

Procolored's Cutting-Edge Siphon White Ink Circulation System Redefining the Future of DTF Printing

Don't Miss Out on Procolored White Ink Circulation System!



Los Angeles, California May 15, 2024 ([Issuewire.com](https://www.issuewire.com)) - As a printer brand specializing in DTF printing technology for over 10 years, [Procolored](#) always stands at the forefront of innovation, steadfastly committed to offering avant-garde solutions tailored to the requirements of both seasoned professionals and burgeoning enthusiasts alike.

Throughout the journey all along, Procolored has ceaselessly redefined the limits of printing technology. Recently, this brand launched its most cutting-edge ink circulation technology - the Procolored Siphon Circulation® system for white ink.

What is the [Siphon White Ink Circulation System](#)

Literally, the Siphon White Ink Circulation System involves a siphon effect during the circulation system. Besides, there are also other devices co-working to create a more stable ink supply, including check valves and a diaphragm.

The system works like this: the electrical motor powers a speed-reducing mechanism that transfigures its high-speed rotary motion into a slower, yet more forceful one. This altered movement actuates the diaphragm to oscillate between extension and retraction, thereby alternately generating suction and pressure within the circulation system. As the diaphragm expands, it enlarges the volume inside the ink chamber, producing a vacuum that prompts the check valves to seal at the output port while opening at the input port. Consequently, fresh white ink is drawn from the reservoir into the chamber.

Upon the diaphragm's contraction, the ink chamber's volume diminishes, leading to an increase in positive pressure. This shift triggers the closure of the check valves at the intake point and their subsequent opening at the discharge point, thus expelling the white ink from the pressurized chamber via the exit conduit and back into the reservoir in a cyclical, positive displacement fashion.

Simultaneously, the white ink being expelled from the circulation system's discharge end capitalizes on the siphon principle to reach and be delivered to the printing nozzle.

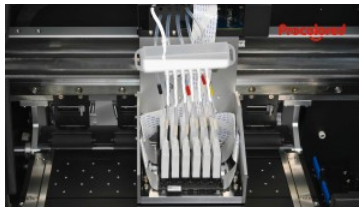
Why the Siphon White Ink Circulation System is More Practical

- **Enhanced emergency resilience:** The white ink circulation relies on the siphoning effect to convey the ink fluid directly to the print nozzle. In the event of unexpected malfunctions or damages to certain parts of the system, this inherent design ensures that the flow of white ink can persistently reach the print head through the same principle. This feature enables the printer to maintain temporary operability, safeguarding continuous business operations and mitigating potential order losses.
- **Streamlined maintenance and extended durability:** This groundbreaking ink circulation mechanism surpasses conventional squeezing systems by eliminating issues such as tubing deformation and the need for frequent replacements. By virtue of its non-mechanical compression method, the overall lifespan of the system is significantly prolonged.
- **Robust self-priming functionality:** The check valves at both the intake and discharge points actively open and close in response to changes in pressure. Even when the transported ink contains minor air pockets, these valves efficiently expel the entrapped air during multiple back-and-forth cycles. This process fortifies the system's self-priming ability, guaranteeing a consistent and efficient supply of ink throughout the printing process.

[Procolored Gen-2 DTF Printers](#) :

Upgraded with Siphon White Ink Circulation System

Accordingly, Procolored will gradually upgrade its DTF printers to the second generation (Gen-2) with this innovative circulation system to provide potential users with better printing experiences.



Procolored



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