

Pre-Installation Planning Notes:

1) Pre-Planning a processor installation site and preparing the expectant customer with the correct information are very important to ensure that the delivery to site, installation, operator training and product performance meet a customer's high expectations. The following points provide a check list for the site preparation and services prior to the processor being delivered and installed and make clear the customer's responsibilities

Site Preparation:

Once the sale is made it is then necessary for a suitably qualified person representing the service company providing the installation service, to visit the customer and advise upon the chosen or a suitable location for the processor and to carry out a site survey to ensure the working area and all services to and from the processor are prepared in accordance with the processor specifications and meet all health and safety standards.

Access:- To measure all access points from the door of entry at the customer site to the final position of the processor, to be sure the processor can be taken and positioned in the selected working area without the need to disassemble any parts.....if disassembly is required then the detail of this must be recorded and for this information to be then passed to the installation engineers before the processor is delivered.

Darkroom Planning:- A processor is normally designed for installation in 3 basic operating positions:- Free Standing in a Darkroom, Through-Wall with Darkroom Loading or Darkroom operating with access to the Film Delivery point within a daylight work room. A decision on this should be taken with the customer and the necessary dimensional information provided to cover any required site preparation i.e. darkroom apertures, floor weights, location and mounting positions of important service supplies..etc..

The customer must also be informed on ALL that must be done to ensure the darkroom and working area's are correctly ventilated/conditioned - that fresh air is supplied in accordance with the required air changes per hour, that the darkroom air pressure is correct to ensure airflow from "Dark" to "Light" working and a suitable air-exhaust facility is provided that will connect to the processor exhaust points to take the exhaust air to atmosphere under controlled pressure.

NOTE: Failure to correctly ventilate the film processor and dryer exhaust may cause corrosion inside the film processor, increasing the likelihood of processor-related film artefacts and making void any warranty claim made on parts damaged by corrosion.

Electrical Supply: The installation site should be prepared with the correct electrical supply power as required by the processor.....this as detailed in the pre-installation electrical consumer data provided for the processor. A qualified electrical engineer must provide and make the electrical power supply connection to the processor and meet all local safety standards.

Water Supply and Drains :-

The processor is designed for fresh water washing of film during processing, the water used is then directed to a drain. The plumbing to be carried out according to DIN 1986/1988 and must comply with local plumbing codes. The water supply to the processor must be fitted with a on/off tap connected with a 3/4-in. outlet (washing machine connection) to the film processor. The tap must always be reachable so as to be opened on start-up and closed at the end of the working day

Subject to the film processing specifications this water should meet the temperature range as specified by the film/chemical manufacturers.

The wash water used by a processor MUST be correctly filtered and CLEAN. The level of filtration will depend upon the local water quality and the level of hardness and impurities which must also be treated if it exceeds the recommended quality for film processing.

The processor uses flow regulators/flow taps to control the flow of fresh water into the wash tank and rinse crossovers, the water flow rate of 3 Lt/min assuming a water incoming pressure of 2–8 bar.

For cleaning racks and processor tanks, as well for chemical mixing, a second water supply should be installed with another on/off tap connected with approximately a 2.5-meter long hose to direct water for use as required..

The drain tubes of the film processor can be drained separately or together, according to the local code requirements. See “Plumbing Requirements” in the installation manual for the hose connections from the film processor to the outlet (drain).

The fixer overflow should be collected separately into a plastic container (storage tank) or directly to a silver recovery unit. The developer to be collected in a plastic container when not suitable for discharge into local sewage . In order to avoid a backwash of the drained, used chemicals, the drain hoses should be free of bends and with a constant fall. The drain must be ventilated. Use either a floor drain or a wall drain with a built-in plastic siphon. Do not use brass or copper in the drain lines. The minimum diameter of the drain lines should be 40 mm.

Automatic Cooling

The processor will automatically detect over temperature developer conditions which then activates a cold water cooling system. The temperature of the incoming cold water supply should be between 7–15°C in order for this system to operate efficiently. If the incoming water is too warm then this system will not operate efficiently and it will be necessary to use an internal or external cooling system similar to the chiller units available from Colenta at additional cost.

Processor Cleaning: A suitable working area must be made available for use when cleaning the transport racks when removed from the processor during a maintenance period. Each rack should be removed from the processor tank and placed onto a carrier tray and taken to the wash area and placed in a sink. Clean Water (under pressure) and suitable cleaning agents can then be applied to the roller and gear surfaces until clean.....the racks then to be returned to the processor tanks from where they were removed.

2) Basic Installation Procedures:

Once the processor is on site and placed into final position.

- a) Level the processor
- b) Connect all water supply and drain hoses.
- c) Start to fill each tank with water – during which carefully check that there are no leaks from any connections.
- d) When the tanks are full, re-check and fine tune the processor level (left to right and front to back) making any adjustment seen as necessary.
- e) The processor can now be tested electrically – a qualified electrical specialist should check and approve the connection he has made to the processor to be sure correct and safe.
- f) With the safety switches enabled and the electrical power applied, the processor should now start to warm up until ready.
- g) During the warm up period check the operating parameters programmed into the default P1 factory programme by using the display controller.....make any change required.
- h) During warm up, connect the processor exhaust port to the exhaust facility provided on site by the customer.
- i) During warm up check that the ventilation/airflow conditions within the darkroom and daylight working area have been correctly configured.

- j) When the processor display shows READY – this confirms that the processor is ready for use.
- k) Switch OFF the processor and drain the water from each tank. Clean and then fill each tank to the designated fill level on each tank wall.....when done clean and check each transport rack to be sure rollers and gears are smooth running and then place and secure each rack in position.....top up the tank levels and set the processor back to an ON condition.

l) When the processor reaches its READY condition feed test media of different sizes to ensure all pass through the rollers and dryer without problem.....when all is OK the processor is now ready for chemical testing.

Fill the processor chemical tanks with correctly mixed and good chemistry
Fill the Replenishment tanks with correctly mixed and good chemistry.

Check for any sign of chemical/water leaks and when OK then switch ON, taking care that the circulation pumps have no air locks and are circulating well.....an air lock in a pump requires immediate attention, clear the air or pump blockage and then restart.

Sensor Check – Using the Monitor Mode check that all sensors in the sensor bar are activating correctly

Replenishment Check.....Manually activate Replenishment cycles and measure the delivered amount per cycle to the required 100 mls per cycle delivery consistency – suggest over 3-4 cycles.

Check the set up data for “Replenishment after each” – normally if set at 0.125 sq/mt. this means that the replenishment pumps will activate 8 run cycles for every 1 sq metre that enters the processor under the sensor bar.

Check the required programmed replenishment amount per sq/mt for each chemistry, check that this amount is delivered correctly for this set area entering the processor.

Temperature Check. Using an accurate thermometer used by the customer, check that the measured chemical temperatures are the same as the displayed temperatures – use the temp calibration procedure to fine tune.

Developer Time Check. Measure the developer time from entry into the the developer solution until the contact point into Fixer/Bleach

Adjust developer times, temperatures and replenishment rates to the specified start points of the film/chemical manufacturer and fine tune each to provide a consistent processing quality to the typical work load of the processor.