High Tech Cleaning for the High Volume Producer

In need of something to improve your cartridge cleaning cycle? Looking for a technique to improve your success rate? Want a system to handle almost any cartridge?



At Promax Imaging Ltd., we get many visitors looking for a method to improve their success rate when filling cartridges. And we always tell them: the first step to successful cartridge filling is getting the cartridges clean and empty <u>before</u> you try to fill them. The easiest way to clean a cartridge is the same as used for the weekly wash: to boil it with a cleaning agent. This has become the technique of choice for all the large remanufacturers when they clean their sponge cartridges.

But you cannot use boiling water on cartridges. The temperatures involved can damage the electronics, and may also fix the dyes in the sponge. That's not very helpful when they are contaminated, especially when the construction of the cartridge prevents the boiling water from getting to all of the parts. So how is it possible?

Vacuum Boiling Explained

You are probably already aware of the advantages of vacuum when filling cartridges. Cleaning cartridges under vacuum also has a major advantage. Under vacuum, water boils at a lower temperature, so you can get all the advantages of a high temperature cleaning cycle at much lower temperatures - and so remove the risk of damage to cartridges. In fact you can boil wash all parts of the cartridges at temperatures that are so low you can put your hands in the water without harm.

By drawing down a vacuum and then releasing it, the air inside the cartridge is drawn out, and replaced by the fluid. Repeating this a few times will expel all of the air and the cartridge will be totally saturated. Then with a vacuum drawn down and maintained at around 25" the water will boil.

Vacuum boiling opens the cell structure of the sponge. As the cartridge delivers ink in use, the cell structure of the sponge closes. That is why it can be difficult to refill cartridges without them overflowing: the closed cells will not accept new ink. Reopening the cell structure means fewer

overflows, easier filling, and a better quality cartridge. It could increase your pass rates by anything up to 100%.

Vacuum boiling is the simplest, fastest and most efficient advanced cleaning system you can use. For this reason, Promax Imaging introduced its VB120 vacuum boiler more than two years ago, and it remains the vacuum boiler of choice for high volume processors of remanufactured cartridges.

Promax Imaging VB120



The Promax Imaging VB120 is an easy to use boiling system, powered by a separate vacuum pump. The process of boiling is very simple:

- 1. Stack your cartridges in the baskets provided: up to 120 large HP cartridges can be processed at one time. Alternatively a mix of cartridge types can be processed in a single run.
- 2. Stack the baskets in the boiler and place the weight on top.
- 3. Add approximately 30 litres of warm deionised water or a suitable cleaning solution
- 4. Turn on the separate vacuum pump.
- 5. Run the vacuum cycle for 5 minutes to saturate the cartridges.
- 6. Run the boil cycle for 30-45 minutes
- 7. Release the vacuum and remove the cartridge baskets (remember: the water is not hot!)
- 8. Empty the boiler through the drain tap at the base of the boiler.
- 9. Centrifuge the cartridges to empty the cartridges completely.

To make effective use of the vacuum boiler, you will also require:

- A water heater for deionised water and/or cleaning solution, capable of achieving 60-68°C.
- A centrifuge to empty cartridges before and after boiling.



Availability

The VB120 Boiler is available to order. Shipment is generally 1-2 weeks from order. All VB120 Boilers operate on normal single-phase electric supply at 240v as does the associated vacuum pump..

* If you wish to purchase the Promax Imaging VO66 Vacuum Oven with the VB120 Boiler, the Vacuum Regulator can be used to run both machines from the higher rated Vacuum Oven pump.

And if the VB120 is too large for your operation, consider the Promax Imaging Mini-Boiler, which uses the same technology but scaled to the shop front and smaller remanufacturing operation. Call Promax Imaging on +44 (0) 1538 722121 for more details.

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