

Heraeus

Agfa Dentus®



**Perfect diagnostic image quality**

Product Information

The radiographic image and its interpretation are an essential aid to dental diagnosis.

The adaptability of an X-ray radiograph as a diagnostic tool and the demands placed on the film quality have increased as technology has advanced.

- **radiographs must identify the presence or absence of disease**
- **patient exposure must be kept to a minimum**
- **the process must be cost-effective**

Technical advances must always be geared to practical needs. Our role as a research-oriented company in the field of dentistry is firstly to identify dentists' requirements and then to develop products which contribute to therapeutic success.

The Agfa Dentus range has been specifically developed to meet the diverse needs in everyday dental practice. The high standards of quality ensure that Agfa Dentus films are continually checked throughout all stages of the manufacturing process.

**To satisfy the demands of modern dentistry**

**Agfa Dentus X-ray films assist the diagnostic process by offering**

- unique image quality and reliable processing

**Agfa Dentus M2 Comfort, E/F- and D-films – the first universal intraoral films**

- for outstanding image quality with reduced exposure times
- one film type for all intra-oral indications

**Agfa Dentus Ortholux and RP 6**

extraoral films for all dental panoramic tomography indications with

- ideal contrast
- exceptional sharpness
- high speed for reduced exposure times

**Agfa Dentus Duplicating X-ray copy film for all extraoral X-ray images**

- extreme sharpness
- reproduction of density true to the original
- very high brilliance

**Dentus chemicals for consistent image quality**

- designed specially for Agfa Dentus system
- user friendly
- suitable for all manual or tank processing systems

# General considerations guaranteed quality with Agfa Dentus®



All Agfa Dentus X-ray films meet the requirements for displaying the -symbol

# Agfa Dentus<sup>®</sup> M2 Comfort E/F- and D-Speed X-ray films

Because of its up-to-date base and emulsion technology, Agfa Dentus M2 Comfort ensures:

- superior image sharpness
- excellent contrast
- high brilliance
- outstanding clarity
- low background fog

## Standard exposure time

Conversions can be made from other D class films to Agfa Comfort E or D class films without changing the exposure times, as long as the sensitivity class is not reduced.

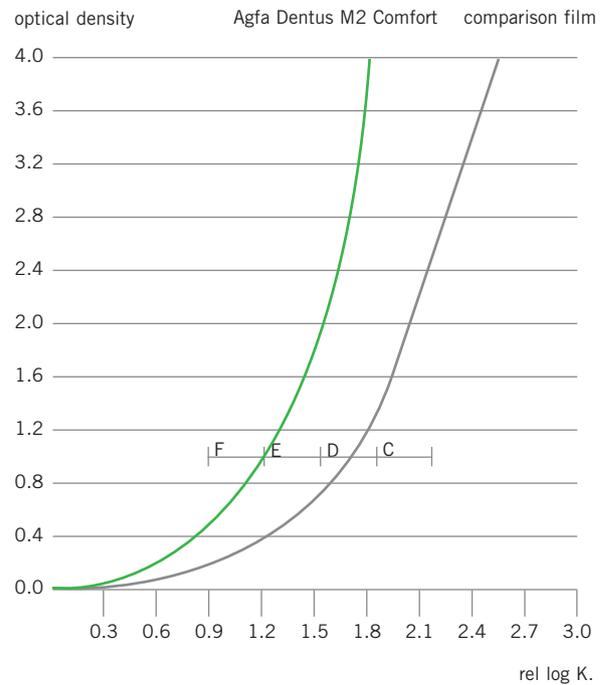
A repeat acceptance test (by X-ray prescription) is therefore not required.

## Minimal radiation dose

Shorter exposure time with E/F-Agfa M2 Comfort Film!

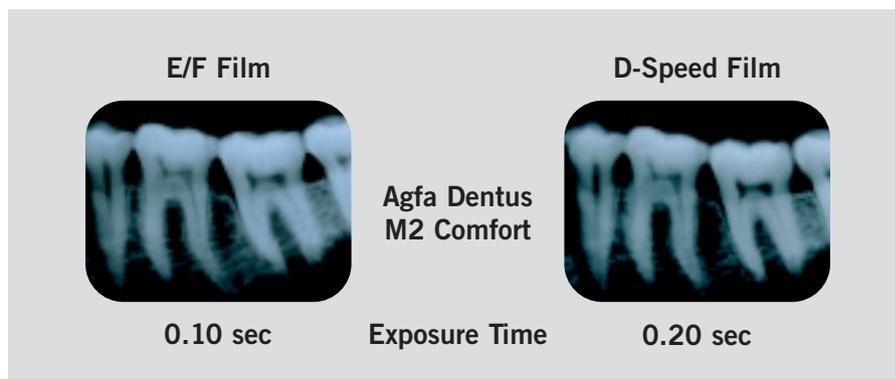
Conversions can be made from other E/F class films to Agfa M2 Comfort E/F film without changing the exposure times.

## Minimal radiation dose



**Agfa Dentus M2 Comfort (E/F Speed):**  
radiation exposure lower than 0.36 mGy

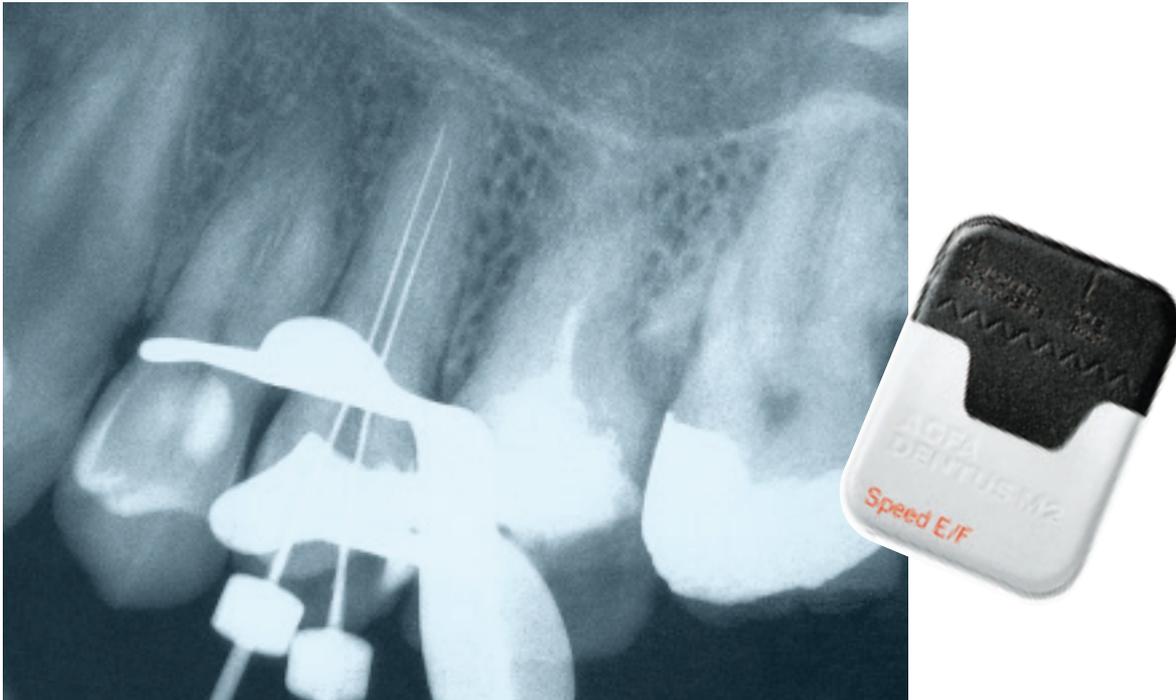
## Intraoral film comparison – E/F and D class film



The Agfa Dentus M2 Comfort is compatible with all state-of-the-art radiographic devices.

Photochemical processing (manual or automated) is possible with all commercial X-ray film chemicals. A repeat acceptance test (by X-ray prescription) is not required in a change to M2 Comfort.

# The universal intraoral films



X-ray radiograph by courtesy of the "Poliklinik für Zahnerhaltung und Parodontologie" of the University Bonn, Germany.

## Safe and comfortable to use.

- High contrast and high maximal density facilitate diagnosis through well-defined grey gradients.
- Movement-induced blurring prevented by short switching times.
- Extra soft plastic, saliva-resistant and disinfectable.
- For all indications and application areas.
- The inside packing ensures safe handling even in the darkroom.
- Universal processing potential.
- Long-lasting: archivable for up to 30 years.

# Agfa Dentus<sup>®</sup> Ortholux

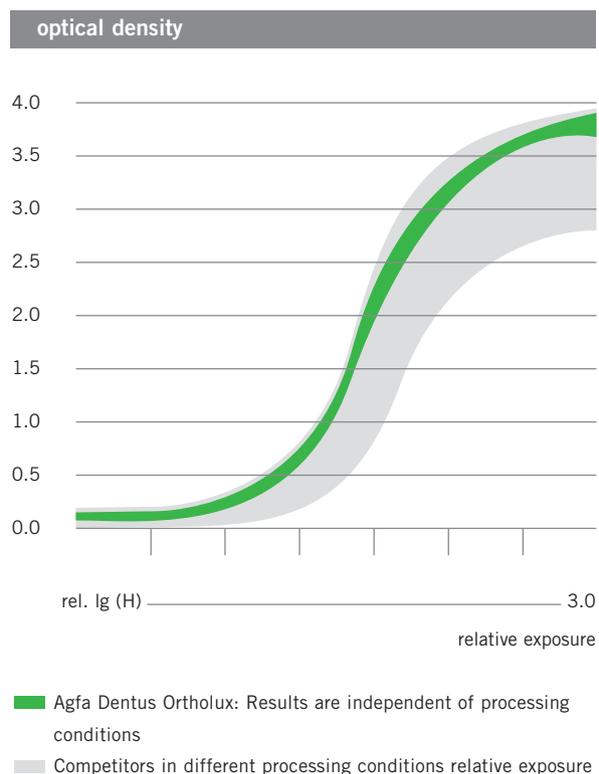
The Agfa Dentus Ortholux is a green-sensitive film for:

- **Panorama layer exposures**
- **Cephalometry**
- **Mandibular joint examinations**
- **Hemimandible technique**

Agfa Dentus Ortholux may be combined with all commercial green-emitting intensification sheets, e.g. Agfa Dentus Ortho.

Because of its up-to-date crystal and emulsion technology, Agfa Dentus Ortholux guarantees outstanding imaging properties along with particularly low radiation dose:

- extremely sharp imaging producing very fine detail recognition
- brilliant image impression from the ultra-clear blue base and high contrast
- very fine grain imaging for homogeneous overall impression



## Precisely detailed image definition

throughout all degrees of blackening due to SEL (Split Emulsion Layer) technology. Two layers with different degrees of sensitivity (2 and 3) on each side of the support (1) eliminate the crossover effect and out-of-focus images.

## Prevents artifacts

due to the special layers which protect from mechanical damages (4) and eliminate influences due to electrostatic charging (5).

## Amazingly consistent image results

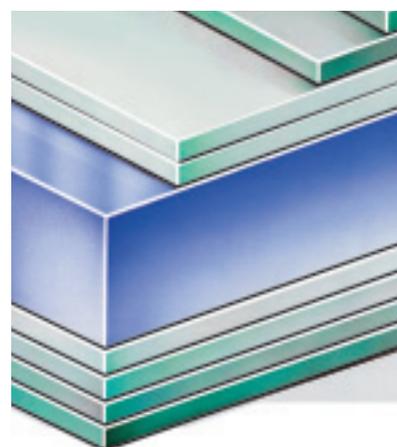
when using various photochemical processing systems



Agfa Dentus Ortholux



Comparison film without SEL-technology



Cross-section of the layers

# Its excellent quality images guarantee highly reliable diagnosis

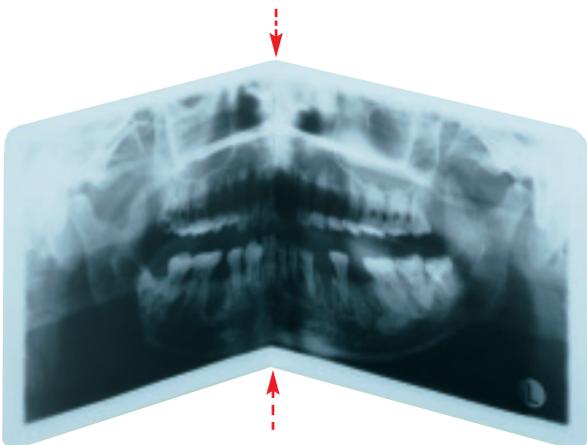


## Easily archived, top quality images Agfa Dentus Ortholux Register

The new Agfa Dentus Ortholux Register features an additional advantage:

The film has a narrow slot along its centre allowing it to be folded easily and stored together with the usual patient data.

Special feature: The film is perforated so that the most important details of the image remain easily identifiable.



## This is what experienced users think about the new Ortholux film:

Medical specialists at hospitals and dental practices tested and compared our new Agfa Dentus Ortholux film with the orthochromatic film they normally use. An evaluation undertaken by a large hospital comprising 184 assessments which described the clarity of the image, definition, contrast and details required for the diagnosis showed impressive results:

77% of those questioned considered the Agfa Dentus Ortholux film superior to the compared film. 20% considered it to be of the same quality standard.

This following evaluation is typical of the numerous positive comments heard from dentists.

Professor Dr. med. habil. Dr. med. dent. Edgar Spens of the Oral Surgery Department of the Martin Luther University at Halle-Wittenberg, Germany said:

“This new Agfa film produces excellent image quality, clarity and brilliancy to provide very reliable quality for the sophisticated diagnostic procedures employed daily”.

Agfa Dentus Ortholux can be combined with all green-emitting intensifying screens.

# Agfa Dentus® RP 6

## For all extra-oral radiographic techniques

- Panorama layer exposures
- Cephalometry
- Mandibular joint examinations
- Hemimandible technique

## For use with all dental X-ray machines

Agfa Dentus RP 6 may be combined with all commercial blue-emitting intensification sheets, e.g. Agfa Dentus Blue. High contrast and small dose requirements make the Agfa Dentus RP 6 universally applicable as a standard film.

Its outstanding processing stability ensures optimal safety of use. The range of application of its sensitivity is enormously increased when combined with Dentus Blue intensification sheets. This means that the radiation dose can be reduced to a minimum. The crisp sharpness and fine grain of the Dentus RP 6 guarantee high detail recognition.

## Optimal application security

- Ideal clinical detail
- High-contrast radiograph
- Unique UV-blue-sensitive emulsion
- Suitable for all conventional dental X-ray processing techniques
- High processing stability

### Darkroom conditions

Requires safelights with ordinary filters at least 0.9 m (~ 3 ft.) away from the workbench.

### Photochemical processing

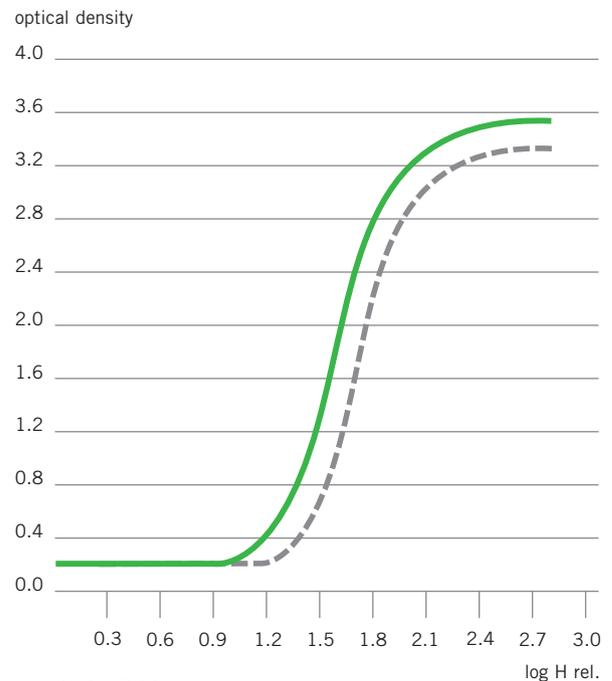
Agfa Dentus RP 6 films can be developed using all modern processing systems (minimum total processing time 90 sec.). Suitable for both manual and automatic processing techniques.

Optimum image quality can be attained with Agfa Dentus RP 6 film when used in combination with Agfa Dentus Blue intensifying screens.

### Speed Class

Agfa Dentus according to ISO 9236	Blue 200 200	Blue 400 400
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## optical density

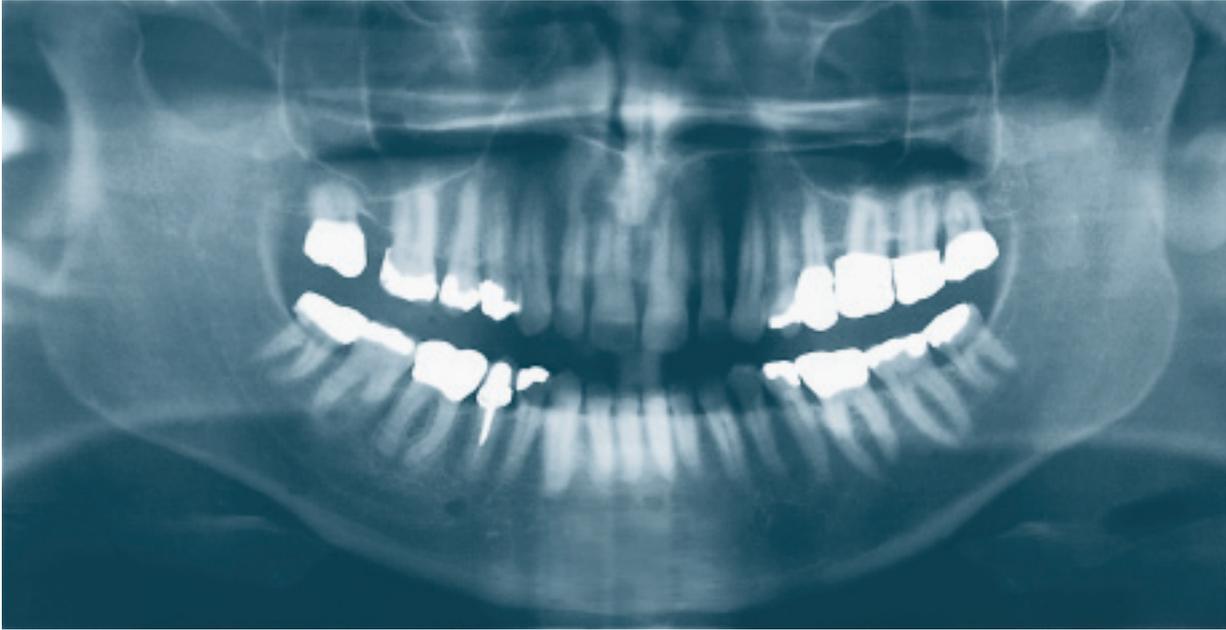


Agfa Dentus RP 6

Controllfilm A: conventional blue-sensitive film

Agfa Dentus RP 6 is guaranteeing exceptional panoramic radiographs.

UV/blue-sensitive film with very high film sensitivity and reduced radiation dose



Film: Agfa Dentus RP 6; size: 15 x 30 cm; intensifying screen: Agfa Dentus Blue 200

# Agfa Dentus® Duplicating

## Extraoral duplicate films for dental applications

- Outstanding image
- High reproduction of finest details on a clear, blue base
- Optimal image contrast
  - Lowest base fog density for images with outstanding brilliance

## Duplicate reproductions – as good as the original radiograph

- Agfa Dentus Duplicating film is compatible with all UV-light bulb duplicators and can be used for reproduction of all dental X-ray radiographs.
- The homogeneous contrast guarantees the exact reproduction of all density steps of the original radiograph. The special film emulsion layer prevents all light scatter and results in extreme sharpness.



### Easy to use

A close contact between the original radiograph and the duplicating film during exposure ensures best image results. The emulsion side (mat finish) of the duplicating film has to be placed on the original radiograph. The image is formed as the light passes through the original radiograph to the duplicating film.

### Darkroom conditions

Requires red safelight filter at least 0.9 m (~ 3 ft.) away from workbench.

### Photochemical Processing

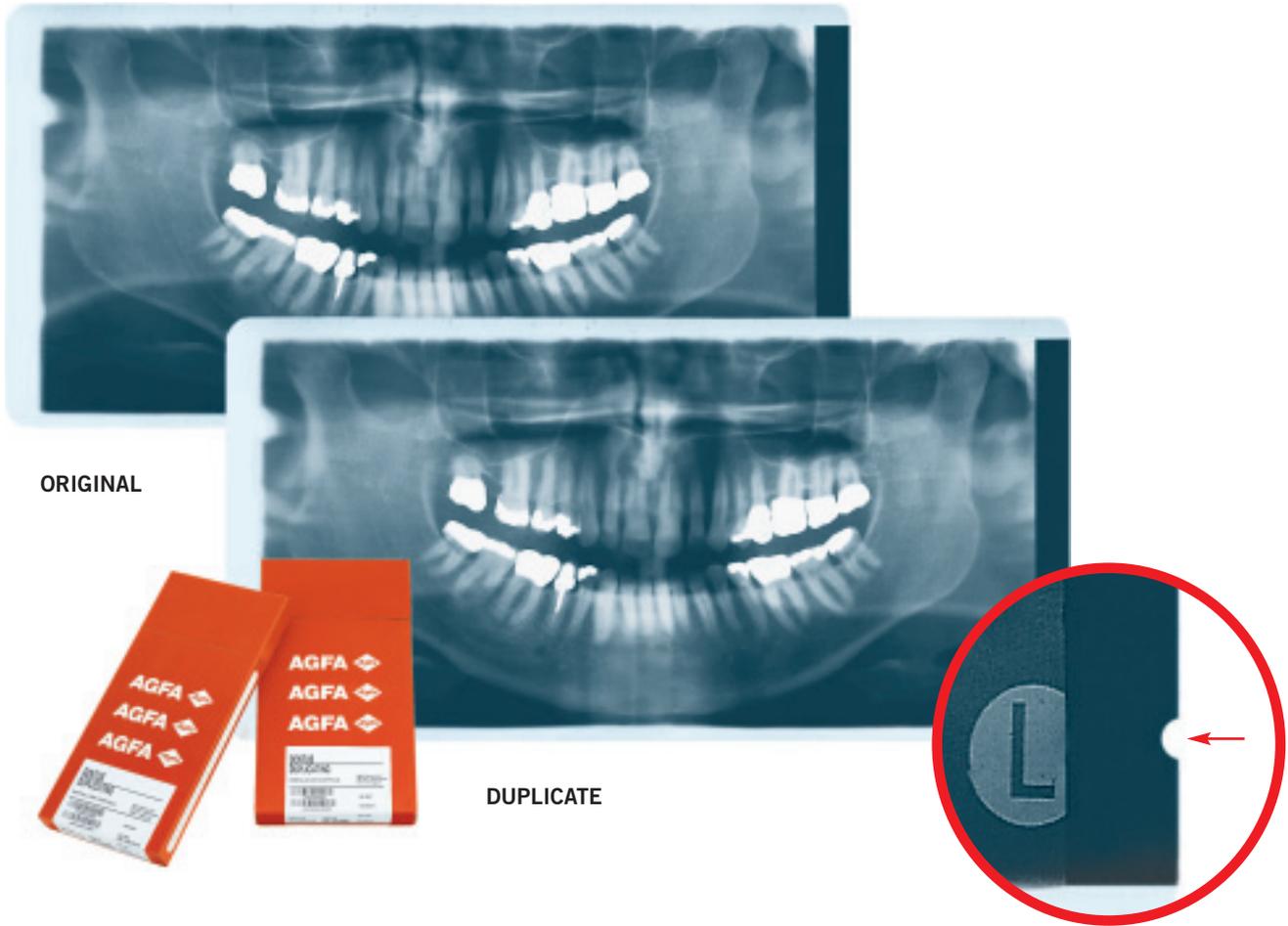
Agfa Dentus Duplicating Film can be used in any conventional dental X-ray processing system (minimum total processing time: 90 sec.). Suitable for both manual and automatic processing techniques.

### Film Speed

Agfa Dentus Duplicating Film is a direct reversal film. This means, the longer the exposure, the lighter the duplicate will be. The image will be darker with shorter exposure time.

The speed value is adjusted for use in standard X-ray copy printers.

# For the reproduction of extraoral films



To recognize the emulsion side of the film there is a double notch at the edge of each sheet. The emulsion side is facing the user if the double notch is shown at the right hand side.

# Agfa Dentus® Ortholux Cassette

## Patented magnetic pressure contact for top quality images

A patented magnetic contact system presses the screen onto the film firmly and homogeneously to guarantee high definition images.

The orthochromatic (400 class) green-emitting intensifying screen is coated with a special scratch-resistant, protective layer to prolong its serviceable life.

This new type of intensifying screen minimizes the crossover effect considerably and produces even higher definition images.

## Less radiation exposure

The very low rate of radiation absorption by the plastic used ensures that the exposure of the patient to radiation is kept to a minimum.

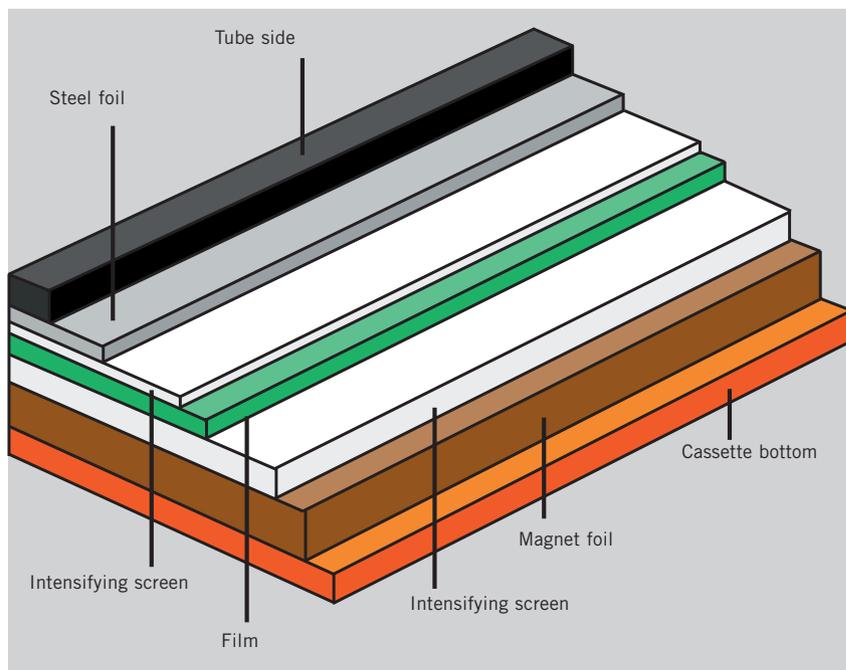
## Plastic Housing

The plastic construction weighs about 1/3 less than conventional film cassettes. The non-sensitive, shock- and scratch-resistant housing with edge protectors ensures a long service life. Easy to use smooth-sliding spring hinges provide easy opening and secure closing of the cassette.

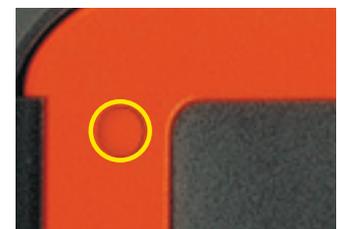
## Visual and touch film indicator

with the cassette closed it shows whether a film is inserted (e.g. in the darkroom). Missing or double exposures are thereby prevented. Scribor holder for patient data exposure strips. L/R markings on the intensification sheet.

The Agfa Dentus Ortholux-Cassette was developed for using extraoral X-ray films easily and safely. This stable cassette is made of high tech plastic and weighs approx. 1/3 less than conventional film cassettes. The rugged, impact and scratch resistant housing with edge protectors provides for a long service life.



1. Cassette without film



2. Cassette with film

# Easy handling for reliable diagnosis!

## Agfa Dentus Intensifying Screens

Green- or blue-emitting class 200 or 400 intensification sheets.

Agfa Dentus intensifying screens have a high degree of self-emission within their own sensitivity class and, when used with high class proprietary films within the same spectral range, produce high sensitivity values. This guarantees that patients are only exposed to relatively low radiation levels.

Agfa Dentus intensifying screens include high grade luminous materials made of "rare earths". This results in uniform and optimum image characteristics with high definition details. The long service life of Agfa Dentus intensifying screens is due to their special, resistant layer which safeguards the surface against mechanical effects and protects the luminous materials embedded in it. These intensifying screens are easily cleaned if contaminated.



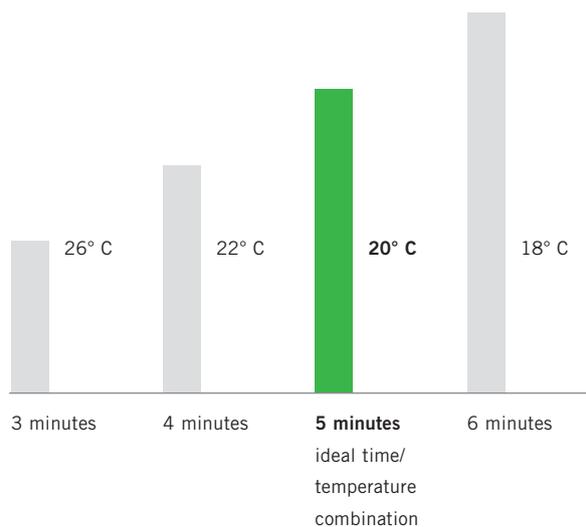
# Agfa Dentus® X-Ray chemicals

The combination of Agfa Dentus developer and Agfa Dentus fixer ensures high-quality images for both the intraoral and extraoral technique.

- Colour coding for developer and fixer
- Filling status indicator on the 1-litre bottle
- Free of glutaraldehyde
- Easy solution preparation for optimal processing
- Office-adapted pack sizes (1 litre and 125 ml)
- Fully recyclable polyethylene container



## Developing times dependent on bath



## Processing tips

Same temperature in developer and fixer bath recommended

- at least every 150–200 films (3 x 4 cm) or
- make up fresh solutions weekly (recommended)
- Avoid fogging and pre-exposure by
  - opening film packages (extraoral) and films (intraoral) under dark room conditions only
  - exposing films to suitable safelight for short periods only
- checking dark room conditions regularly to ensure ambient light is excluded

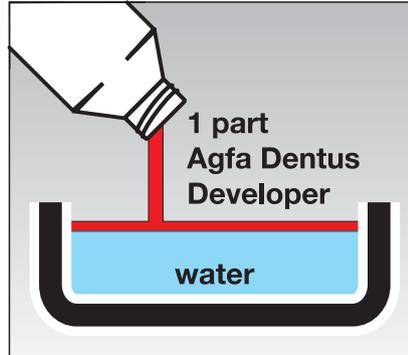
# for manual processing and hand basin facilities

N.B. it is important to pour the water in first and then add the chemical concentrate. Stir well and place lid on the tray or tank. Use different stirrer rods for developer and fixer.

## Processing in trays

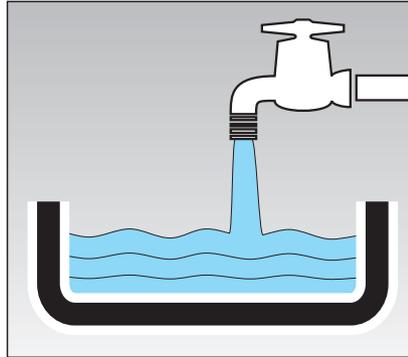
### 1. Developing Agfa Dentus D developer

1 part Agfa Dentus D developer (1 bottle) and 3 parts water for 500 ml of ready to use solution.



### 2. Intermediate wash

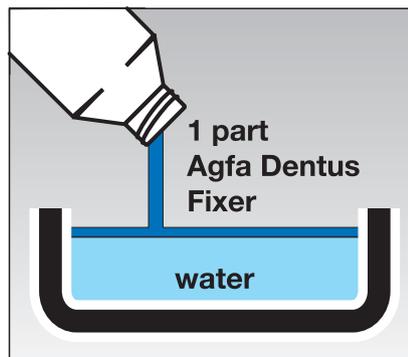
15 seconds under running water. Intermediate washing in running water prevents carry-over of developer into the fixing bath.



### 3. Fixing Agfa Dentus F fixer

1 part Agfa Dentus F fixer (1 bottle) and 3 parts water for 500 ml of ready to use solution.

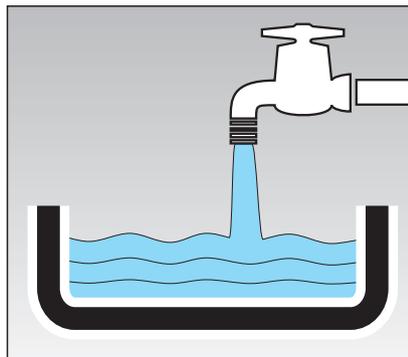
Fixing time: at least 2 min. (20° C)  
2 x setting time = fixing time



### 4. Final wash

To ensure radiograph quality required by law for archiving purposes: at least 10 minutes under running water.

The final wash removes residues and prevents discolouration during storage. Radiographs to be archived for less than 6 months: 3 minutes final wash is sufficient



## Processing in tanks

### 1. Developing Agfa Dentus D D-1000

1 part Agfa Dentus D-1000 developer and 4.5 parts water for 5500 ml of ready to use solution.

### 2. Intermediate wash

15 seconds under running water. Intermediate washing in running water prevents carry-over of developer into the fixing bath.

### 3. Fixing Agfa Dentus F fixer

1 part Agfa Dentus F-1000 fixer and 4.5 parts water for 5500 ml of ready to use solution.

Fixing time: at least 2 min. (20° C)  
2 x setting time = fixing time

### 4. Final wash

To ensure radiograph quality required by law for archiving purposes: at least 10 minutes under running water.

The final wash removes residues and prevents discolouration during storage. Radiographs to be archived for less than 6 months: 3 minutes final wash is sufficient.

# Agfa Dentus® Product-Outline

## Intraoral X-ray films

### Agfa Dentus® M2 Comfort (E/F – Speed)



Format	Unit	Part. No.:
2 x 3 cm	100 x 1 sheet	65031124
Children's size	double film 100 x 2 sheet	65031256
3 x 4 cm	150 x 1 sheet	65414615
Standard size	double film 150 x 2 sheet	65414623
5 x 7 cm	25 x 1 sheet	65870955
Occlusal film		

### Agfa Dentus® M2 Comfort (D – Speed)



Format	Unit	Part. No.:
2 x 3 cm	100 x 1 sheet	66009814
Children's size	double film 100 x 2 sheet	66009815
3 x 4 cm	150 x 1 sheet	66009817
Standard size	double film 150 x 2 sheet	66009818

## Extraoral X-ray films

### Agfa Dentus® M2 RP 6 (blue-sensitive)



Format	Unit	Part. No.:
15 x 30 cm	100 sheet	65780697
18 x 24 cm	100 sheet	65780700
12.7 x 30.5 cm	100 sheet	65780689
<b>Agfa Dentus RP 6 Cassette class 400 intensification</b>		
15 x 30 cm without L/R markings		66006150

### Agfa Dentus® Ortholux (green-sensitive)



Format	Unit	Part. No.:
15 x 30 cm	100 sheet	66000312
18 x 24 cm	100 sheet	66000313
12.7 x 30.5 cm	100 sheet	66000311

### Agfa Dentus® Ortholux Register (foldable for archiving)



Format	Unit	Part. No.:
15 x 30 cm	100 sheet	66002380

### Agfa Dentus® Duplicating (Copy Film)



Format	Unit	Part. No.:
15 x 30 cm	100 sheet	65038668
18 x 24 cm	100 sheet	65038684
12.7 x 30.5 cm	100 sheet	65038641

## Cassettes and Intensification Sheets

### Agfa Dentus® Ortholux Cassettes class 400 intensification sheets



Format	Part. No.:
<b>Agfa Dentus Ortholux – green sensitive</b>	
15 x 30 cm without L/R markings	66002011
15 x 30 cm with L/R markings	66002012
18 x 24 cm without L/R markings	66002013

### Agfa Dentus® Blue – Intensification Sheets class 200 or 400



Format	Part. No.:
<b>Agfa Dentus Blue 200 – blue emitting</b>	
12.7 x 30.5 cm	65299212
15 x 30 cm	65299220
18 x 24 cm	65299239
<b>Agfa Dentus Blue 400 – blue emitting</b>	
12.7 x 30.5 cm	65299166
15 x 30 cm	65299174
18 x 24 cm	65299204

### Agfa Dentus® Ortho – Intensification Sheets class 200 or 400



Format	Part. No.:
<b>Agfa Dentus Ortho Medium 200 – green emitting</b>	
12.7 x 30.5 cm	65769901
15 x 30 cm	65769898
18 x 24 cm	65769871
<b>Agfa Dentus Ortho Regular 400 – green emitting</b>	
12.7 x 30.5 cm	65769855
15 x 30 cm	65769847
18 x 24 cm	65769839

## X-ray Chemicals

### Agfa Dentus® X-ray Chemicals



Format	Unit	Part. No.:
<b>Agfa Dentus D,</b>		
<b>Developer Concentrate for dish development</b>		
125 ml x 10	10 units = 10 x 500 ml solution	65694510
<b>Agfa Dentus F,</b>		
<b>Fixer for dish development</b>		
125 ml x 10	10 units = 10 x 500 ml solution	65694502
<b>Agfa Dentus D-1000,</b>		
<b>Developer for tank development</b>		
1000 ml	1 litre = 5500 ml solution	65282194
<b>Agfa Dentus F-1000,</b>		
<b>Fixer Concentrate for tank development</b>		
1000 ml	1 litre = 5500 ml solution	65282259

# Notices

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