

IHARA

CHEMICAL FREE DAMPENING SYSTEM



"Never use fountain solution, again!"



Model Ladybird 801

What is “Chemical-less Water Printing”?

Dampening water is used in the conventional lithographic printing process. The water involves Isopropyl Alcohol (IPA) or the substitute: the fountain solution. IPA is a VOC (Volatile Organic Compounds) and it is unhealthy to the operator and the environment. Fountain solution is the chemical additives to control the water’s surface tension but it produces water pollution when it is discharged as industrial waste water. Both IPA and the fountain solution are detrimental to the environment. The “Chemical-less water printing” is the new printing process that does not use any agent with the dampening water.

How the “Chemical-less Water Printing” works?

The surface tension prevents water from being used as the dampening solution. The fountain solution reduces the water surface tension and improves ink viscosity, but it also makes the ink transfer worse and increases the ink drying time for the printed papers. With this new chemical-less printing device, the water’s surface tension is reduced without any additives. Only ordinary tap water is used as the dampening solution.

Benefit of “Chemical-less Water Printing.”

- **Higher quality - sharper printed dots;**
- **Print with less ink;**
- **Much quicker drying time;**
- **Reduce spray powder;**
- **Environmentally friendly;**
- **No fountain solution;**
- **Prolong life of rollers and blankets;**

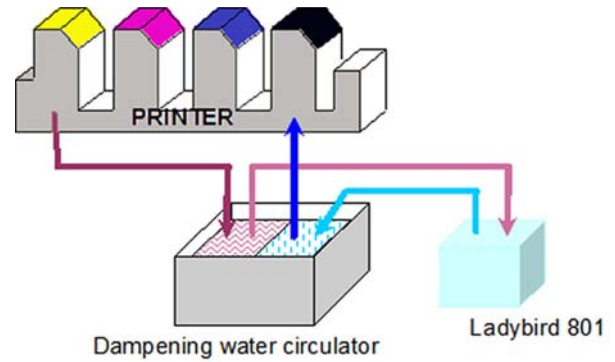
Since the ink transfer is much improved when compared to the dampening solution with additives, the ink film thickness is thinner and the ink color is clearer. In essence, the drying time is greatly reduced and less powder will be needed since the ink film thickness is thinner. The fountain solution for the conventional offset process dilutes the ink and causes the printed dots to penetrate into the paper and spread. With chemical-less water printing, the “Dot Gain” is reduced. The dot quality is stable and the trapping is much improved.

Since the chemical materials are omitted, the water condition is always kept stable. The paper elongation will be kept at a minimum and the paper registration is improved.

Are there any additional cost savings benefit?

Yes. Aside from ink reduction, elimination on fountain solution cost, reduction in spray powder, the life of the printing press will be extended due to the removal of the chemical and its harmful effects.

How to connect the device with the current printing system?



The installation is quite simple. Only connecting two pipes are required with the current dampening water system. Connection to the filtration system is required if the dampening water filtration system is connected. The filter inside will need to be replaced.



This sales brochure is printed using the Ladybird 801 Chemical Free Dampening System -- Completely chemical-less and environmentally friendly.



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Ladybird Model 801 is manufactured by Nippon Lithograph and distributed exclusively by Ihara U.S., Inc.