

# VistaCam iX HD Smart - for HD-quality diagnostics support

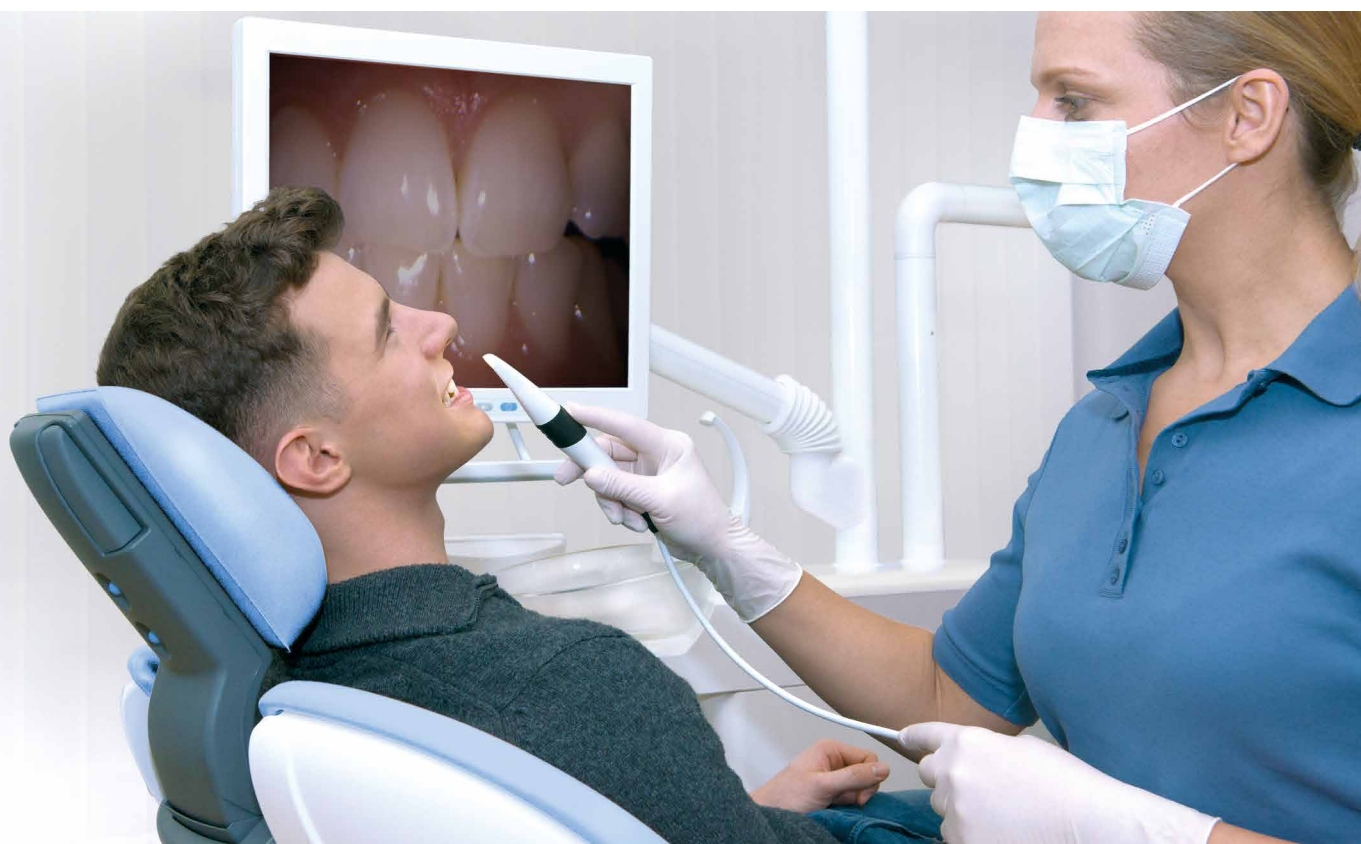
The innovative intraoral camera with interchangeable head system

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X-RAY TECHNOLOGY

# VistaCam iX HD Smart – real HD resolution for unrivalled caries diagnostics



Patient communications, caries diagnostics and documentation – all to unrivalled high standards. Dürr Dental camera systems provide valuable support in dental treatments and foster patient understanding of the required treatment measures. Here, VistaCam iX HD Smart sets new standards with its outstanding HD resolution. Thanks to its improved optics it delivers extremely high contrast images.

Do you have the highest requirements in terms of image quality, depth of field and ease of use? With its uniquely high resolution and the new, infinitely variable autofocus, the VistaCam iX HD Smart system delivers images with unmatched brilliance and sharpness. In combination with the

intelligent interchangeable head mechanism, the camera system will provide you with reliable support – both in the diagnosis and early detection of caries, as well as in plaque visualisation. At the same time, it makes your treatment recommendations easier for patients to understand.

## Key features:

- Brilliant HD image quality even in video mode
- Infinitely variable autofocus for everything from macro to extraoral images
- Software evaluation to detect caries lesions and display plaque (Proof interchangeable head)
- Diagnostic aid for detection of proximal caries – without any radiation exposure (Proxi interchangeable head)

## Optimised workflow, ergonomic design

VistaCam iX HD Smart with its narrow, rounded head enables easy access even to the rear molars. The buttons both on the top and bottom of the device provide ideal support for your workflow and ensure that there is no need to change your grip. A motion sensor that switches the camera on and off automatically makes use of the unit even more efficient. The lenses of the interchangeable heads are equipped with durable protective glass for a long service life.

# Cam interchangeable head

VistaCam iX HD Smart – new, improved optics and excellent depth of field for brilliant HD images.

## Photos and live videos in HD

Maximum image quality for the most demanding requirements: With real HD resolution and the new integrated sharpness filter, the camera system will deliver crystal clear as well as high contrast HD images even on large monitors.

Thanks to the infinitely variable autofocus, images can be captured exceptionally quickly and easily. Regardless of whether you need intra-oral, extraoral or macro images. With the new VistaCam iX HD Smart, you can also watch live videos in the same HD resolution as photos. Two LEDs provide optimized and homogeneous illumination.

## Perfectly focused and even sharper.



Intraoral image\*



Intraoral image\*



Macro image\*



Smile line

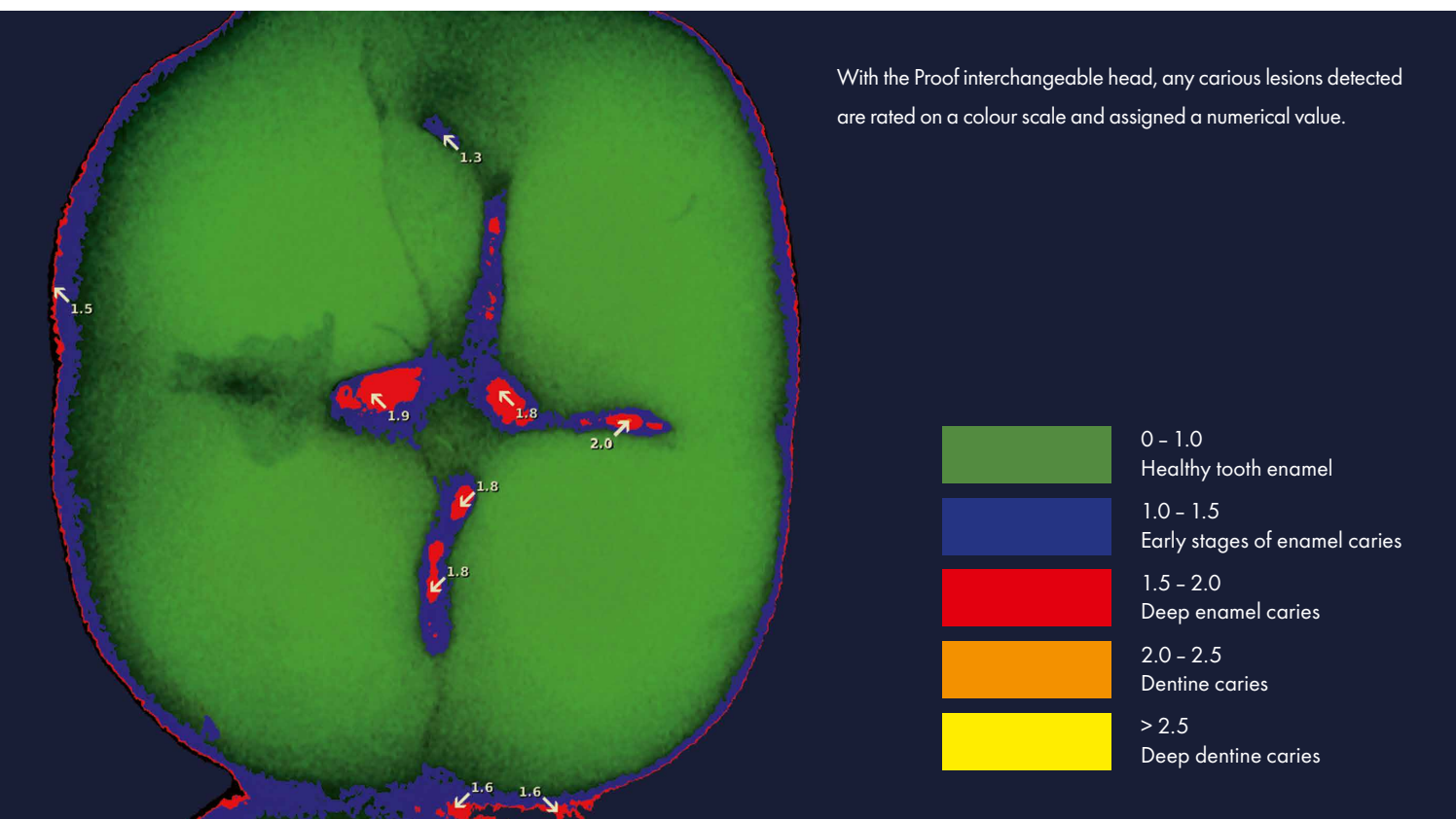


\*By courtesy of MUDr. Heda Dengel, Remseck



# Proof interchangeable head

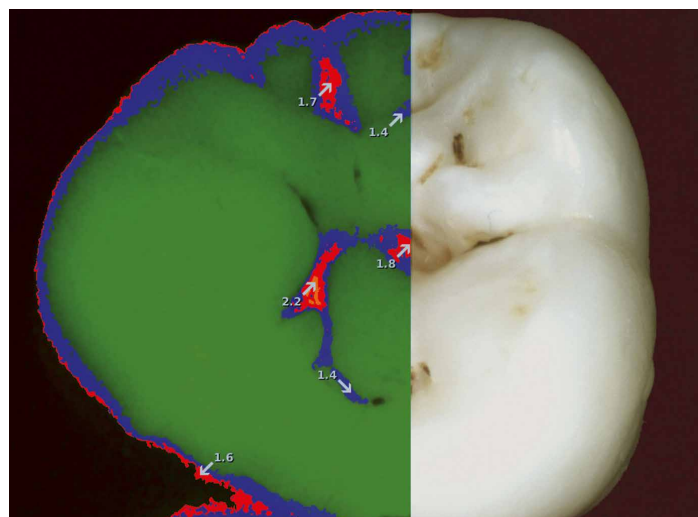
## Reliable detection of caries and plaque



You will simply see more – the new VistaCam iX HD Smart Proof interchangeable head uses software for easy visualization of occlusal and surface caries, plaque on occlusal and smooth surfaces, as well as dental calculus. For the analysis of caries activity, both colours and numbers are used to display the result. The violet light of the LEDs activates the metabolic products of cariogenic bacteria and makes them shine red. By contrast, healthy tooth enamel can be identified by its green fluorescence. Thus making diagnosis easy and reliable.

### Key features:

- Software analysis for the detection of caries lesions
- Visualisation of plaque during professional dental cleaning and for consultations with the patient
- Monitoring of caries progression
- Monitoring of caries removal during excavation



Direct comparison: caries filter and intraoral image

### Visualisation of carious areas

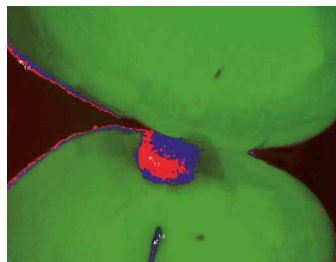
In the image created with the Proof interchangeable head (left), the caries findings can be reliably identified in greater detail. In this example, the early-stage caries (blue) and deep enamel caries (red) are easy to spot.

## Caries detection with the Proof interchangeable head

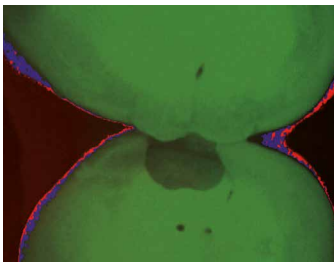
During the excavation, the Proof interchangeable head of the new VistaCam iX HD Smart can also be used to reliably visualise the progress of caries removal. The intraoral image shown here (Fig. 1) reveals the initial clinical situation: discolouration is evident on tooth 15. The subsequent image (Fig. 2) was taken for confirmation immediately after the site was opened up. It shows the image taken with the Proof interchangeable head, which makes it easier to distinguish between the carious region on tooth 15 (red) and the healthy tooth enamel (green). The intraoperative check seen in Fig. 3 confirms that all the carious regions have been fully removed.



Intraoral image (Fig. 1)\*



Monitoring image (Fig. 2)\*



Intraoperative check (Fig. 3)\*

## Plaque visualisation during professional dental cleaning

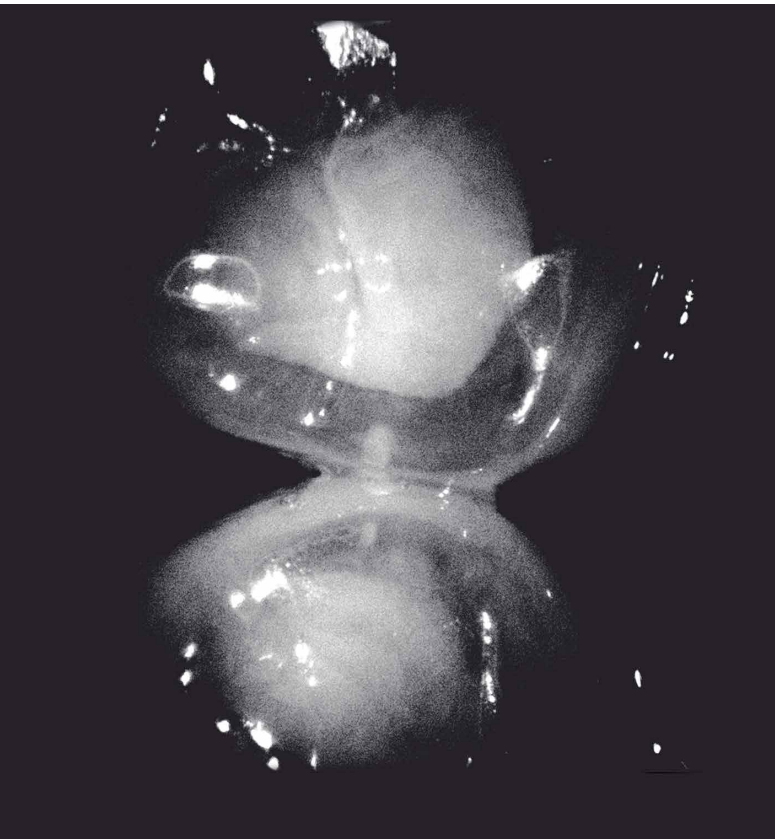
You can offer patients a graphic illustration of where more thorough cleaning is necessary. Thanks to the fluorescence technology, all you need to do to visualise the deposits is to use the Proof interchangeable head; there is no need for dental dye tablets or rinsing solutions. With the aid of 'before' and 'after' images you can also highlight the importance and added value of professional dental cleaning to your patients.

\*By courtesy of Dr. Jens Hanf, Illingen

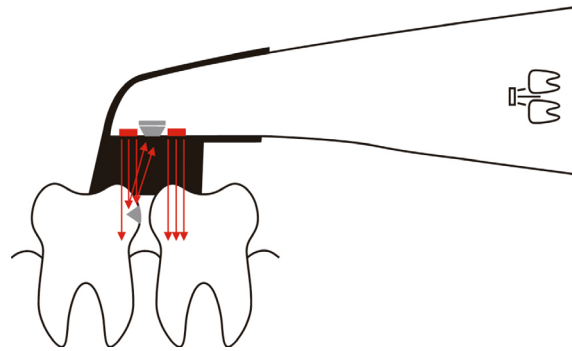


# Proxi interchangeable head

## Gentle and early detection of proximal caries



Reliability for your patients – the new VistaCam iX HD Smart Proxi interchangeable head provides reliable support in the early detection of proximal caries. The advantage: diagnostic support without exposure to radiation, particularly for children and pregnant women. Images can be saved directly in the patient database, where they can be used to monitor treatment success (e.g. remineralisation or spread of caries).



Caries lesions reflect infrared light.

### Key features:

- Diagnosis support without exposure to radiation
- Detection of early proximal caries
- Checking of the treatment success (e.g. remineralisation)
- Simple visualisation promotes patient understanding

### Detection of caries lesions

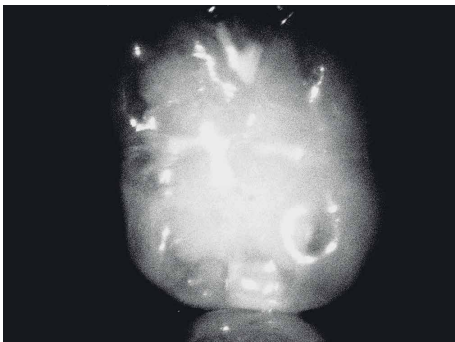
Two adjacent teeth are illuminated by the LEDs. Due to the wavelength of the infrared LEDs, the tooth enamel appears slightly transparent in the proximal space. Healthy tooth enamel is permeable to light in the infrared spectrum and appears dark in the image (transparent). By contrast, caries lesions are white and opaque due to the changed material structure. The infrared wavelength is refracted differently by the lesions and is largely reflected. In this way, the Proxi interchangeable head can be used for gentle and early diagnosis of proximal caries. The HD resolution of the system provides an optimal display on the monitor.

## Reliable detection of proximal caries

In the initial clinical situation (Fig. 1), the caries is very difficult to see. With the aid of the Proxi interchangeable head, a mesial caries lesion can be seen on tooth 36 (Fig. 2). The image taken after initial opening of the site confirms this; here, the carious region can also be seen with the naked eye (Fig. 3).



Intraoral image (Fig. 1)\*



Proxi image (Fig. 2)\*



Intraoperative image (Fig. 3)\*



# Powerful imaging software



The imaging software from Dürr Dental impresses with its intuitive design. All the main functions can be accessed with just one click – which is all it takes to both take and open images.

Caries and plaque filters display caries activity with the aid of a colour scale and a numerical value – also in the live video view. With the aid of the Dürr Dental Imaging App, you can even access your image data on an iPad.

## Figures, data and facts at a glance

| VistaCam iX HD Smart          |   |
|-------------------------------|---|
| <b>Connections</b>            | USB 2.0 (USB 3.0 compatible)  |
| <b>Multi-user application</b> | Plug & play   |
| <b>Activation</b>             | Via button located on handpiece (top and bottom), vibrates when pressed                 |
| <b>Handpiece weight</b>       | 70 g  |
| <b>Handpiece length</b>       | 200 mm  |
| <b>Cable length</b>           | 2.5 m (optional extension up to 19 m via active holder with USB hub and repeater cable) |
| <b>Power supply</b>           | USB (5 V)   |
| <b>Sensor</b>                 | High performance CMOS Sensor  |
| <b>Driver</b>                 | Uses standard Windows drivers, NO additional drivers needed                             |
| <b>Resolution</b>             | 1280 pixels (H) x 1024 pixels (V)   |
| <b>Illumination</b>           | 2 LEDs each for: Cam (white), Proof (405 nm, violet), Proxi (850 nm, infrared)          |
| <b>Optical system</b>         | Lenses with protective glass, infinitely variable autofocus                             |



Handpiece holder on monitor



Hygienic protective covers



Optional: Active holder with USB hub



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