# Protec ECOMAX

# World's Simplest Automatic X-Ray Film Processor Simple, Reliable and Affordable



**Features & Benefits** 

- Lightweight, tabletop processor
- 100 second processing speed, leading edge to leading edge
- Energy and water saving design limits run time to when film is actually being processed
- Anti-oxidation and anti-crystallization programs result in chemical savings and outstanding image quality
- All components are easily accessible for service
- Simple microprocessor control about the size of a credit card
- Ingenious shallow tank design reduces chemical oxidation and results in cost and environmental savings
- Top film feed and top return for convenience
- New film transport rack design minimizes cleaning through reduced part count and ensures a smooth film path
- Quality polyurethane & rubber rollers for outstanding image quality and no artifacts
- 2 year warranty
- Meets ISO, IEC, CE, TUV, CSA & UL quality standards
- Made in Germany

The *ECOMAX* is the world's simplest automatic x-ray film processor. Designed with the end-user in mind, the *ECOMAX* is simple to install, operate and maintain. Plug & process is all you have to do!

The revolutionary design of the **ECOMAX** reduces energy, water and chemical use, saving the **ECOMAX** owner money while delivering outstanding quality images.

The *ECOMAX* is manufactured by Protec in Germany in compliance with DIN ISO 9001:2000, IEC, TUV, CE, CSA, and UL quality standards.

The **ECOMAX** sets the standard today for simple, reliable and affordable automatic x-ray film processors.

## **Standard Equipment**

- Comes complete and ready with all components for tabletop processing
- Levelling legs for uneven surfaces
- Spare parts kit
- 6.6 gallon (25 liter) replenishment tanks with filtering replenishment straws
- Floating lid for developer tank
- Water supply hose
- Tubing and hardware
- Installation, Operating and Parts Manual

# Protec ECOMAX

# Simple X-Ray Film Processor

## Minimum Darkroom Requirements

#### **Electrical**

- 115V, 50/60Hz, 15A Service (Operating Range 100-130V)
- 230V, 50/60Hz, 10A Service (Operating Range 200-250V)
- Energy use of 1.2 kWh during processing and 0.12 kWh in standby mode.
- · Dedicated line strongly recommended.
- Use of a multi-outlet adapter or extension cord will void the warranty.

#### **Water**

- Cold water only with recommended temperature between 41-86°F (5-30°C).
- Water connection of 3/4" with 29 145 psi (2 10 bar).
- Minimum drain diameter of 2 inches (5 cm) at a maximum of 12 inches (30.5 cm) above the floor.
- Water consumption of 0.26 gal/min (1.0 liter/min) during processing.
- Water consumption of 0.0 gal/min (0.0 l/min) in standby mode.
- In-line water filter strongly recommended when water supply contains contaminants or particulate materials.
- Do not use copper drain pipe or fittings. Use cast iron or PVC.

#### <u>Space</u>

- Actual dimensions 34.7" (88 cm) long by 26.4" (66 cm) wide by 17" (42 cm) tall.
- Please allow adequate clearance on sides, back and top of processor for ease of use, maintenance and service.



ECOMAX's simple film transport rack design is easy to clean and maintain

Film Processing Capacity Measured at 100 Second Processing Speed

10" X 12" (24 X 30 cm), 74 films per hour

14" X 17" (35 X 43 cm), 45 films per hour

#### **PRODUCT SPECIFICATIONS**

#### Film Size

4" x 4" (10 cm x 10 cm) min. to 17" (43 cm) X any length max. Will accept roll film

### Processing Time

100 seconds (factory set), leading edge to leading edge

#### Developer Temp

89.6 °F (32°C), adjustable

#### Replenishment

Rates adjustable either
460 ml per 10 sq. ft. (ml/m²) or
600 ml per 10 sq. ft. (ml/m²)
Anti-crystallization replenishment
is selectable off or on at 20
minute intervals

## Net Weight (Empty/Filled)

58.4/75 lbs (26.5/34 kg)

#### • Tank Capacity (D/F/W)

0.6/0.6/0.55 gallons (2.3/2.3/2.1 liters) in each section: developer, fixer, water

#### Film Drying

Warm circulated air, factory set to 140°F (60°C)

#### Chemical Storage

6.6 gallon (25 L) tanks 10 gallon (38 L) tanks optional

#### Film & Chemistry

Use standard medical x-ray film and chemistry formulated for automatic medical x-ray film processors.

Your Authorized FI Sales, LLC Dealer

RAYTECH DIAGNOSTICS

https://www.raytechdiagnostics.com/ sales@raytechdiagnostics.com 613-799-4171

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FI Sales is pleased to offer other x-ray film processors should the ECOMAX not meet your needs.

• OPTIMAX

90 second model for low to moderate film volume processing with a capacity of 75 films per hour

• OPTIMAX 2010-NDT

90 second variable speed model for industrial NDT film processing