

PF-FILMS

Process Free X-Ray Films for NDT and Security Applications

"Specifically designed to meet the current demand for security and very small thickness industrial x-ray imaging applications"

Properties

- Self-developing, no need for processor equipment
- Safe to use in the light, no more fumbling in the dark
- Shoot and see, no additional equipment required
- No limitation to film orientation, no non-imaging edges
- Watch the image appear in real time
- Observe the results with the film "in place"
- No more wasted under- or over-exposures
- Custom size, easily cut and shaped to meet the needs

Applications

- For faster, easier, more convenient and less costly x-ray or isotope imaging. Particularly effective in field applications and remote environments
- Security application
 - Suspicious packages
 - EOD
- Non-destructive testing
 - Electronic circuit
 - Welding

Advantages

- Stand alone image tool
- No screens required
- No cassettes required
- Self developing in real-time
- Resolution better than 10 micron
- Robust - water and scratch resistant; usable in daylight from -40°F to 140°F
- Stable in real world environment with shelf life > 1 year
- Roll or sheet films are easily cut to custom shapes
- No wasted films – watch in for the optimum image to appear in real time



Figure 1 : Process Free Films

Developed images (0 seconds for A and 300 seconds for B with CP 120B at setting 120 kV and 1 mA from a distance of 4.5 ft) showing the inside of a laptop computer.

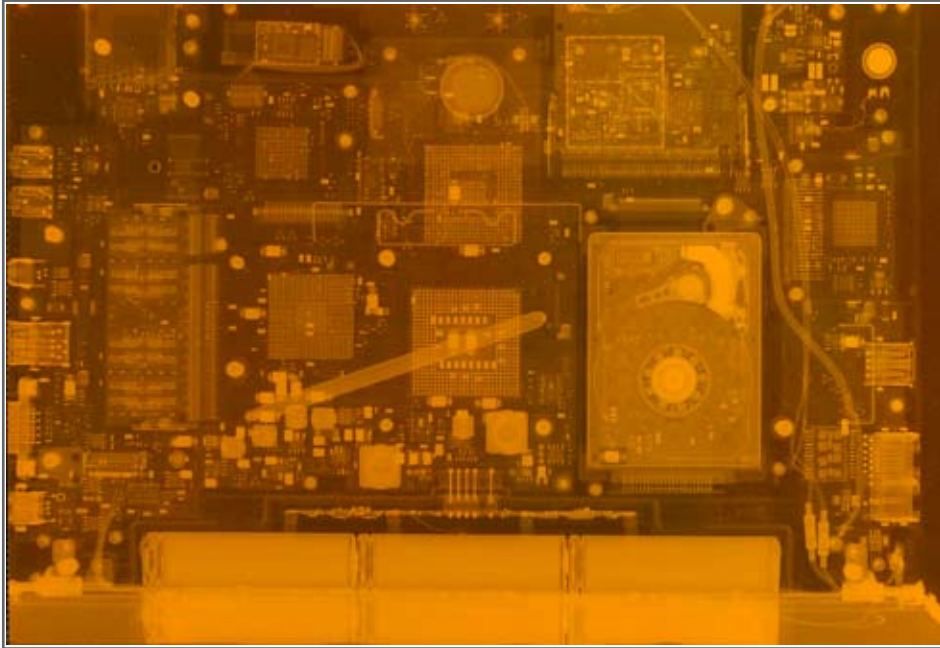


Figure 2 : Unknown packaging inspection using a PF-Film



Figure 3 : Developed image after shooting with a CP120B

Figure 3 : Scanned x-ray images obtained on the above exposed unknown package



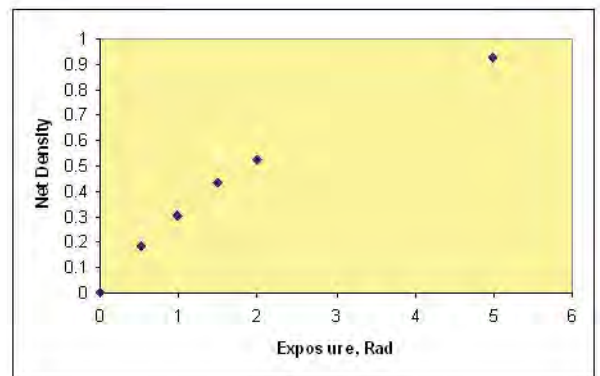
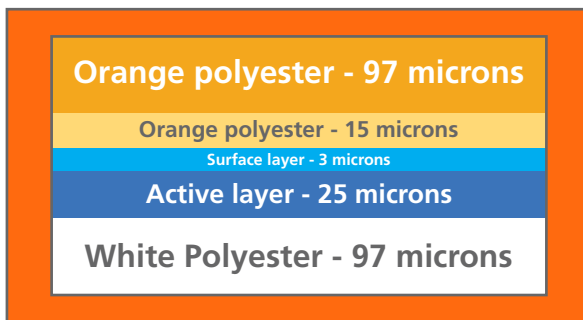
Sensitivity of PF-Films

The response of a PF film is dependent upon the output spectrum of the x-ray generator or the type and strength of the isotopes as well as the thickness and composition of the object to be imaged. The user dependent contrast and detail required for the specific task will also determine the exposure needed. Users should determine the dose-density response pertaining to their specific situation.

Figure 4 : Configuration and H/D curve of the PF-Film

The graphic below shows the film configuration and the H/D curve obtained using an industrial cabinet x-ray unit. The film was exposed at 120 kVp with 1 mm copper filter. The image density was measured with an X-Rite 310T equipped with a reflection adapter.

Film Configuration



Availability : 10" x 12" sheets or 20" x 300' rolls or any other custom size

Contact your regional distributor:



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