

Important Guidelines for Care and Use of Cartridges on Press

1. Rotate Stock:

This is critical. Cartridge shelf life is 6 months or less. Please make sure that your inventory is properly rotated so that you do not use cartridges on press that are beyond this shelf life.

2. Pressure setting: Do NOT exceed 5 bar at any time

The cartridge dispensing system is highly unstable at pressures over 5 bar !

- CP cartridges: 4-5 bar to open nozzle to dispense ink
- CC cartridges: 2-3 bar (2.5bar recommended) to open nozzle to dispense ink

3. Crack seal around plunger before using cartridge (new or partial)

How: *Apply pressure around the plunger by squeezing plunger sides with palms of hands, OR apply light pressure around plunger while rolling cartridge on a flat surface*

Un-cracked dried ink around plunger causes a lot of problems; it acts like glue and jams plunger while air escapes into ink. Air cavity in ink causes CCs to implode and damage the nozzle on the bottom of both CP and CC cartridges, causing ink to spill. As such, it is critical that the operator 'crack' the dried ink seal around the plunger before using a cartridge (new and partials). *Please do not increase pressure > 5 bar to try to get the plunger to go down! This forces air into the cartridge.*

4. Make sure correct PUCK is used:

Make sure that you are using the right puck. A wrong puck will cause the plunger to 'jam' on its way down, causing all sorts of sensor reading, air pocket and dispensing problems.

- For CP cartridges: use white puck
- For CC cartridges: use black puck

4. Clean after each use of cartridge:

1. *Bottom of ink cartridge,*
2. *Face plate of cartridge dispenser, and*
3. *Around and inside of 'hole' at bottom of dispenser vessel*

For a partially used cartridge: remove cartridge and use a small amount of product-friendly lubricant to lightly wipe/clean around the areas with product-friendly solvent, and then lightly lubricate (supplier recommends lubricant like Crisco shortening, roll lube, No Melt grease etc.) Lubricant will prevent any ink from transferring or sticking at the bottom of the cartridge dispenser faceplates. This prevents build-up of skin or interferences at bottom of dispenser. Do not get lubricant onto the ultrasonic sensors.

5. Storage:

Always store new or partially used cartridges upright, preferably in a warm(er) environment.

Cartridges are more susceptible to damage than conventional metal containers. The plastic CP cartridges are susceptible to stress cracking, if dropped even from a relatively short height. Care has to be taken when handling, as it has proven common that plastic cartridges can slip out from operator hands. CP cartridges that have been dropped may exhibit stress damage in the form of:

- a. White 'streaks' on the body of the cartridge – these are not air pockets!
- b. Actual cracking of the nipple at the bottom
- c. Cracked plunger, or actual crack on body of cartridge

Damaged cartridges may/may not be suitable for use after stress has occurred.

With CC/CL cardboard cartridges, moisture can cause the structural integrity to fail if fibreboard becomes sufficiently saturated over its lifetime. These cartridges will likely fail soon after air pressure is applied.

Storage conditions are *critical* and care must be taken. Keep cartridges:

- a. away from areas of water, or high moisture / humidity
- b. away from areas where cartridges could be easily bumped into and damaged

Please visually inspect cartridge surface and nipple at dispensing end before use. These few seconds could save a lot of problems down the road.