

STRUCTURIX Equipment



STRUCTURIX Processing Equipment

Our systems approach means your film processing options are fully compatible with STRUCTURIX chemicals and equipment.

After being X-rayed, each radiographic film needs to be processed before examining the film results. Depending on the place, situation and application, processing of the industrial X-rays films is carried out by manual or automatic processing. GE Measurement & Control provides the full STRUCTURIX Film Systems product line. Thus, complete solutions are available to choose the best way of processing your films in combination with STRUCTURIX chemicals and equipment.

All are perfectly suited to one another.

AUTOMATIC FILM PROCESSING EQUIPMENT

GE's processing equipment is renowned for its unwavering reliability and robust design. All STRUCTURIX film processors feature:

- **Perfect processing quality**

The design of STRUCTURIX processors is based on several decades of experience and know-how in dedicated industrial X-ray film processor design and construction. This, together with the use of state-of-the-art technology, explains why we can guarantee high quality film processing.

- **Minimum processing costs**

The precise control of replenishment ensures accurate chemistry consumption. A very minimum volume of water (as little as 13 l/m² with our ECO processors) is used during processing, creating a low ecological impact. The consumption of electricity is also low, due to the infrared drying system and other design elements such as the automatic switch to standby.

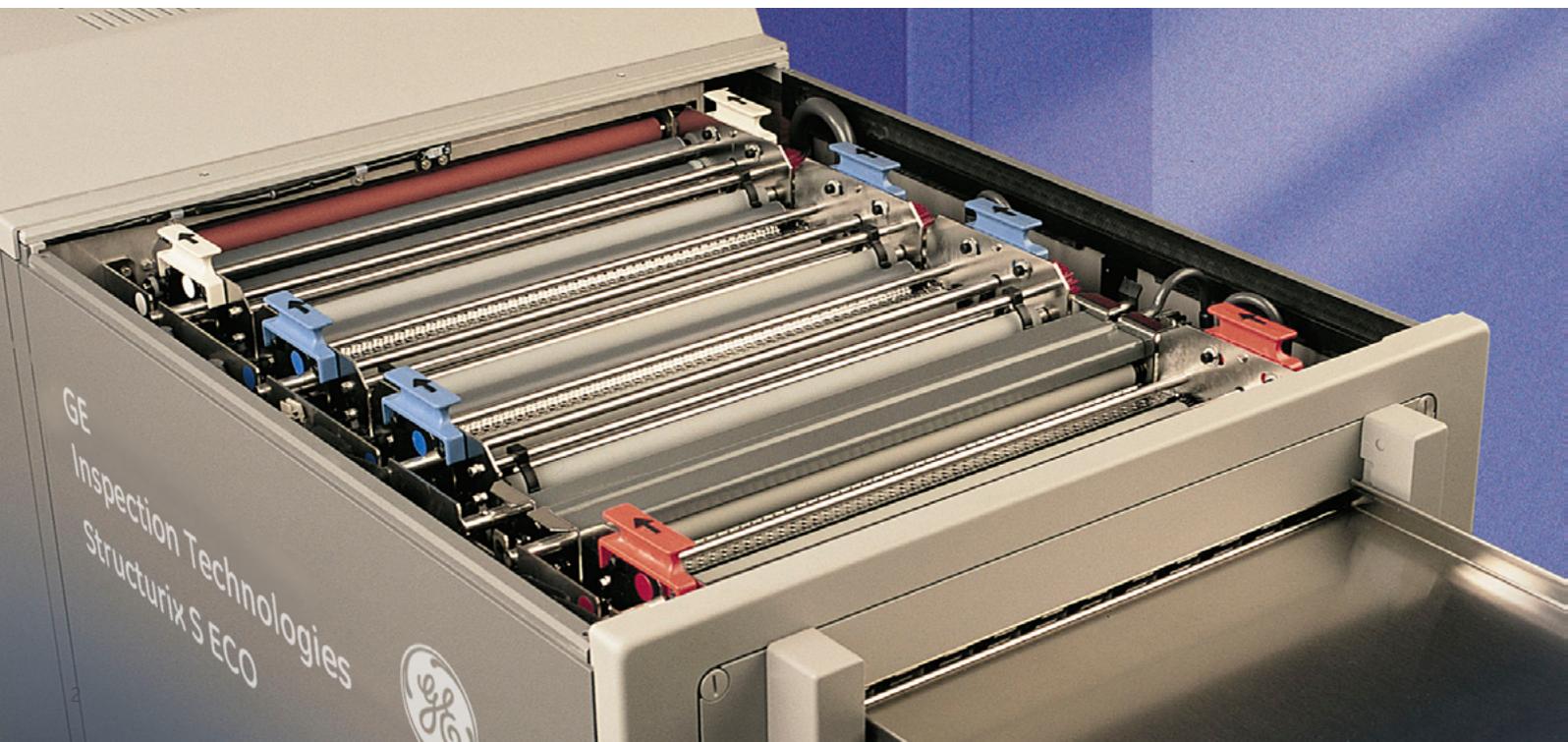
- **Low heat emission**

All GE processors feature infrared drying, which not only guarantees uniform drying of films, but also reduces the energy consumption and helps keep darkroom temperatures down. As such, a comfortable working temperature in the darkroom is more easily maintained.

- **Adjustable film receiving tray**

The film receiving tray of all GE processors can easily be adjusted to suit the kind of film size being processed, i.e., sheet film, welding formats or roll film. Processed films collect in the tray in the order of the film being inserted.

In addition, GE equipment is designed to meet all required safety regulations and are EMC compliant. All film processors are supplied with the CE, TUV GS and NRTL label as well as the CE Declaration of Conformity and are manufactured to ISO 9001 standards. These designations are continued proof of our commitment to quality and reliability.



Revolutionary 'ECO' or Cascade Fixing Processing Technology

The STRUCTURIX S ECO and M ECO are the future of ecologically responsible processing. These processing machines are designed to meet the strictest standards for silver content in wash water. Thanks to the unique cascade fixing system, the amount of silver in the wash water is 15 to 25 times lower than in a conventional processing system.

Cascade fixing

The 'ECO' or cascade fixing system is an entirely new concept for processing X-ray films. The STRUCTURIX S ECO and M ECO processors are built with two successive fixing tanks replenished on the counter flow principle.

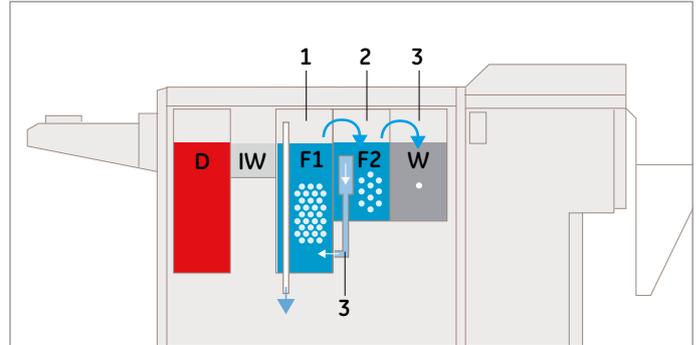
The result is nothing less than revolutionary in terms of the amount of silver in the wash water. The cascade fixing principle is very simple: the exposed film is first developed in the developer tank, then washed in the intermediate wash tank.

The intermediate washing system ensures that there is hardly any carry-over of developer into the fixing tanks, thus keeping the fixer bath in optimal condition. The intermediate washing also prevents development faults occurring on the film. The film is then 100 percent fixed in the first fixer tank and rinsed in the second fixer tank.

Since fixer replenishment is carried out in the second fixer tank, the concentration of silver in this tank remains very low. There is also very little carry-over of silver into the water tank, so that the waste water complies with the most stringent standards. Fixer replenishment works on the counter flow principle, with the first fixer tank being replenished from the overflow of the second fixer tank. An added advantage of this is that nearly all of the silver released in the fixing stage ends up in the overflow from the first fixing tank. This ensures optimum silver recovery.

The "cascade fixing" system ensures that the amount of silver in the wash water remains within the limit of <math><50 \text{ mg/m}^2</math>.

With the STRUCTURIX S ECO and M ECO, ecology goes hand in hand with economy.



- D** Developer tank
- IW** Intermediate wash tank
- F1** Fixer tank 1
- F2** Fixer tank 2
- W** Final wash tank
- 1** Overflow F1
- 2** Transfer of residues
- 3** Link between F1 and F2 in the direction of F1

STRUCTURIX S ECO



In addition to the unique advantages of the 'ECO' processing technology, the STRUCTURIX S ECO guarantees several other features. These include a large capacity, superior image quality, precise replenishment and minimum processing costs.

Large capacity

STRUCTURIX S ECO can be set to either a 5 or an 8 minute cycle. In both cases, the throughput of the S ECO is sufficient to meet the needs of large film users or companies with high production peaks. When set to the 5 minute cycle, the STRUCTURIX S ECO processes no less than 51 cm of film per minute or 78 films per hour of 35 x 43 cm. In this 5 minute cycle, the processor forms the basis for the "ECO Film System". In such a system, the STRUCTURIX film, chemistry and processor are all carefully matched to ensure the best possible ECOlogical results in terms of silver in the wash water while ensuring the lowest chemistry consumption and waste.

Superior image quality

STRUCTURIX S ECO is perfectly suited to applications that demand the highest image quality. The technology in terms of rack construction and roller configurations has proved its worth in previous processors. A microprocessor provides "smart" control of all process functions. This results in perfect, even drying of your films in all ambient conditions.

Precise replenishment

The surface area of the film is measured accurately on entry by 11 detection rollers. This unique method of scanning actually controls the replenishment far more precisely than a length only measurement, thus keeping replenishment usage to an efficient minimum.

Anti-crystallization cycle

The STRUCTURIX S ECO has a "drive cycle" or "anti-crystallization" cycle, which in stand-by mode activates the roller transport mechanism sporadically for short periods of time. This cycle keeps the energy consumption to an absolute minimum, while avoiding crystallization of chemicals on the rollers and, therefore, increases the life of the processor considerably.

Processing cycles

The microprocessor has seven pre-programmed processing cycles, varying between 1.5 to 12 minutes. These standard cycles can be set quickly and easily. Simply select the required cycle time on the display, and the other processing parameters such as development temperature, dryer level, fixing temperature and replenishment rates adjust automatically.

Customized processing

This feature allows you to manually adjust the processing speed from five to 12.5 minutes in steps of 30 seconds. Processing parameters can be locked and protected by a special password.

Reliable electronics

The STRUCTURIX S ECO is equipped with highly reliable electronics, designed to give security of operation. All processing parameters, including temperature, speed, replenishment quantities and drying capacity, are controlled by a microprocessor.

User Comfort

Multifunctional drainage system

The STRUCTURIX S ECO is equipped with three-way drainage valves. This makes it simple to direct photo-chemicals and cleaning chemicals to the correct collection tank. The valves also prevent the formation of toxic fumes in the waste chemical collection tank.

Easy maintenance

STRUCTURIX S ECO needs only an absolute minimum of maintenance. The top parts of the racks are easily removed and cleaned without having to take the racks out of the tanks. The STRUCTURIX S ECO is designed and built to facilitate regular cleaning of the film sensor rollers on the feed tray. The rollers can be reached easily by removing the feed tray. In order to prevent algae growth, the wash water is automatically drained when the machine is switched to "off".

Intuitive operating panel

The operating panel provides visual information about the processing parameters, including the current processing temperature, cycle time, dryer setting, replenishment quantities, the OK indication for film input and the remaining cycle time. As befits such a universal machine, there is a choice of 12 languages for the display messages. The temperature of the developer and dryer can be adjusted incrementally on the control panel to suit the processing program chosen.

Unique daylight system

When combined with the STRUCTURIX FEEDER, the S ECO becomes a unique and practical daylight system. The feeder automatically follows the film processing speed of the S ECO processor, even when the speed is altered. In cases where the STRUCTURIX S ECO is used without a feeder, an optional light-tight cover can be ordered.

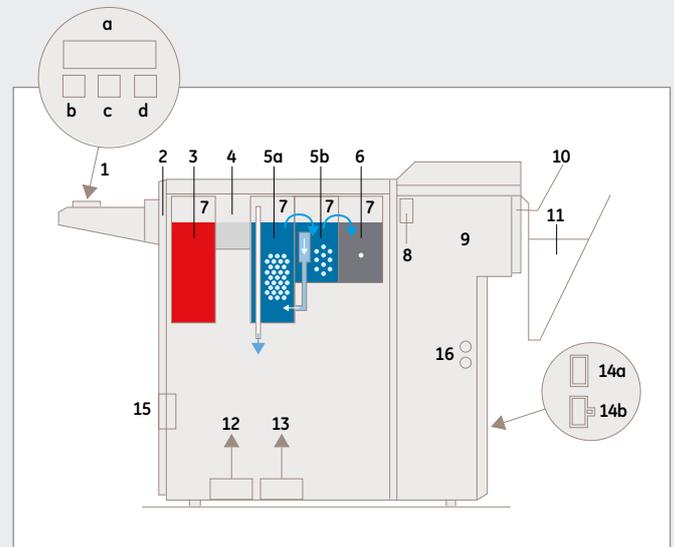
Accessories

- Light-tight cover
- Darkroom panel
- Two replenishment tanks of 30 litres with level sensor
- Water filter with cartridge

Peripheral equipment

- STRUCTURIX MIXER (50 Hz)
- STRUCTURIX FEEDER combined with a Flip-top magazine

The STRUCTURIX S ECO has been awarded by DIBT (Deutsches Institut für Bautechnik) for its overall quality and performance, a certificate numbered z-77,41-3.



Operating diagram:

- 1 Film feed table
 - a LCD display
 - b Menu selection
 - c Increase setting
 - d Decrease setting
- 2 Film area scanning
- 3 Developer tank
- 4 Intermediate wash tank
- 5 a Fixer tank F1
- 5 b Fixer tank F2
- 6 Final wash tank
- 7 Removable top rack parts
- 8 Distribution rollers
- 9 Infrared dryer
- 10 Film output
- 11 Film receiving tray
- 12 Replenishment pump for developer
- 13 Replenishment pump for fixer
- 14 a On/off switch
- 14 b Earth leakage circuit breaker (ELCB)
- 15 Three-way valves for draining the machine tanks
- 16 Overheating protectors for developer and fixer

STRUCTURIX M ECO

Compact and ecological



The STRUCTURIX M ECO is the most compact processor of the STRUCTURIX Eco Film Systems, suited to applications that demand the highest image quality while being ecologically responsible. The secret lies in the double fixing tank, the cascade fixing system - a unique concept in the tabletop processors range.

The ease of use and the problemfree maintenance make the STRUCTURIX M ECO an extremely user-friendly and reliable processor. It has been designed for consumers of small and medium quantity of film.

ECOLOGICAL Design

The STRUCTURIX M ECO lives up to expectations ecologically with:

- Revolutionary **cascade fixing** system which reduces the amount of silver in the waste water by a factor of 5 to 10.
- **Reduction of fixer replenishment** if the STRUCTURIX ecoFix is used.
- **Economical water and electricity consumption.**
- **Infrared drying** reducing the amount of heat produced in the darkroom to a minimum.
- **Optimal replenishment** system as a result of film surface scanning.
- **Intermediate washing** which ensures that there is hardly any carry-over of developer, keeping the fixer bath in optimum condition. This system also prevents development faults occurring on the film.
- **Design for Recycling**
Extra attention has been given to the selection of the materials in order to improve the recyclability. Materials or components which can disrupt the recycling process are easy removable.

A Recycling-Passport (RP) and Equipment Information Sheet (EIS) are available.

Exact Replenishment

The surface area of the film is measured accurately on entry by 5 detector rollers. This unique film area scanning ensures a precise economic, ecologic replenishment operation and reduced replenishment rates.

Minimal Running Costs

The accurate replenishment, as described above, implies low chemical consumption. In addition, during film processing only an ecologically justified volume of water is used and the consumption of electricity is particularly low due to the infrared drying system.

Accessories

- Table support
- Replenishment tanks of 30 litres
- Water filter with cartridge

Peripheral equipment

- STRUCTURIX MIXER (50 Hz)



A Smart Choice for Excellent Film Output

The STRUCTURIX M ECO is a compact film processor that occupies a minimal amount of space in your darkroom. The M ECO processor is versatile, in the laboratory or transportable in a mobile site darkroom. It processes sheet film as well as roll film up to any length.

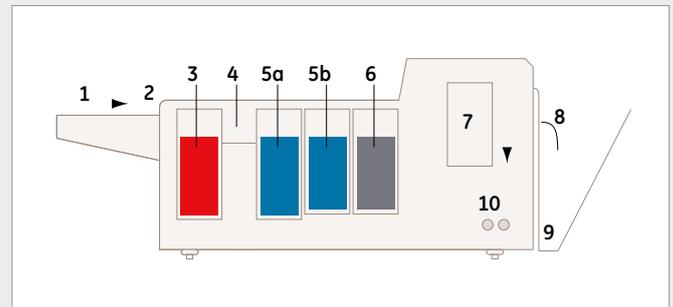
This processor appeals to environment-conscious companies of every size and activity where film image quality is of prime importance.

The M ECO is ideal for:

- on-site testing even with multiple processors which are easy to transport and use
- customers switching from manual processing to an automated system
- serving as a back-up system to provide flexibility in film solutions and to complement digital solutions
- situations where space is limited

Customized Features

- **Compact size**
Takes up only 0.56 m² of floor space.
- **Well-conceived, lightweight construction**
Constructed of stainless steel, aluminum and PVC to be corrosion resistant strong, lightweight and durable.
- **Easy to use**
Built with an automatic start/stop function. Film detection with five scanning rollers allow intelligent and economic replenishment depending on the processed film surface. The detachable control display provides visual reference of all process parameters (temperature, dryer settings). An OK light indicates when the next film can be inserted.
- **Easy to service**
Lightweight aluminum side covers enable fast access to the machine. Circulating pumps and racks are easy to remove, clean and service. The external water and chemical connections assure an efficient and separate drainage of the liquids.
- **Light-tight cover**
The standard light-tight cover allows the operator to perform other tasks while film feeding into the STRUCTURIX M ECO film processor is ongoing. It also prevents dust particles from entering the processor to help avoid scratches on the film.
- **Globally adaptable**
Comes with state-of-the-art electronics. Worldwide "plug and play" feature allows you to adapt it to any standard outlet, accommodating all voltages globally.



Operating diagram:

- 1 Film feed table
- 2 Film area scanning
- 3 Developer tank
- 4 Intermediate wash area
- 5 a Fixer tank F1
- 5 b Fixer tank F2
- 6 Final wash tank
- 7 Infrared dryer
- 8 Film output
- 9 Film receiving tray
- 10 Overheating protectors for developer and fixer

STRUCTURIX U

Universal Reliability

The high reliability of our processors and years of practical experience led to the development of this unique processor. Ease of use, ease of maintenance and the fact that it is suitable for almost every application combine to be the main advantages of the STRUCTURIX U.

Universal use

With the STRUCTURIX U, you have at your disposal the most universal processor from our selection. STRUCTURIX U combines simplicity, reliability and universal use in one processor. It is specially designed for customers who use medium-sized quantities of film. The STRUCTURIX U is very versatile and processes sheet film as well as roll film.

Offshore use

In response to conditions and the demanding requirements with regard to access time, an offshore version of the U processor is available. This STRUCTURIX U offshore version suits the specific offshore conditions and satisfies the demands with regard to processing time (90 sec.) and reliability. Easy trouble shooting and repair make this processor especially suitable for use on remote sites. Moreover, the built-in developer cooler allows operation in warm climates.



Reliable

The STRUCTURIX U is a dependable processor, no matter where installed. Built with solid components, the construction uses only simple and modern techniques.

User-friendly

Thanks to its functional design, the processor operation is easy to control. An audio and visual signal indicate when the next film can be fed into the processor. The dryer level and the developer temperature level can be set using simple steps.

Perfect processing quality

Three infrared drying units ensure uniform drying, in accordance with the principle of direct heat absorption. The fixer has its own heater element, which reduces the fixer warm up time considerably. This temperature control guarantees the film archival quality.

Selectable processing cycles

Upon delivery, the STRUCTURIX U is set at the cycle time of 8 minutes. An optional cycle time from 1.5 to 12 min. can be set quickly and simply by an approved service engineer.

Features	Advantages
<ul style="list-style-type: none"> Mainly electro-mechanical functions 	<ul style="list-style-type: none"> High functional reliability Not sensitive to voltage fluctuations (which can occur in an industrial environment)
<ul style="list-style-type: none"> Processing cycle time: choice between 5/6/7/8/9/10/11/12 min. 	<ul style="list-style-type: none"> Choice of development time while keeping the required image quality
For offshore applications choice between 1.5/2.5 min.	
<ul style="list-style-type: none"> Lower liquid level in the processor tanks Double liquid overflow (on both sides of each processing tank) 	<ul style="list-style-type: none"> Prevents the liquids from overflowing out of the tank Sufficient drainage for abnormal sea states or large movements
<ul style="list-style-type: none"> Extra floor closing plate and air filter 	<ul style="list-style-type: none"> Optimal protection from the intrusion of so-called offshore dust in the processor

Replenishment by area

Forward of the film feed slot five rollers accurately measure the surface area of the film. This unique film area scanning ensures a more precise economic and ecologic replenishment operation than if the film were only scanned lengthwise.

Automatic daylight feeding

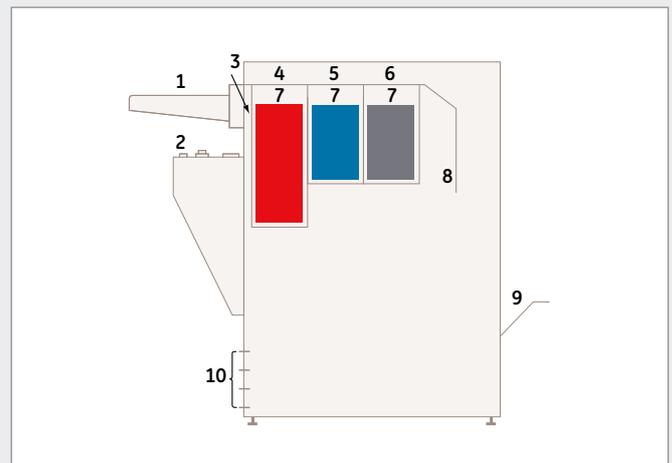
The STRUCTURIX U can easily be fitted with the STRUCTURIX FEEDER. Just remove the film feeding tray in a few seconds and connect the film feeding system in its place. With the feeder, you convert the STRUCTURIX U into a practical, automatic daylight film feeding system.

Accessories

- Darkroom panel
- Feed tray cover (light-tight)
- Two replenishment tanks of 30 litres with level sensor
- Feeder speed connection adaptor
- Water filter with cartridge

Peripherals

- STRUCTURIX MIXER (50 Hz)
- STRUCTURIX FEEDER (50/60 Hz) with flip-top magazine



Operating diagram:

- 1 Film feed table
- 2 Control panel
- 3 Film area scanning
- 4 Developer tank
- 5 Fixer tank
- 6 Wash tank
- 7 Removable upper racks
- 8 Infrared dryer
- 9 Film receiving tray
- 10 Processor drain

STRUCTURIX NOVA Compact Film Processor



The STRUCTURIX NOVA is a processor designed and built specifically for the industrial NDT testing environment. It is smart, robust, economical and automatic, and fills the gap in the market for a compact processor that can perform rugged NDT testing, while providing the quality of STRUCTURIX Film Systems and the features that users need.

Compact and portable

The NOVA is a tabletop processor that takes up just 0.40 m² of space and has been designed to be extremely light and transportable. Its stainless steel, aluminium and PVC construction minimise weight (80 kg for the basic model) and maximise corrosion resistance.

Versatile and economical

No matter what your field, the NOVA provides the ideal solution. For inspection companies which conduct on-site testing with multiple teams, the NOVA's compact size and light weight make it the natural choice. It offers manufacturing or testing labs a way to automate their manual processing at an affordable price. It also offers an excellent solution to companies which process 10 to 50 films per day. Finally, for companies who need the flexibility of a back-up processor which can complement their digital solutions, the NOVA is an ideal choice. The intelligent power management system ensures low power consumption (a maximum of 1,700 watts) and therefore significant cost savings over the processor's lifetime.

Adaptable and easy to use

The NOVA comes in one standard model with state-of-the-art electronics, and the worldwide 'plug and play' feature allows you to adapt it to any conventional outlet which accommodates any standard global voltage. The NOVA has an automatic stop/start function. Film detection with five scanning rollers means that

replenishment can be carried out economically and intelligently depending on the amount of film scanned. The control display gives the operator a visual reference of the processing parameters and an 'OK' light indicates when the next film can be inserted. The NOVA has been tested with the full range of STRUCTURIX films and chemicals so you can be confident of the optimum results in all conditions. The standard light-tight cover allows the operator to perform other tasks while film is being fed into the NOVA and also prevents dust particles from scratching the film.

Easy to service and upgrade

Lightweight aluminium side covers give easy access to the machine and the racks are easy to remove, clean and service. The circulating pumps are also easy to access and can be changed easily by the operator. Remote monitoring and diagnostics allow the service technician to connect the NOVA to his PC directly or remotely and to transfer all data quickly and reliably.

The optional package of product add-ons, the NOVA Comfort Kit, allows you to upgrade its performance quickly and easily. A water saving solenoid valve and replenishment pump permits the amount of wash water supplied to be linked to the surface area of the film entering the wash section. A water filter with cartridge filters particles out of the incoming water, thus guaranteeing excellent film quality. Two 30-litre replenishment tanks can be sited under the table, to save darkroom space.

The STRUCTURIX NOVA offers you a unique combination of portability and performance.

NOVA Comfort Kit

- Water saving solenoid valve
- Water circulation pump
- Water filter with cartridge
- Two Replenishment Tanks of 30 Liters

Accessories

- Table Stand
- Two Replenishment Tanks of 30 Liters
- Water Filter with Cartridge

Peripherals

- STRUCTURIX MIXER

STRUCTURIX FEEDER

Automatic Film Feeding Daylight System

Compact and time saving, the STRUCTURIX FEEDER converts the processors S ECO and U into a unique and practical daylight system. With the STRUCTURIX FEEDER, you can save time and expense in the darkroom. At the press of a button, you can feed up to 240 films an hour automatically!



Complete daylight system

The STRUCTURIX FEEDER acts as a perfect miniature darkroom, so that all further activities can take place in daylight, while automatically feeding film into the processor.

Reliable

When the feeder is switched to "on", it carries out a self-diagnosis. While in operation, built-in electronic checking functions guarantee high reliability. In this way, for example, a double film is detected, returned and fed in again separately, without intervention from the user.

Simple installation

Thanks to the easy detachable film feeding tables of the STRUCTURIX processors and the simple mounting system of the feeder, the processors S ECO and U are quickly and easily converted.

Multiple film sizes

Grouped per size and per project or work piece, our films can be loaded easily in any darkroom. All film sizes from 6 to 43 cm wide and from 12 to 48 cm long can be accommodated.

The handy film magazine, in which up to four film lanes can be set up, makes the STRUCTURIX FEEDER ideal for processing films of welds. Up to 240 films per magazine (four times 60 films/lane max.) can be loaded!

Film magazine

The FLIP-TOP magazine is best for highvolume processing of the same film size. Films from 6 x 18 cm up to 43 x 48 cm can be loaded without removing the FLIP-TOP magazine. This avoids repeated manipulation of the magazine, prevents wear and tear of the equipment and simplifies the operator's job.

Technical Specifications

	Without Film Magazine	With Film Magazine
Length	32/42 cm	63/78 cm
Width	53.5 cm	53.5 cm
Height	27.4 cm	27.4 cm
Weight	22 kg	25 kg
Power Supply	110 V-240 V, 50/60 Hz (Separate Mains Connection)	
Magazine Types	FLIP-TOP	
Film Sizes	Min. 6 x 12 cm*, Max. 43 x 48 cm	
Loading Capacity	60 Films/Stack, Max. 4 Lanes	
Priority Film Loading	Easy, Fast	
Use	Loading on the feeder, Non transportable	

* from 18 cm length on, loading without removing the magazine

STRUCTURIX MIXER

Timesaving and Standardized Chemical Mixing

The STRUCTURIX MIXER is a fully independent unit that relieves you of mixing chemicals. To use the STRUCTURIX MIXER, simply place the bottles on top of the mixer. The rest occurs automatically to save you time.



Compact and solid

The compact design of the STRUCTURIX MIXER means it requires very little space. The materials used in construction of the mixer have been chosen for greater strength and enhanced resistance to chemicals.

Reliable and user-friendly

With the STRUCTURIX MIXER, you can count on your chemistry being mixed in a consistent manner, time after time.

The mixer provides both an audible and visible signal when the next chemicals should be prepared. You never come in contact with the chemicals, thanks to the bottles of concentrate having a safety seal which is only pierced when the bottles are set in position on the mixing machine.

The STRUCTURIX MIXER has a handy pumping system for transferring the chemicals from the mixer into the processor, for example, to refill the processor after maintenance.

The STRUCTURIX MIXER connects easily to your processor replenishment system in order to act as a replenishment tank.

Easy to clean

The templates are easy to clean with water. When the bottles of concentrate are emptied, two covers can be used to close the tanks.

In brief, the STRUCTURIX MIXER is a reliable and simple mixing unit that ensures optimal mixing of the developer and fixer solutions. It is a valuable acquisition for anyone seeking consistent, high-quality film processing results.

Technical Specifications

Dimensions	Length	71 cm
	Width	45 cm
	Height	73 cm
Weight	Empty	35 kg (With Storage Tanks Filled: 88 Kg)
	Developer Tank Capacity	20 l
Fixing Tank Capacity		20 l
Signal When Tank is Almost Empty		Audible and Visual Signal at 6.5 l
Filling Time		(max.) 15 Minutes
Cold Water Connection		Yes
Tap Water		5 - 30°C, Connection
Water Pressure		Min. 1.5 bar, Max. 3 bar
Power Supply		230 - 240 V / 50 Hz

STRUCTURIX DRYER

Fast and efficient film drying

The STRUCTURIX DRYER is an instrument that helps customers who process films manually.



Fast and efficient film drying

With the new STRUCTURIX DRYER, films dry more rapidly than in conventional drying cabinets. The drying process immediately starts with no warm-up time needed.

The unit is compact and takes up little space in either the stationary darkroom or mobile lab. The lightweight of the STRUCTURIX DRYER makes it easy to move or transport.

The new STRUCTURIX DRYER consists of state-of-the-art electronics that makes it easy to operate and service. The new dryer carries the CE label, GS and USA/Canada NRTL sign.

Easy to operate

The new dryer can be used worldwide. No matter where you plan your operations, the "plug and play" feature allows you to adapt it to any standard outlet, accommodating all voltages globally.

Drying temperature and processing time of the STRUCTURIX DRYER can easily be set and adapted to any circumstance. The introduction of step-less speed control enables an even better fine-tuning.

Excellent results

The manually and thoroughly processed film first passes through the wetting tank. The water comes from a 2.5 liter water bottle.

Most water is removed from the film by means of squeegee rollers prior to the drying section. The film is then hot air dried on both sides and collected in the adjustable film tray.

Technical Specifications

Dimensions	Length	60 cm
	Length With Extended Receiving Tray	83 cm
	Width	63 cm
	Height	35 cm
	Height With Bottle	45,5 cm
	Weight Empty	35 kg
	Weight With Storage Tank Filled	88 kg
Weight	Empty	24 kg
	Full (With Bottle)	27,5 kg
Power	Volts	200-240 V / 100-120 V
	Ampère	5,0-6,0 A / 10,0-12,0 A
Frequency	Hertz	50 Hz / 60 Hz
Consumption	Watts	1600 W
Maximum Film Width		37 cm

STRUCTURIX NDT Processors		STRUCTURIX Si	STRUCTURIX S ECO/Si	STRUCTURIX U	STRUCTURIX M ECO	STRUCTURIX NOVA
						
Preprogrammed Cycles		7	7	1	1	1
Optional Cycles		1.5 up to 12 min. (per 30 sec.)	1.5 up to 12 min. (per 30 sec.)	3 up to 12 min. (per 1 min.) OS-cycles: 1.5/2/2.5	1.5 up to 12 min. (per 1 min.)	1.5 up to 12 min. (per 1 min.)
Standard Processing Cycle		8 min.	8 min.	8 min.	8 min.	8 min.
Developer Immersion Time		100 sec.	100 sec.	100 sec.	100 sec.	100 sec.
Capacity (8 min. Cycle)	10 cm x 48 cm (4 Films Side by Side)	300 films/hour	148 films/hour	106 films/hour	92 films/hour	92 films/hour
		75 films/hour	48 films/hour	34 films/hour	30 films/hour	30 films/hour
Transport Speed		50 cm/min.	32 cm/min.	23 cm/min.	20 cm/min.	20 cm/min.
Film Sizes	Format min.	6 x 12 cm	6 x 12 cm			
	Width min.	3.5 cm	3.5 cm	3.5 cm	3.5 cm	3.5 cm
	Width max.	43 cm	43 cm	43 cm	43 cm	43 cm
	Length min.	12 cm	12 cm	12 cm	12 cm	12 cm
Dimensions	Length	162 cm	162 cm	120 cm	142 cm	119 cm
	Bottom	111 cm	111 cm	75 cm	86 cm	63 cm
	Width	71 cm	71 cm	68 cm	68 cm	68 cm
	Height	123 cm	123 cm	105 cm	59 cm	57 cm
	Surface on Floor	0.79 m ²	0.79 m ²	0.50 m ²	0.56 m ²	0.40 m ²
Weight	Empty	298 kg	285 kg	160 kg	104 kg	80 kg
	With Chemicals	426 kg	426 kg	250 kg	134 kg	110 kg
Power Supply	Amperage	16 A	16 A	16 A	16 A	8.5 / 7.5 / 6.5 / 7.3 A
	Frequency	50 Hz / 60 Hz	50 Hz / 60 Hz			
	Voltage	208 / 230-240 V	208 V / 230-240 V	200 V / 240 V	100 V / 120 V / 200-208 V / 230-240 V	100 V / 120 V / 200-208 V / 230-240 V
Tank Capacities	Developer Tank	37 l	41.5 l	24 l	10 l	10 l
	Fixing Tank F1	37 l	41.5 l	20 l	10 l	10 l
	Fixing Tank F2	27 l	29 l		9 l	
	Final Wash Tank	27 l	29 l	20 l	9 l	10 l
Standard Consumption	G135 Developer	900 ml/m ²	900 ml/m ²	900 ml/m ²	900 ml/m ²	900 ml/m ²
	G335 Fixer	700 - 1200 ml/m ²	1200 ml/m ²	1200 ml/m ²	1200 ml/m ²	1200 ml/m ²
	Water	13 l/m ²	13 l/m ²	13 l/m ²	13 l/m ²	13 l/m ²
Developing Temperature		28° C	28° C	28° C	28° C	28° C

ECO Film System at Standard (ECO) Cycle

ECO Cycle		8 (5) min.		8 min.	
Developer Immersion Time		100 (62.5) sec.		100 sec.	
Capacity 10 cm x 48 cm (4 Films Side by Side)		148 (300) films/hour		92 films/hour	
	35 x 43 cm	48 (75) films/hour		30 films/hour	
Transport Speed		32 (50) cm/min.		20 cm/min.	
EcoDEV Developer		900 (550) ml/m ²		900 ml/m ²	
EcoFIX Fixer		700 (700) ml/m ²		700 ml/m ²	
Water		13 l/m ²		13 l/m ²	
Developing Temperature		27 (29)° C		27° C	

Table above shows standard values at standard processing cycle unless differently indicated (modifications possible)

STRUCTURIX Eco Film System

The STRUCTURIX ECO Film System combines both economy in use and ecological responsibility. This advanced film system minimizes its impact on the environment with less chemistry consumption, higher film throughput and lower energy usage.

Choose from the STRUCTURIX Film System in 5 minute cycle (NDT S ECO) or the STRUCTURIX Film System in 8 minute cycle (NDT S ECO/M ECO).

Both are specially designed to meet the strictest standards for silver content in the wash water. The secret lies in the double fixing tank with which the system is equipped. This cascade fixing system ensures that the amount of silver in the wash water remains within the limit of <math><50 \text{ mg/m}^2</math>. Additionally the STRUCTURIX S ECO allows significant reduction in the chemistry replenishment rate.

STRUCTURIX Chemicals

Thanks to the intelligent composition of the chemicals, STRUCTURIX ecoDEV and ecoFIX, it is possible to reduce the chemistry consumption to less than 60 percent of the present reference levels while maintaining excellent sensitometric and physical characteristics. This drastic reduction in chemistry consumption translates into lower purchasing costs, while the smaller volume of developer and fixer waste leads to lower disposal costs. In fact, the higher concentration of silver in the fixer waste actually turns an expenditure item to an income item, thanks to silver recovery.

STRUCTURIX ecoDEV

The ecoDEV is a new two-part developer for universal use but specially designed for super fast processing, with the lowest possible replenishment rates while maintaining optimum developing capabilities. The hardener-free and boron-free ecoDEV has a minimal impact on the environment.

Replenishment rate 5 min. cycle: 550 ml/m^2 (S ECO)

Replenishment rate 8 min. cycle: 900 ml/m^2 (S ECO/M ECO).

The use of the starter solution, ecoSTART, is highly recommended when filling the developer tank. In this way, optimal sensitometric results are ensured from the start.

STRUCTURIX ecoFIX

The ecoFIX is a new boron-free, two-part fixer specially designed for super fast processing, with the lowest possible replenishment rates while rendering improved archiving results.

Replenishment rate: 700 ml/m^2 (S ECO and M ECO).



STRUCTURIX films D2 to D8



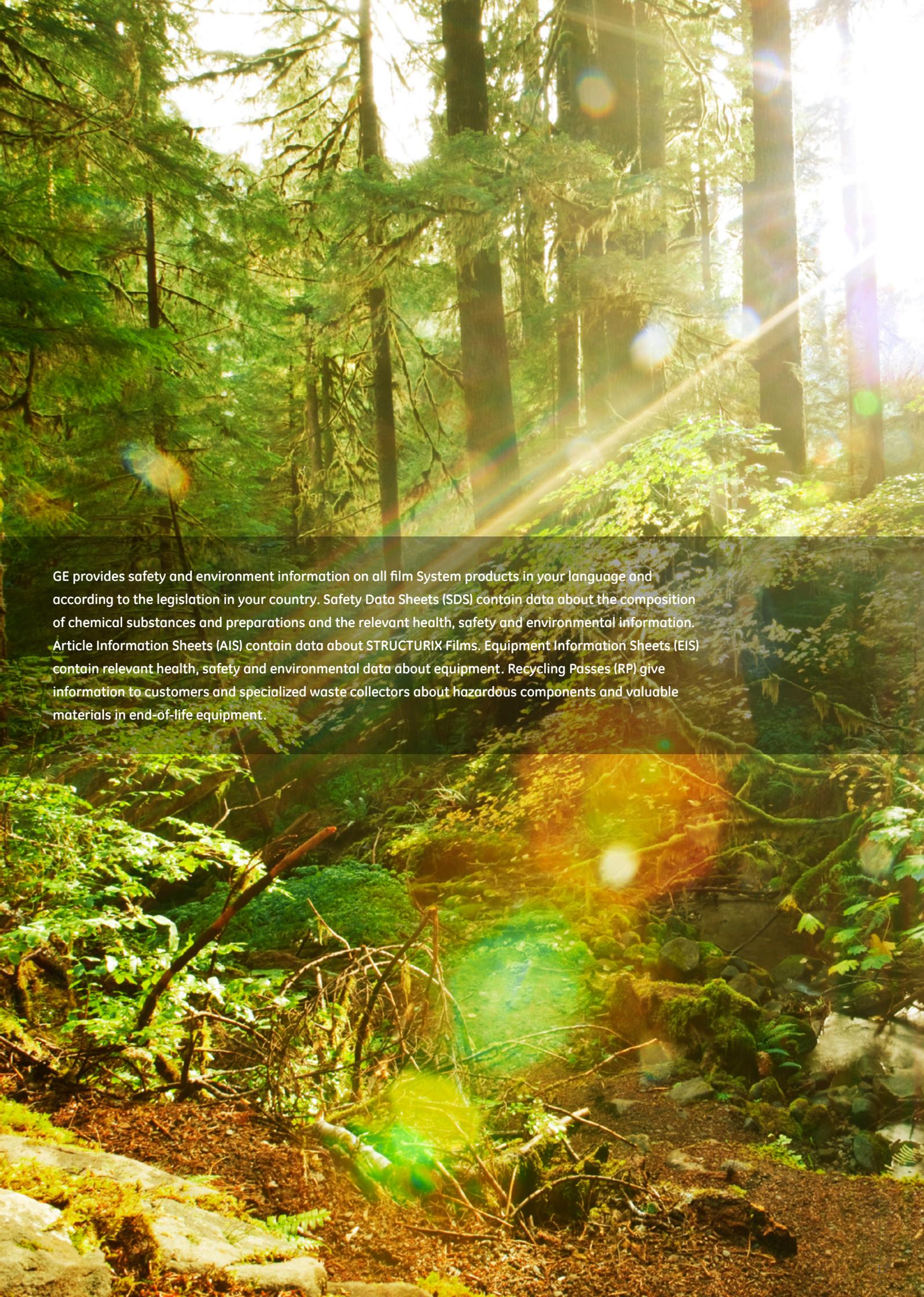
STRUCTURIX Eco Chemicals



STRUCTURIX M ECO



STRUCTURIX S ECO

A lush forest scene with sunlight filtering through tall trees and a mossy stream bed in the foreground. The image is split horizontally, with the top half showing tall, thin trees and the bottom half showing a stream bed covered in moss and fallen branches.

GE provides safety and environment information on all film System products in your language and according to the legislation in your country. Safety Data Sheets (SDS) contain data about the composition of chemical substances and preparations and the relevant health, safety and environmental information. Article Information Sheets (AIS) contain data about STRUCTURIX Films. Equipment Information Sheets (EIS) contain relevant health, safety and environmental data about equipment. Recycling Passes (RP) give information to customers and specialized waste collectors about hazardous components and valuable materials in end-of-life equipment.

STRUCTURIX Eco Film Systems

The STRUCTURIX ECO Film System in 5 minute cycle

This STRUCTURIX ECO Film System has all possible economical advantages and features to minimize its impact on the environment, including:

- Up to 60 percent higher film throughput capacity
- Up to 40 percent less chemistry
- Up to 40 percent less chemistry and packaging waste
- A considerable decrease in wash water replenishment rates
- Lower silver freights in the wash water
- Less energy consumption

A certified system

The STRUCTURIX ECO Film System is perfectly suited to applications that demand the highest image quality. It is certified according to the Industrial Film Systems Classification Standards EN 584-1, ASTM E-1815, ISO 11699-1 and JIS-K7627. The German Federal Institute, BAM, awarded the STRUCTURIX ECO Film System in 5 minute cycle the certificate of compliance to International Classification Standards.

STRUCTURIX films

The radiographic films D2, D3, D4, D5, D7, D8 can be used in this system. Adaptations have been made to harmonize the drying characteristics of this assortment.

Outstanding performance

When set to the 5 minute cycle, the STRUCTURIX S ECO processes no less than 51 cm of film per minute or 78 films (35 x 43 cm) per hour! ecoDEV immersion time: 62.5 sec. (5 min. cycle) at temperature 29°C.

The STRUCTURIX ECO Film System in 8 minute cycle

Compared to the STRUCTURIX ECO Film System with the S ECO installed in a 5 minute cycle, this system operates with the S ECO or M ECO in an 8 minute cycle.

This system also provides important ecological advantages, including:

- Reduction of the fixer replenishment
- Reduction of wash water
- Reduction of silver content in the waste water
- Less packaging waste
- Low energy consumption

A certified system

This STRUCTURIX ECO Film System is perfectly suited to applications that demand the highest image quality. It is certified according to the Industrial Film Systems Classification Standards EN 584-1, ASTM E-1815, ISO 11699-1 and JIS-K7627.

STRUCTURIX films

The STRUCTURIX films D2, D3, D4, D5, D7, D8 can be used in this system.

Superior performance

The STRUCTURIX ECO Film System in 8 minute cycle has a film throughput capacity of 32 cm/min., or 48 films (35 x 43 cm) per hour for the S ECO and 20 cm/min., or 30 films (35 x 43 cm) per hour for the M ECO.



STRUCTURIX Eco Film Systems Versus STRUCTURIX Standard Film Systems	STRUCTURIX ECO Film Systems		STRUCTURIX Standard Film Systems	
	5 Minute Cycle	8 Minute Cycle	8 Minute Cycle	
STRUCTURIX Equipment	S ECO	S ECO, M ECO	U, NOVA	
STRUCTURIX Films	All	All	All	
Film Throughput	<ul style="list-style-type: none"> • cm/min. • 35 x 43 cm Films/Hour 	51 78	32 (S ECO) / 20 (M ECO) 48 / 30	Depending on Processor Type Depending on Processor Type
STRUCTURIX Chemistry	<ul style="list-style-type: none"> • Developer Replenishment • Fixer Replenishment • Starter 	ecoDEV: 550 ml/m ² ecoFIX: 700 ml/m ² ecoSTART: 25 l/l*	ecoDEV: 900 ml/m ² ecoFIX: 700 ml/m ² ecoSTART: 20 ml/l*	G135: 900 ml/m ² G335: 1200 ml/m ² G135S: 25 ml/l*
Developer Immersion Time (sec)	62.5	100	100	
Temperature (°C)	29°	27°	28°	
Water Consumption Between	13 l/m ²	13 l/m ²	Depending on Processor Type 13 l/m ² and more	
Silver Freight**	< 50 mg/m ²	< 50 mg/m ²	300 - 600 mg/m ²	
Silver Concentration	<ul style="list-style-type: none"> • At Fixer Rate 700 ml/m² • At Fixer Rate 1200 ml/m² 	4 ppm 1 ppm	4 ppm 1 ppm	Between 25 & 50 ppm

* 1 ready to use.

** Values based on average radiographic densities.



www.ge-mcs.com/en/radiography-x-ray/film-and-film-equipment

GEIT-40007EN (05/14)

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