

ATPColor DFP2000 A Complete Direct-to-Fabric Solution

THE WIDEST TEXTILE PRINTER IN THE WORLD WITH INTEGRATED, INLINE FIXATION

5.3-meter grand-format textile printers are challenging to build and require other equipment for finishing. That's why there are so few options in the market. We at ATPColor decided to create a new system that changes the paradigm of grand-format textile printing.

There are many challenges to focus on when printing superwide. We've developed a new workflow to keep these obstacles to a minimum.

1. Inline Fixation

5-meter offline fixation has several challenges, from handling 5 meter materials (loading and unloading both the printer AND the calender) in addition to loading 5-meter protective tissue paper to production inefficiencies of a two-step process. Additionally, with today's very quick turn-around for jobs, printing and removing a job from the press as it's completed can help in the "quick turn" nature of today's business.

2. Media Width Flexibility

Many companies will gang multiple images up on a 5-meter roll and cut them after printing. The DFP2000 features the ability to simultaneously print on two different width rolls, allowing the customer to print a 1-meter wide roll next to a 2.6-meter width roll. This gives the customer the ability to maximize the entire system when not needing 5-meter output and the flexibility of multiple rolls.

3. Media Loading

Media loading can be quite costly in many grand-format inline textile systems. The DFP2000 has an integrated ultrasonic automatic sewing system to attach new rolls, significantly reducing waste as there is no need to completely web the system on roll change-outs.

4. Fabric Tension Adjustments

Textile, compared to paper or vinyl, has some unique challenges inherent to its structure. Many times, different fabrics can perform very differently in a printer when printing direct. The DFP2000 features several ways to adjust the fabric tension so the system prints consistently and reliably regardless of the type of fabric, such as a woven backlit, knit poplin, soft-knit, heavy-knit, etc.

5. Patented Inline Calender

The DFP2000 features an extremely sophisticated heating drum integrated into the printer; a first of its kind. The patented heating drum is designed for consistent and repeatable fixation, print after print.

6. User Friendly Design

Ease of use is another strength of the DFP2000. The system has been designed with the operator in mind, with simple maintenance procedures and easy-to-access panels for any electronic maintenance.



PRINT ON MESH FABRICS

The ATPColor solution is designed to easily print on open mesh fabrics such as flag material and sports textiles without marking the backside of the fabric with "blow-by" ink. The especially designed ink trough with sponge and pad absorbs any ink that passes through the fabric.

DESIGNED TO BE RUGGED AND RELIABLE

The ATPColor direct-to-fabric printing systems combines trusted performance and reliability with award winning innovative design and print quality.

MEDIA HANDLING SYSTEM

The engineered system features two precision stepping motors and synchronized dancing rollers that automatically fine tune the media feeding process to ensure precise movements with every pass of the print head. Also a special cork covered cylinder can be activated when printing on stretchable media such as Lycra®, spandex and other sports textiles.

FLEXIBILITY

Although the ATPColor system was designed to print directly on fabric, you have the flexibility of printing on dye sub transfer paper for those projects that require it.

OPTIONAL INLINE CUTTING SYSTEM

Specifically designed for the ATPColor Direct-to-Fabric systems, the InLine Cutting System dramatically increases the ATPColor capabilities. The production process is made easier and faster by cutting printed fabric on the vertical axis. The system uses cold knife technology to make sharp flawless cuts. The InLine Cutting System can be stopped or paused without creating defects in the printed fabric a significant advantage over traditional hot knife systems. The ATPColor Direct-to-Fabric printers provide a very productive work flow with sublimation printing directly onto the fabric then fixing or sublimating the image. Now with the addition of the InLine Cutting System, you can also cut the fabric, while keeping it contained within the footprint of a single compact roll-to-roll printer system.



ATPColor DFP2000

ATPColor DFP2000, A Complete Direct-to-Fabric Solution

- Produce flag, banners, textiles and soft signage with a single system;
- Print directly onto coated or uncoated polyester fabrics;
- No need for transfer paper or separate heat press;
- High Capacity Bulk Ink System ideal for unattended printing and lower production costs;
- On Board Sublimation System bonds the printed image to the fabric resulting in a permanent, durable image;
- Intelligent Workflow Roll-to-roll operation minimizes requirement for operator oversight;
- Unattended automatic turn-off, the system can finish, completely unattended a printing and color fixation job, it will finish curing the textile and it will turn off the calender, everything automatic.

Print Heads Comparison: Kyocera, Ricoh G5, Ricoh G4



No 1+1

A complete Direct-to-Fabric solution; it is a single process from printing to cutting.

Does not need separate calender Does not need transfer paper Does not need protective paper Easy unattended Workflow



No toaster

We have direct contact between the printed surface of the media and the heated surface of the calender.

Heat, dwell time and contact are needed to fix the color. Other solutions for direct printing have no contact...just the toaster.



No Banding

The ATPColor direct-to-fabric printing system features two precision stepping motors and synchronized dancing rollers that automatically fine tune the media feeding process to ensure precise movements with every pass of the print head. Adjustable interleave technology delivers perfectly smooth image details and no banding.



New Inks

ATPColor's inks have been specifically formulated to deliver exceptional colour gamut and fastness to sublimated graphics. No washing needed.

Print • In line Fix • Deliver to customer

PRINTER TECHNICAL SPECIFICATIONS DFP2000

| Print Width | 530cm |
|--|--|
| Print Heads | Ricoh G5 -6/12 Head Configuration |
| | Kyocera 4/6/8 Head Configuration |
| Number of colors | 4/6 |
| Resolution | Up to 1200x600dpi |
| RIP Software | Open to Major RIP Vendors: Caldera, Ergosoft, Onyx, Colorgate |
| Print Speed, 4 color, 2 pass, smooth-screening | 6 Ricoh G5: 120 sqm/h |
| | 12 Ricoh G5: 240 sqm/h |
| | 4 Kyocera: 160 sqm/h |
| | 8 Kyocera: 320 sqm/h |
| Ink System | 4/6 colour, 5 litre each |
| Calender Type | Specially Developed for Maximum Heating Homogeneity |
| Max Fixation Temperature | 200°C |
| Max Roll Weight | 200Kg |
| Max Fabric Roll Diameter | 400cm |
| Optional Accessories | Inline Cutting System |
| | Inline Sewing System |
| | Jumbo roll option, Take-up, Supply |
| Dimensions | 780x230x200cm (Without take up and Supply) |
| Weight | 6.500 Kg |
| Environmental Requirements | 20-25°C – Humidity 45-80% |

All specifications subject to change without previous notice



Green solution

We make the best possible usage of the heating power. Our system has power consumption that's 1/5 or 1/3 of other solutions on the market.



High Speed

High speed printing and fixation with a simplified workflow. The return on investment it is much faster when reducing production bottlenecks and simplifying the processes.



Show through

Our solution provides flags with a perfect show through. Flags appear to be printed double sided...both in solid colors and continuous tone images.



Inline Cutting

The production process is made easier and faster by an optional slitting system. The system uses cold knife technology to make sharp flawless cuts.

The Inline Cutting System can be stopped or paused without creating defects in the printed fabric — a significant advantage over traditional hot knife systems.



UV Resistant

Dedicated inks, direct printing and state-of-the-art color fixation deliver a high UV resistance compared to traditional paper transfer printing.