FOMADUX RX-8

SPECIAL INDUSTRIAL RADIOGRAPHIC FILM

General information

FOMADUX RX-8 is an industrial radiographic film designed for non-destructive X-rays or gamma rays testing.

FOMADUX RX-8 possesses an extremely high X-ray sensitivity and medium contrast. In addition, FOMADUX RX-8 has a high sensitivity in the blue spectral region, and as such it is primarily intended for use in combination with intensifying screens.

Application

FOMADUX RX-8 is particularly useful in circumstances where its high sensitivity is beneficial, e.g. when radiographing thick-walled products and materials, building structures, and the like, or in situations where a very short exposure is a critical requirement. Its assets include the possibility of using it in combination with blue emitting tungsten intensifying screens and, in particular, with fluorometallic screens. Its use with lead screens is feasible as well.

Intensifying screens

The following fluorometallic screens are recommended for use with FOMADUX RX-8:
- Rennex UPW – 1,UPW – 2
- Agfa Structurix RCF
- Kyokko SMP 308
- Kodak Lanex Fast Screens

The use of fluorescent intensifying screens ($CaWO_4$) emitting in a region with a peak at approx. 420 nm is also possible.

Exposure with intensifying screens

The inverse relation (mA/time or time/distance), which is applicable to exposure to direct X-rays or behind lead screens, does not apply here. Therefore no universal intensifying factor valid in all exposure conditions can be identified.

Packaging forms

Darkroom packaging (KB)
Size: 30x40 cm interleaved (IF, FW) in boxes of 50 sheets .
Rollfilm packaging
- rollfilm with Pb, 60, 70 mm or 100 mm wide, 90 m long
- rollfilm BLR (Bulk Road Roll)

Other specific sizes or rolls can be obtained subject to agreement with the manufacturer.

Film base

FOMADUX RX-8 is coated on a dimensionally stable bluish polyester backing 0.175 mm thick. The two film surfaces are provided with protective layers against mechanical damage and electrostatic discharge

Darkroom illumination

FOMADUX RX-8 should be handled and processed under indirect safe yellow light (wavelengths 590 nm and higher). In view of the high film sensitivity it is recommended that the exposure time and the film-light source distance be tested in advance.

Processing

FOMADUX RX-8 is well suited to both manual and automatic processing.

Recommended baths for manual processing:

FOMADUX LP-T developer and developer-replenisher
(developing time 5 min/20°C, dilution 1 + 3)
FOMAFIX rapid fixer
FOTONAL wetting agent

Recommended baths for automatic processing:

FOMADUX LP-D developer-replenisher
(developing time 120 sec/28°C)
FOMA LP-DS developer starter
FOMADUX MIX hardening rapid fixer

FOMADUX RX-8 can also be processed in baths designed for processing industrial radiographic films from other manufacturers.

Adhere to the developing time of 100 seconds and temperature of 28°C when using Agfa baths for automatic processing (Agfa G135 developer), and the developing time of 5 minutes and temperature of 20°C when using Agfa baths for manual processing (Agfa G128 developer).

Sensitometric characteristic

220 kV/10 mA/8 mm Cu, automatic processing, FOMADUX LP-D developer, cycle 8 min/28°C, developing time 120 sec

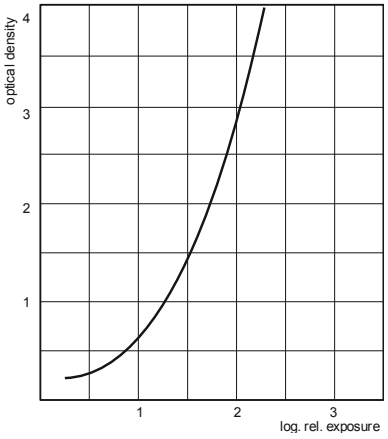

Table of relative exposure factors for NDT using FOMA films

The values are approximate and should be modified adequately in dependence on the exposure equipment and developing procedure.

Film type	Exposure factor
INDUX R2	4.5
INDUX R3	2.5
INDUX R4	1.8
INDUX R5	1.0
INDUX R7	0.6
INDUX R8	0.45
INDUX RX-8	0.3

Archiving of processed films

The manufacturer guarantees stability of the processed films for 50 years or longer provided that the following conditions are met:
- The films have been properly fixed and washed
- The films are stored at 10°C to 25°C, RH 30% to 50%, out of the reach of harmful gases.

Storage of unexposed films

Unexposed films should be stored in the vertical position in the original packaging in a dry and cold place at 10°C to 21°C and relative humidity 40% to 60%, out of the reach of any ionising radiation.

Exposed films should be developed as soon as possible.

The product has been produced and marketed in conformity with a quality system according to the international standard EN ISO 9001.

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