct reading or mirrored by pressing button on the camera	
Image storage:	When used without PC (video solution) up to 12 images can be stored in quad display	
Software:	DBSWIN or other software programs with built-in video module	
System solution:	PC solution or video solution easily arranged Simple integration into existing chair units	



With VistaCam CL you can exchange the battery for the power cable, e.g. in the operating theatre



Dürr TFT-Monitor with medical grade power supply and hygienic protective foils



Dürr wireless footswitch set

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