CRYSTAL IP™
CRYSTAL CLEAR IMAGES

Next Generation Phosphor Screen Technology

Ultra-High Resolution
50% less dose
Reduced Scatter

Crystal IP™ imaging plates are the next evolution in phosphor screen technology. This advanced imaging detector uses needle-shaped crystals positioned side by side resulting in a greater packing density and more efficient x-ray absorption in the active area. The crystals are specially grown inside a vacuum chamber using a method known as physical vapor deposition (PVD). During the slow-grown process of PVD, the crystals become long, slender needles that can achieve a much higher x-ray absorption at a much faster rate. This combination results in clearer, more accurate diagnostic images at a much lower dose than standard CR cassettes.

Crystal IP is incredibly efficient. It provides up to 50% less dose, lower noise, reduced scatter, and increased eraser speeds that result in faster overall cycle times. In addition to the time saved during image acquisition, Crystal IP images offer improved spatial resolution, contrast to noise ratio, and requires less laser power that increases the life of your CR reader.

Faster Eraser Speed Resulting in More Images Per Hour

Improved Contrast-to-Noise Ratio

Improved Spatial Resolution

www.iCRco.com

iCRco

CRYSTAL IP™
CRYSTAL CLEAR IMAGES

Next Generation Phosphor Screen Technology

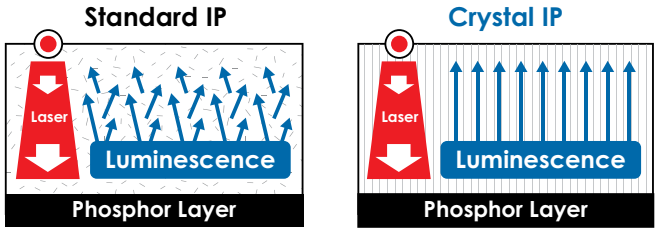
Provides up to 50% LESS DOSE, LOWER NOISE, REDUCED SCATTER, and INCREASED ERASER SPEEDS.

Advantages over Standard Phosphor Plate:

- Dose Efficiency (50% more dose efficient)
- Lower Noise
- No Grid Required
- Better Erase Efficiency
- Faster Eraser Speed for More Images Per Hour
- Less Scatter
- Improved Spatial Resolution
- Improved Contrast-to-Noise Ratio
- Lower Stimulation Energy with a Deeper Read-Out
- Lower Laser Power Increasing Scanner Life

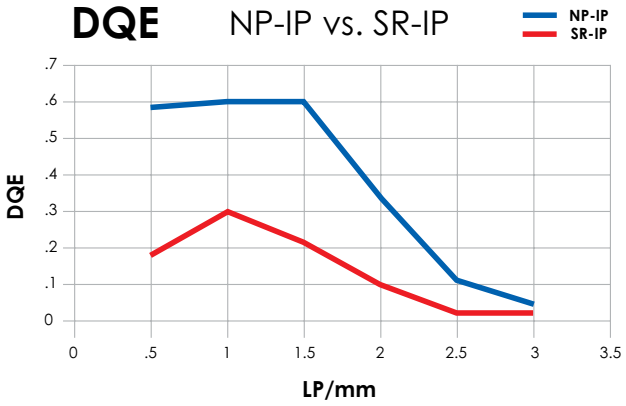
Needle Phosphor is excellent to use for:

- Pediatric and Neonatal Applications
- Extremities
- Mammography
- General Radiography (Chest AP, LAT etc)
- Equine Radiology



The needle-shaped crystals effectively store the x-ray energy in a more precise and accurate way, essentially working as light guides. During light guide transfer, the crystals emit blue light directly into a photomultiplier tube (PMT). A filter in front of the PMT absorbs the reflected laser light and transmits the crystal phosphor emission light. In the PMT, the light signal is transformed into an electrical signal, amplified, and digitized into an amazingly clear diagnostic projection.

Crystal IP will bring clarity to your studies in ways that were never formerly possible allowing for more precise diagnosis and effective treatment plans for your patients.



26 COROMAR DR., GOLETA, CA 93117 | TEL: 310.921.9559 | FAX: 310.542.7236 | WWW.ICRCO.COM | INFO@ICRCOMPANY.COM