

Technical Information



April 2020

Guidelines for Prolonged Shutdown of Processing equipment

1. General Information

To prevent issues caused by chemical oxidation and evaporation it is recommended to properly drain and clean processing tanks prior to a prolonged shutdown.

Please refer to processor manufacturer manuals for specific instructions.

After draining the processor tanks and removing the filters, please use this prolonged shutdown time to clean the racks, tanks and filter housing. After cleaning, reinstall the racks and fill up the processor with clean water.

After the shutdown period, start up using fresh tank solutions and install new pump filters. Make sure you have sufficient chemical concentrate and color developer starter solutions to mix fresh tank and replenishment chemistry.

Attention point: Dispose the concentrate leftovers, which were exposed to aerial oxidation for more than 2 weeks.

Shutdown of chemical mixers:

> 2 weeks → Disconnect all concentrates vessels, rinse all piping/tubes, pumps and drain all tanks

2. RA4 processors

The exact procedure may vary depending shutdown period:

1 to 2 weeks → drain only processor tanks

> 2 weeks → drain both processor & replenisher tanks

If you plan to shut down for 1 to 2 weeks, you will only need to drain the processor tanks but not the replenisher tanks (if these tanks can properly be protected from aerial oxidation by a floating lid or floating balls).

However, if you predict your shut down will be more than 2 weeks, it is recommended to drain both the tank and replenishment tanks.

3. C41 processors

The exact procedure may vary depending the shutdown period:

1 to 2 weeks → drain only processor tanks

> 2 weeks → drain both processor & replenisher tanks

4. E6 processors

The exact procedure may vary depending the shutdown period:

- > 1 week without floating lids → drain processor tanks
- > 2 weeks with floating lids → drain processor tanks
- > 2 weeks with floating lids → drain FD – REV – CD – PB replenisher tanks
- > 4 weeks with floating lids → drain BL – FIX – Pre Rinse replenisher tanks

Guidelines for CLP calibration after restarting the equipment.

After restarting the equipment with fresh chemistry, please take care to make additional paper balance setups for the papers, which are calibrated in the printers (2 times / day). Until approximately 2-3 TTO the fresh chemistry will change to seasoned (running) chemistry. The seasoned chemistry has a stable sensitometric and control strip response to the developed paper(s).

Guidelines for low production volume on processors

1. General Information

During low utilization periods, it may be necessary to make adjustments, such as tank modifications, replenishment rate increases or even switch to a higher replenishment product to maintain equilibrated processing solutions.

At any time fresh tank solution may be added directly to any seasoned tank to flush away seasoned working tank solution that may become dirty, unacceptably oxidised or chemically unbalanced as a result of low utilisation, thus maintaining the chemical composition integrity of the bath.

2. RA4 processors

Prolabs running CPRA Digital Pro chemistry:

During low production volume periods, the replenishment rate of the Developer can be increased up to 325 ml/m² (495 ml/m² for display material). For the Bleach-Fix the replenishment rate can be increased unlimitedly (tank solution = replenisher).

Please take care the Tank Turn Over (TTO) of both Color Developer & Bleach-Fix processing tank should be minimum 0.3 TTO/week.

Finisher labs running Envirochem chemistry:

During low production volume periods a switch from the low replenishment developers MP60 AC or MP73 AC to the higher replenishment rate developers MP108 or MP160 (non-air controlled) can be considered.

For the Bleach-Fix, a switch from low replenishment BX 55 or BX 70 to the higher replenishment rate BX108 or BX215 is recommended. If you are already running BX the replenishment rate can be increased unlimitedly (tank solution = replenisher).

Preparing smaller replenisher batches should be considered as well as buying smaller concentrate sizes.

Super Stabilizers cannot be over replenished, so increase the Replenishment rate by +20% or more. Regular replacement of Super Stabilizer baths, especially the first tank, is the best way to avoid problems.

Please take care the Tank Turn Over (TTO) of both Color Developer & Bleach-Fix processing tank should be minimum 0.25 TTO/week.

Developer and Bleach-Fix regenerator systems require close monitoring. Temporary reducing the total circuit volume, switch to a lower rebuilt ratio or partial replacement by fresh tank solution are optional measures to maintain the chemical balance of the regeneration system.

Frontier Minilabs running CP48 & CP49 cartridges:

During low production volume periods we recommend the following switches :

- from CP48 HV to CP48S
- from CP49 HV to CP49E
- from CP49 LR (RR Dev 40 & BX 31.1 ml/m²) to CP49E (RR Dev 45 & BX 35 ml/m²)

Super Rinse baths cannot be over replenished, so increase the Replenishment rate by +20% or more. Regular replacement of Super Rinse baths, especially the first tank, is the best way to avoid problems.

Please take care the Tank Turn Over (TTO) of both Color Developer & Bleach-Fix processing tank should be minimum 0.25 TTO/week.

Minilabs running standard process Envirochem chemistry:

During low production volume periods a switch from the low replenishment developers MP60 AC or MP73 AC to the higher replenishment rate developers MP108 or MP160 (non-air controlled) can be considered.

For the Bleach-Fix, a switch from low replenishment BX 55 or BX 70 to the higher replenishment rate BX108 or BX215 is recommended. If you are already running BX the Replenishment rate can be increased unlimitedly (tank solution = replenisher).

Super Stabilizers cannot be over replenished, so increase the Replenishment rate by +20% or more. Regular replacement of Super Stabilizer baths, especially the first tank, is the best way to avoid problems.

Please take care the Tank Turn Over (TTO) of both Color Developer & Bleach-Fix processing tank should be minimum 0.25 TTO/week.

Other Minilabs:

During low volume production, it is recommended to switch to higher replenishment rate products where possible.

Super Stabilizers cannot be over replenished, so increase the Replenishment rate by +20% or more. Regular replacement of Super Stabilizer baths, especially the first tank, is the best way to avoid problems.

Please take care the Tank Turn Over (TTO) of both Color Developer & Bleach-Fix processing tank should be minimum 0.25 TTO/week.

For DKS1500-1600-1700 please consult PIS598.

- PIS_598-3_FH product range for KIS DKS 15xx-16xx-17xx- low volume processing_2016-08

3. C41 processors

Prolabs & Finisher labs running LR chemistry:

During low film volume processing periods a switch from the low replenishment developers (LR @ 21 ml/ 135-24) to standard replenishment rate developer (41 ml/135-24) is recommended. Bleach regeneration is not recommended when film volumes are low.

Both Fixer and Stabilizer replenishment rate can be increased up to 50% when the processor is running under low throughput conditions. Regular replacement of Super Stabilizer baths, especially the first tank, is the best way to avoid problems.

Minilabs running Fujifilm chemistry:

During low volume production, it is recommended to switch to higher replenishment rate products where possible.

Super Rinse baths cannot be over replenished, so increase the Replenishment rate by +20% or more. Regular replacement of Super Rinse baths, especially the first tank, is the best way to avoid problems.

If your film throughput is extremely low, the replenishment rate of ALL baths – developer, bleach, fixer and stabiliser – can be further increased by 15%.

For CN-16 minilabs please consult the following TIS:

- TIS032 CN16Q Minilabs at Low Throughput E03 02-14
- TIS043 CN16L Minilabs at Low Throughput E04 02-14
- TIS031 Fuji FP363SC-563SC Conversion from CN-16S to CN-16S ER Chemistry E02_02-14

Minilabs running Envirochem chemistry:

During low film volume processing period a switch to the higher rep rate Environeg 60 Developer @ 60 ml/135-24 film and to the higher rate EnviroNeg RA Bleach VR @ 10ml/135-24 film (check mixing instruction) is recommended.

Both Fixer and Stabilizer replenishment rate can be increased up to 50% when the processor is running under low throughput conditions.

Regular replacement of Super Stabilizer baths, especially the first tank, is the best way to avoid problems.

If your film throughput is extremely low, the replenishment rate of ALL baths – developer, bleach, fixer and stabiliser – can be further increased by 15%.

For C41- minilabs please consult the following TIS :

- TIS005 EnviroNeg Developer AC 60 Minilab E04 08-16
- PIS_395-2_C41 Low volume minilab_08-2016

Your local FUJIFILM representative can give further technical advice if required.

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