



## CR MD4.0 GENERAL PLATE

*Imaging plate for computed radiography with increased sensitivity and sharpness at low dose, ensuring improved image quality for dedicated applications.*

### Superior image quality

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### Exceptionally long lifespan

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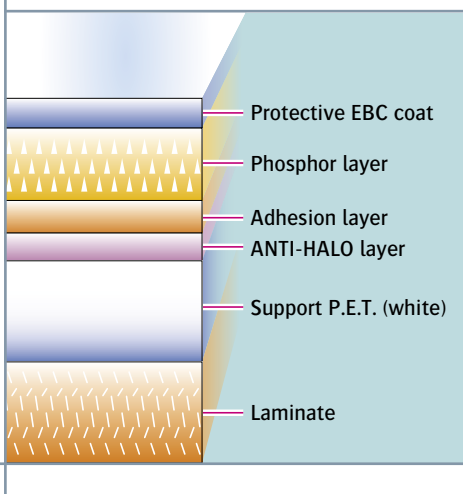
### Extremely wide dynamic range, eliminating retakes

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### Superior image quality

The CR MD4.0's storage phosphors feature high absorption efficiency, excellent homogeneity and short response time. The latter means that the previous pixel is fully faded before the next one is stimulated. As a result, a higher level of sharpness at all spatial frequencies is attained.

Agfa's EBC top-coating technology provides a smoother plate surface, giving improved signal-to-noise ratios. The anti-halo layer is an Agfa-patented blue layer that forms a perfect barrier against laser light, while letting through the stimulated light. The increased sensitivity and sharpness at a low dose make the CR MD4.0 imaging plate especially suitable for dedicated applications.



# CR MD4.0 GENERAL PLATE

## Exceptionally long lifespan through

- EBC top-coat protection
- Adhesion layer improving the imaging plate's stability
- Absence of forced bending of the imaging plates by the CR reader



**Fully compatible with ADC MD30 and ADC MD10 plates.**

## Extremely wide dynamic range

- Larger choice of patient dose possible
- A single exposure suffices to obtain all diagnostic information

## *Long lifetime*

CR MD4.0 general imaging plates are protected by an EBC (*electron-beam-cured*) top coat.

EBC topcoating is an Agfa-proprietary technology for hardening a pre-polymer lacquer coat into a high-density polymer shield that protects the phosphor layer. This results in plates that feature superb resistance to mechanical wear and extensive immunity to chemical cleaning solutions.

A new adhesion layer is an additional improvement for the imaging plate's stability. This guarantees its superior durability, especially when Agfa's CR Phosphor Plate Cleaner is used for plate maintenance.

Finally, the CR reader handles the imaging plates without any forced bending, further contributing to their exceptionally long lifespan.

## *Downward compatibility*

Each CR MD4.0 imaging plate is identified by a code on the back. The CR MD4.0, ADC™ MD30 and ADC MD10 can be used together without any problem.

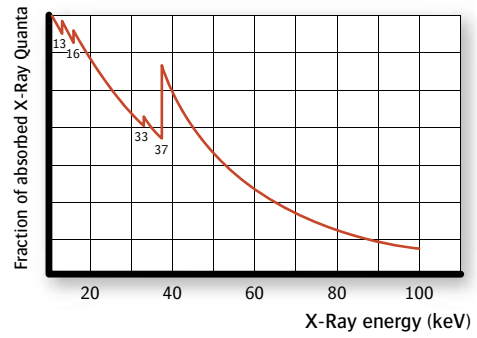
## *No more retakes*

The storage phosphors on the CR plate have an extremely wide dynamic range.

This results in high tolerance conditions and a larger degree of freedom in selecting the patient dose.

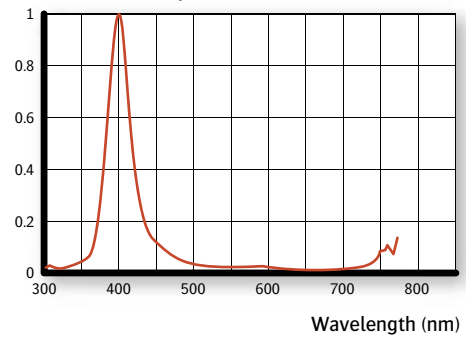
Furthermore, in many cases the wide exposure latitude of the CR MD4.0 imaging plates allows the visualization of all diagnostic information with a single exposure - e.g. bone and soft tissue. Both of these features have the effect of drastically reducing the retake rate. This way, the use of CR MD4.0 imaging plates leads to a substantial reduction of the population dose load.

### Spectral absorption curve

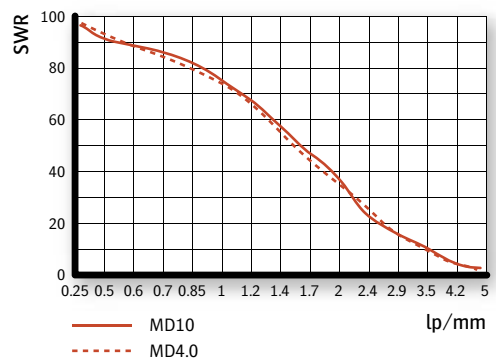


High absorption efficiency, with typical sudden increase at the Br, Sr, I and Ba K-edges of 13, 16, 33 and 37 keV

### Spectral information curve luminescence Spectrum



### Sharpness - ADC MD10 versus CR MD4.0 SWR for all frequencies



## > TECHNICAL SPECIFICATIONS

### Requirements

- ADC ID Software 1.1.09 or higher (Unix®)
- ADC ID Software version 2.0 or higher (Windows®)

### Sizes

- 18 x 24 cm
- 18 x 43 cm
- 20 x 40 cm
- 24 x 30 cm
  
- 35 x 35 cm (14 x 14")
- 35 x 43 cm (14 x 17")
- 15 x 30 cm
- 8 x 10"
- 10 x 12"

### Phosphor composition

- BaSrFBrl:Eu
- Typical luminescence 400 nm

### Image retention

- Readout is recommended within 1 h after exposure.
- Two hours after exposure 70% of the stored energy is still present with no visible loss of information upon readout.
- Image retention still exceeds 45% after 24 h.

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