

## ***Pre-Installation Checklist for the INDUSTREX M37 Plus FILM PROCESSOR***

---

### **Introduction:**

Carestream Industrex M37 Plus Processors are sold with installation provided (and required) by a Carestream approved installer. This is to assure proper installation, set-up of the processor and training of the operator(s) and service personnel.

Carestream will work with the installer and selling coordinate installation. The identified service provider or selling dealer will be responsible for assuring site preparedness and adherence to site requirements and specifications.

Attached is a checklist to be used for this purpose.

Please review the checklist and Site Specifications and Pre-Installation Guide and return it to Carestream as directed on the checklist.

Carestream will arrange and coordinate installation, which generally requires 2 days. One day for installation and a second day for proper set-up, training of operator and service personnel and system check out.

After the completed and signed Checklist is received by Carestream, installation can occur.

Proper installation of the processor and training is essential for proper operation and maintenance of the processor.

Thank you for your cooperation.

**David P. Reining**

*Senior Systems Engineer and*

*Industrex Processor Installation Coordinator*

## ***Pre-Installation Checklist for the INDUSTREX M37 Plus FILM PROCESSOR***

---

### **Site Inspection and Preparation:**

It is necessary for a qualified person at the customer facility to perform a site survey to ensure the working area and all services to and from the processor is prepared in accordance with the processor specifications and meets all local health and safety standards.

**IMPORTANT: This is intended as a checklist to verify proper site preparations prior to an installation. The customer must thoroughly read the SITE SPECIFICATIONS and DATASHEET for the CARESTREAM INDUSTREX M37 Plus Processor, prior to filling out the check list.**

**Check if correct. Record Values (such as incoming voltage). Note any exceptions.**

#### **1. Access:**

- Measure all access points from the door of entry at to the final position of the processor, to be sure the processor can be taken to and positioned in the selected working area without the need to disassemble any parts. If any disassembly is required this information to be then passed to the installation engineers before the processor is delivered.
- Doorways should be a **minimum of 31 inches (77 cm.)** wide.

#### **2. Darkroom Layout:**

- Clean area and darkroom with level floor, to place the processor.
- Through-the-Wall Installation requires the customer to prepare the opening and provide materials to adequately seal the opening for light-tightness.
- Service access of a minimum of 20 inches around the processor.
- Utilities (power, water, drain) including a sink and tempered water for cleaning
- Area for chemical replenishment containers and tempered water available for mixing
- Work surface for tools and servicing components of the processor

## ***Pre-Installation Checklist for the INDUSTREX M37 Plus FILM PROCESSOR***

---

### **3. Darkroom Environment and Ventilation Requirements:**

NOTE: Verify and adhere to local codes

- \_\_\_\_\_ Room Temperature: 59–72°F (15–22°C) ( )
- \_\_\_\_\_ Relative Humidity: 15 - 76% RH, non-condensing over operating temperature
- \_\_\_\_\_ Altitude: Maximum altitude 2424 m (8000 ft) above sea level.
- \_\_\_\_\_ Ambient Light: Room lighting should not exceed 450 lux (150 ft-candles) at the processor.  
The room must be capable of going completely dark when loading film into the processor.
  
- \_\_\_\_\_ Room Ventilation Volume—10 room air exchanges/hour with good airflow through the whole room  
66°C (150°F) maximum
- \_\_\_\_\_ Processor Exhaust: Exhaust duct from the building with an Adjustable Air Gap, 0.76–2.54 mm (0.03–0.10 in.)  
10.2 cm (4 in.) duct

Check local codes for venting requirements:

- If venting is not correct, fumes will corrode the equipment. Do not install the film processor or accessories if the venting is not correct.
- If the film processor is installed with an auto-feeder or if the feed table is located in the darkroom and the film processor is installed in a daylight location, the darkroom must have adequate pressure to ensure a positive airflow from the feed to the dryer to avoid condensation problems. The airflow is correct when the fumes are flowing out the film processor through the exhaust hose.
- If the ventilation is to be connected to the film processor, measure the negative static pressure in the exhaust duct.  
*Use a DWYER 460 AIR METER or equivalent instrument for measuring air-flow and negative static pressure is required to measure dryer exhaust*

## ***Pre-Installation Checklist for the INDUSTREX M37 Plus FILM PROCESSOR***

---

### **4. Plumbing:**

All plumbing requirements must comply with local and national codes. Do not use iron pipes. All drain material must be made of chemically resistant, non-corrosive material. Use PVC or the equivalent.

#### **Water Supply (Fresh):**

*Note: A mixing valve is recommended*

- \_\_\_\_\_ Temperature between 45–59°F (7°C - 15°C)  
NOTE: Water temperature above 59°F (15°C) requires a chiller.
- \_\_\_\_\_ Filtered, 10-micron water filter is recommended in the input water line.
- \_\_\_\_\_ Flow Volume 2.5 L/min (0.66 gal/min), used on demand only
- \_\_\_\_\_ Pressure of 29 – 116 psi (2–8 bars)
- \_\_\_\_\_ Location, accessible to both the processor and the replenishment tanks
- \_\_\_\_\_ Shut-off valve and a high pressure water hose with a 3/4 in. hose connection, used from the supply tap to the film processor water inlet solenoid, using a DVGW system or a pipe device (not supplied)
- \_\_\_\_\_ A separate tempered water supply is recommended for cleaning the processor and for mixing chemicals.

*Note: Recirculated/reused water is not allowed. Only fresh water.*

#### **Drains and Chemical Effluent:**

- \_\_\_\_\_ Size: 1.26 in. (32 mm) hose connection
- \_\_\_\_\_ Minimum diameter: 3 in. (7.6 cm) with no obstructions
- \_\_\_\_\_ Distance from the film processor: 60 in. (1.5 m)
- \_\_\_\_\_ Height from the floor: Top of the drain or drain containers must be lower than the bottom of the film processor.
- \_\_\_\_\_ Drain hoses should be free of bends and with a constant fall. The drain must be ventilated. A floor or wall drain may be used which should include an anti-siphon system. Do not use brass or copper drain lines.

#### **Chemical Effluent:**

- \_\_\_\_\_ The disposal of the effluent must comply with all local environmental safety codes and regulations. The fixer can be collected separately in a plastic container (storage tank) or directly connected to a silver recovery unit. The developer overflow can be collected in a plastic container.

*Note: Recycled Fixer or In-Line Silver Recovery is not permitted.*

## Pre-Installation Checklist for the INDUSTREX M37 Plus FILM PROCESSOR

### 5. Chemical Replenishment:

\_\_\_ Room for two 8 gal. (30L) replenishment containers (that are supplied with the processor).

### 6. Electrical Supply:

*Note: Consult the Processor Datasheet and Site Specifications*

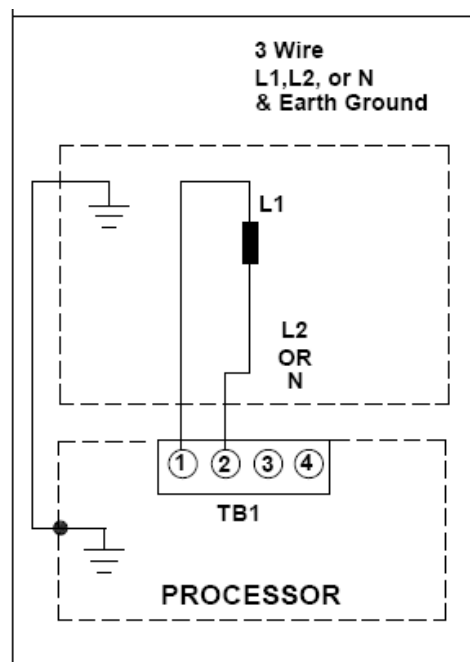
\_\_\_ Single phase, 230 VAC, 2.0 kW

\_\_\_ Separate 13 Amp fused socket with earth leakage protection is required.

\_\_\_ Appropriate plug for the power cord or wire directly, as per local code.



**Attention:**  
Only L1-N = 1 x 230V is connected.



**Pre-Installation Checklist for the INDUSTREX M37 Plus FILM PROCESSOR**

**Please return the completed form to indicate site readiness for processor installation.**

**Customer Information**

**Customer Name:** \_\_\_\_\_  
(Print clearly)

**Customer Address:** \_\_\_\_\_  
\_\_\_\_\_

**Customer Contact Information:** \_\_\_\_\_

**Customer Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Selling Dealer Information**

**Dealer Name:** \_\_\_\_\_  
(Print clearly)

**Dealer Address:** \_\_\_\_\_  
\_\_\_\_\_

**Dealer Contact Information:** \_\_\_\_\_  
\_\_\_\_\_

**Servicing Dealer Information**

**Dealer Name:** \_\_\_\_\_  
(Print clearly)

**Dealer Address:** \_\_\_\_\_  
\_\_\_\_\_

**Dealer Contact Information:** \_\_\_\_\_  
\_\_\_\_\_