The right DFE makes all the difference

Your checklist for success.

A Digital Front End (DFE) is the brain for your press. And in choosing the right DFE, there are some obvious and not-so-obvious requirements to consider. Here's a helpful checklist of the key DFE capabilities that will best position your business for current and future success.

Print the best possible color

☐ **Spot color reproduction meets brand owner standards**
Easily match standard colors, like PANTONE, or create custom, optimized spot color libraries.

☐ **Maximize the available process ink gamut**
Specify the best recipes for each available color on each available substrate.

☐ **Meet industry standards, such as Idealliance G7 or Fogra PSD**
Printing to reference standards ensures consistent, accurate output.

☐ **Ensure consistent color reproduction across applications and environments (analog, digital)**
Achieve color consistency across your plant.

☐ **Optimize ink usage to maximize output quality**
Use the right amount of ink required to achieve desired output quality.

Seamless workflow integration

☐ **Industry 4.0 compliant**
Collect and analyze production data, and integrate with existing MIS systems to increase Overall Equipment Effectiveness (OEE).

☐ **Fits seamlessly into existing workflows**
Offers a wide range of tools and integrations to seamlessly fold into the workflow that works for you.

☐ **Capability to create unique and customized integrations**
Connect to your workflow using industry standards like JDF or a completely customizable API.

☐ **Achieve plant-wide integration by connecting to MIS/ERP and web-to-print systems**
Create an end-to-end integrated system that flows work from job submission to prepress to production and then back to the business office.

☐ **Integrated ink estimation**
Know exactly how much ink was used for a particular job. That data can be fed back into the MIS to assist with calculating the TCO.

Performance to meet your needs for today and tomorrow

☐ **Stream press data at rated speeds when every print is different**
A DFE should have the capacity to feed press at its fastest speeds, no matter the file type.

☐ **Supports variable data (VDP) or versioning out-of-the-box**
Supports all industry standard VDP formats as a standard feature.

☐ **Process inspection image data for fully automated, closed-loop operations**
Read inspection data and adjust press output on-the-fly, at rated speeds.

Integration with printhead drive electronics

☐ **Turnkey solution that integrates DFE, printhead drive electronics, and ink delivery systems**
A DFE partner should be fully integrated with other key technologies, like printhead drive electronics. These turnkey partnerships are fully validated across multiple print speeds and datapaths, which accelerates time to market and prevents any surprises during an integration.

Your checklist for success (continued)

Open architecture

☐ **Open system that can be completely customized**
An open architecture doesn't lock you into a closed platform from a single manufacturer. It's completely customizable for whatever a business needs, both today and for the future. So a DFE should be able to accept jobs coming from a wide variety of workflows, then optimize those jobs for the printer.

☐ **Industry standard rendering platform that enables the press to produce what designers imagined**
Choose an architecture built on industry standard rendering platforms, like Adobe. It's a fact that designers across both digital and analog platforms prefer the Adobe Creative Suite. So a DFE built on Adobe technology is built on the same underlying technology that designers are using.

☐ **Native end-to-end PDF workflow that complies with the latest technical standards (PDF 2.0, PDF/X-4)**
An end-to-end PDF workflow from design to print provides the confidence that artwork will be able to be reproduced on press exactly as the designer imagined.

☐ **Consistency across analog and digital technologies**
Look for integration with partners like Esko, who provides workflows and applications commonly used across digital and analog workflows.

☐ **Compliance with regulatory and security standards**
In the face of constantly changing cyberthreats, your DFE should comply with the latest regulatory and security standards, like IPP 2.0, FIPS 140-2, Common Criteria, etc.

Outstanding output quality

☐ **Intelligence to detect, process, and optimize different object types**
Ability to provide different screens for object types such as text, barcodes, graphics, and images.

☐ **Technology to ensure barcodes print with the highest quality**
Your business depends on producing high quality, machine readable barcodes. Choose a DFE partner with technology to ensure your barcodes print with integrity.

On-the-fly print adjustment

☐ **Integration with closed-loop inspection systems, plus on-the-fly compensation for press issues**
Over time, nozzles can fail and generate artifacts in print. A good inspection system will detect developing failures so the DFE can modify output to compensate for these problems. This compensation minimizes the risk of printing output that needs to be discarded. And automatic adjustment for print artifacts allows operators to maintain production uptime and output quality.