

# STRUCTURIX

## Quality Assurance Tools

### **Standard for control of film processing by means of reference values.**

To assist our customers in making sure the film systems render the expected capability in daily use, we refer to the standards for radiographic examination. EN444, ISO 5579, ASTM E94 and others specify that the user has to process the films in accordance with the conditions recommended by the manufacturer and pay special attention to monitor and control developing, fixing and washing.

ASTM E94 states: "To produce a satisfactory radiograph, the care used in making the exposure must be followed by equal care in processing. The most careful radiographic techniques can be nullified by incorrect or improper darkroom procedures."

Therefore ISO 11699 consists of two parts. ISO 11699-2 describes how the user should control his or her processing system. For instance, to guarantee the designed film system's performance, calibrated pre-exposed strips provided by the film manufacturer must be used.

We designed the STRUCTURIX Quality Assurance Tools, a set of practical, dedicated tools for the radiographer to control and prove compliance of his or her entire system.

# STRUCTURIX Certified PMC Strip (Process Monitoring Control)

The STRUCTURIX Certified PMC strip is a handy, fast and reliable tool for monitoring the quality of the film processing system and for proving compliance with existing standards on systems classifications.

## X-ray pre-exposed film strips

These X-ray pre-exposed film strips are produced under Agfa's Quality Management System (Q.M.S) conditions according to ISO9001-2015.

## Contents

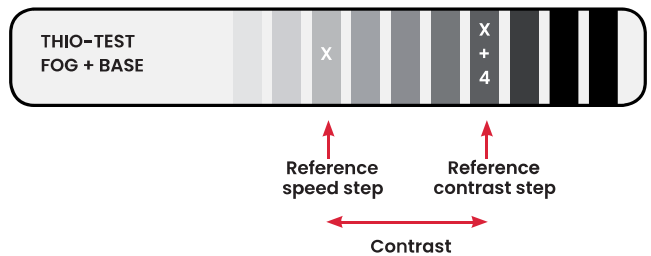
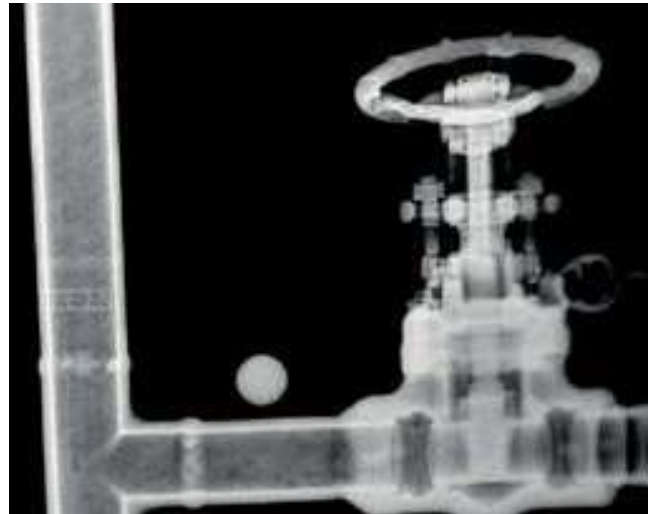
Every STRUCTURIX Certified PMC pack contains:

- 25 X-ray exposed, undeveloped PMC strips in individual daylight packaging. Each strip bears a unique serial (ID) number, even after processing
- A PMC chart to record test results showing compliance with the standards
- Detailed instructions for use
- A certificate for compliance with ISO 11699-2

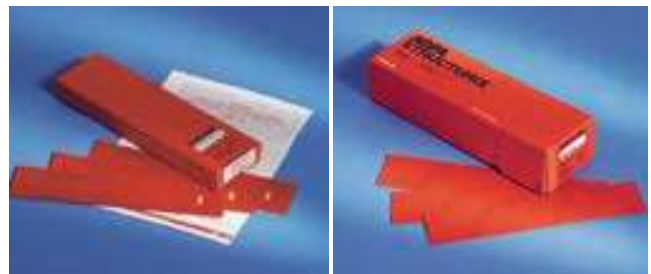
## Purpose

The purpose of these PMC strips is to:

- Demonstrate conformity with the certified STRUCTURIX standard film system, as defined in European standard ISO 11699-2
- Monitor the performance of the STRUCTURIX processing system, in order to guarantee consistent high quality
- Enable early corrective actions to be taken in case of deviations
- Be used on a day to day basis to provide control data as part of a quality management system (e.g. ISO9001-2015)



- Speed index  $S_x$ : average value of net densities of step X
- Contrast index  $C_x$ : positive difference of the average densities of step X and X + 4



STRUCTURIX PMC STRIPS without certificate that can be used to monitor the performance of the STRUCTURIX processing system in order to guarantee consistent quality. Every PMC pack contains:

- 50 X-ray exposed, undeveloped PMC strips in individual daylight packaging
- A PMC chart to record test results
- Instructions for use

## STRUCTURIX Certified DENSTEP

The STRUCTURIX CERTIFIED DENSTEP is a density step wedge film to verify the calibration of optical transmission densitometers used in the industrial X-ray field.

### Each STRUCTURIX CERTIFIED DENSTEP is:

- Packed in a light-tight waterproof package which protects it against moisture, dust, etc. Guaranteeing a shelf life of at least four years, 2 years from opening date of the first use (from date the package is opened)
- Provided with a calibration certificate and a copy of the BAM reference 8.3/8452
- The density values reported, cross referenced by serial number are traceable to BAM (Bundesanstalt für Materialforschung – und prüfung) through traceable calibrations of the instrumentation in accordance with ISO 5-2:2009 and ISO5-3:2009 approved Q.A. system. The calibration process is additionally verified by measurement of a BAM Film Step Tablet for diffuse optical Densities – BAM reference 8.3/8452



## STRUCTURIX THIO-Test

### Archivability check

The archivability of the processed film is evaluated by measuring the residual thiosulphate in the emulsion layers. The STRUCTURIX Thio-Test provides the means for performing the control of fixing and washing as described in ISO 11699-2.

### The STRUCTURIX Thio-Test kit consists of:

- the Thio-Test Color Stepwedge with four steps, which relate to the archivability expressed in number of years
- one dropper bottle of Thio-Test reagent, of 35 ml (about 1,000 drops)

The STRUCTURIX Thio-Test also correlates perfectly with other international standards (ISO/ ANSI) for determining the archival quality of industrial X-ray film. It is a quick and simple method to determine the “life expectancy” of processed films and warns of poorly fixed and/or washed films.



[www.waygate-tech.com/en/radiography-x-ray/film-and-film-equipment](http://www.waygate-tech.com/en/radiography-x-ray/film-and-film-equipment)

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