

FOMADUX NDT ROLLFILM

TECHNICAL RADIOGRAPHIC FILMS

Characteristics of the product

FOMADUX NDT ROLLFILM is a special confectioning form of technical radiographic film with designed for non-destructive material testing with use of X- or gamma radiation. The special form of the packaging ensures the film's resistance to light, humidity and greasy impurities.

The film is placed between two lead screens (thickness 0,025 mm) of the same dimensions; the screens are in perfect contact with the film; the film is packed in a light- and moisture-proof package – using the “edge to edge” system.

Usage

This kind of film is ideal solution for testing of long welds, e.g. welds of pipelines, pressure vessels or large parts in the aerospace industry, as the length can be chosen so that all the radiogram can be exposed to a single piece of film.

Packed film is wound onto a cardboard core and inserted in a transport box from which required length can be simply wound out. There is a print in the package axis on the side with folded edges; the print helps determine the film center and the film length. Contact of the film with a wet or impure object has no effect on the quality of the final radiograph.

How to remove the film from the package before processing: In a dark room hold the non-printed part of the package together with lead screen and the film with one hand and strip off the printed part of the package and the second lead screen with the other hand. Thus the film will be easily and quickly removed from the package.

Advantages of the rollfilm

The full length of the weld can be radiographed onto a single piece of film, i.e. we avoid using several film sheets for one weld. Required film length is determined according to the weld length. Further advantages:

- Using without cassettes
- Lightproof package is resistant to humidity and greasy impurities
- By single – usage films we avoid faults caused by their repeated usage
- Perfect contact between the film, lead screens and checked object ensures optimal quality of the image
- The “edge to edge” packing system allows optimal use of the film surface where there is not sufficient space for placing the film

Processing

FOMADUX is intended both for the manual and automatic processing.

Processing technology

Long films must be processed carefully. Generally it is possible to split the film after marking it and then to process it in the ordinary way or to fully exploit the advantages of the ROLLFILM package and to process it in full length.

- a) When machine processing it is necessary to ensure precise leading (by a suitable jig) of the film into the axis of the developing machine.
- b) In manual processing of ROLLFILM, prior to processing it is necessary to wind the film into a special wire coil that facilitates contact of the film with baths. It is also possible to split the film and to process it in parts in ordinary frames used for cell processing.

Recommended chemicals for the manual processing:

FOMADUX LP-T Developer and Developer-Replenisher
(5 minutes of developing time at 20 °C, 1 + 3)
FOMAFIX Rapid Fixer.

Recommended chemicals for the automatic processing:

FOMADUX LP-D Developer-Replenisher
(2 minutes of developer immersion time at 28 °C)
FOMA LP-DS Developer Starter
FOMAFIX + FOMAFIX H Hardening Rapid Fixer.

FOMADUX NDT ROLLFILM can also be processed in corresponding processing chemicals of other manufacturers, for example developer Agfa G135 for automatic processing 2 minutes of developer immersion time at 28 °C or for manual processing 5 minutes of developing time at 20 °C.

Archiving of processed films

The manufacturer guarantees the archival permanence of minimum 50 years when complying with conditions following:

- films must be perfectly fixed and washed
- films must be stored at a relative humidity of 30 to 60% out of reach of harmful gases.

Storage of unexposed films

Unexposed films should be stored in the original packaging in a cool, dry place (temperature ranging from 5 to 21 °C, relative humidity from 40 to 60 %), out of reach of harmful vapours, gases and ionizing radiations. Films stored in a refrigerator and a freezer should be acclimatized to room temperature for approx. 2 and approx. 6 hours respectively.

Exposed films should be processed as soon as possible.

Packaging

Rollfilm with Pb

- lightproof, humidity and greasy resistant
- sandwiched between two lead screens (thickness 0,025 mm)
- width 70 mm or 100 mm in length up to 90 m.

Rollfilm DW

- lightproof, humidity and greasy resistant
- without lead screens
- especially intended for works using low to very low radiation (<100 kV)
- width 70 mm or 100 mm in length up to 90 m.

Rollfilm BLR

- bare rollfilm
- intended for using in cassettes
- width 70 mm or 100 mm in length up to 150 m.

By using and processing of the product Indux R arise wastes, which is necessary to environmentally liquidate according to valid legislation.

Wastes:

- packaging foil : PET / AL / PE or PAPER / PE / PAPER
- Pb foil
- waste developers
- waste fixers

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