

Easily add an inkjet printing station to a smart factory with SmartDFE™

SmartDFE for Industrial is an award-winning collection of innovative and market-proven components that enable your engineering team to get to market quickly whilst giving them the space and capability to add their own value.



SUPPORTS INDUSTRY 4.0

SmartDFE for Industrial is a software component built for single-pass inkjet printing in industrial settings. It integrates smoothly with factory control systems using the OPC UA interface. This makes adding an inkjet printing station to a factory as straightforward as adding any other industrial component. SmartDFE brings together a range of proven and cutting-edge components, all backed by over 30 years of experience in printing.

SMART CONNECTIVITY Connect to existing User Interfaces or craft new ones

SmartDFE enables secure communication within printing presses, factories, and the Cloud. It enables Original Equipment Manufacturers (OEMs) to quickly market products using standard press controllers or custom front ends that integrate with existing systems. At its core, the Smart Connectivity layer, powered by OPC UA, ensures robust and secure interactions with devices and applications in the press, Cloud and on mobile, supporting features like remote monitoring and predictive maintenance. SmartDFE incorporates print communication standards (JDF and JMF) for enhanced interoperability and efficiency in print production workflows.

SMART CONTROL Your own brandable inline RIP controller

Experience the power of a fully customizable Digital Front End (DFE) that adapts to your brand requirements. This solution provides a seamless entry into the market, enabling swift integration. Operating in server (headless) mode, it also effortlessly complements your existing front end setup. Seamlessly integrate with the Smart Print Controller through the OPC UA API, enhancing connectivity.

SMART QUALITY Achieve top-quality output without the need for a PhD

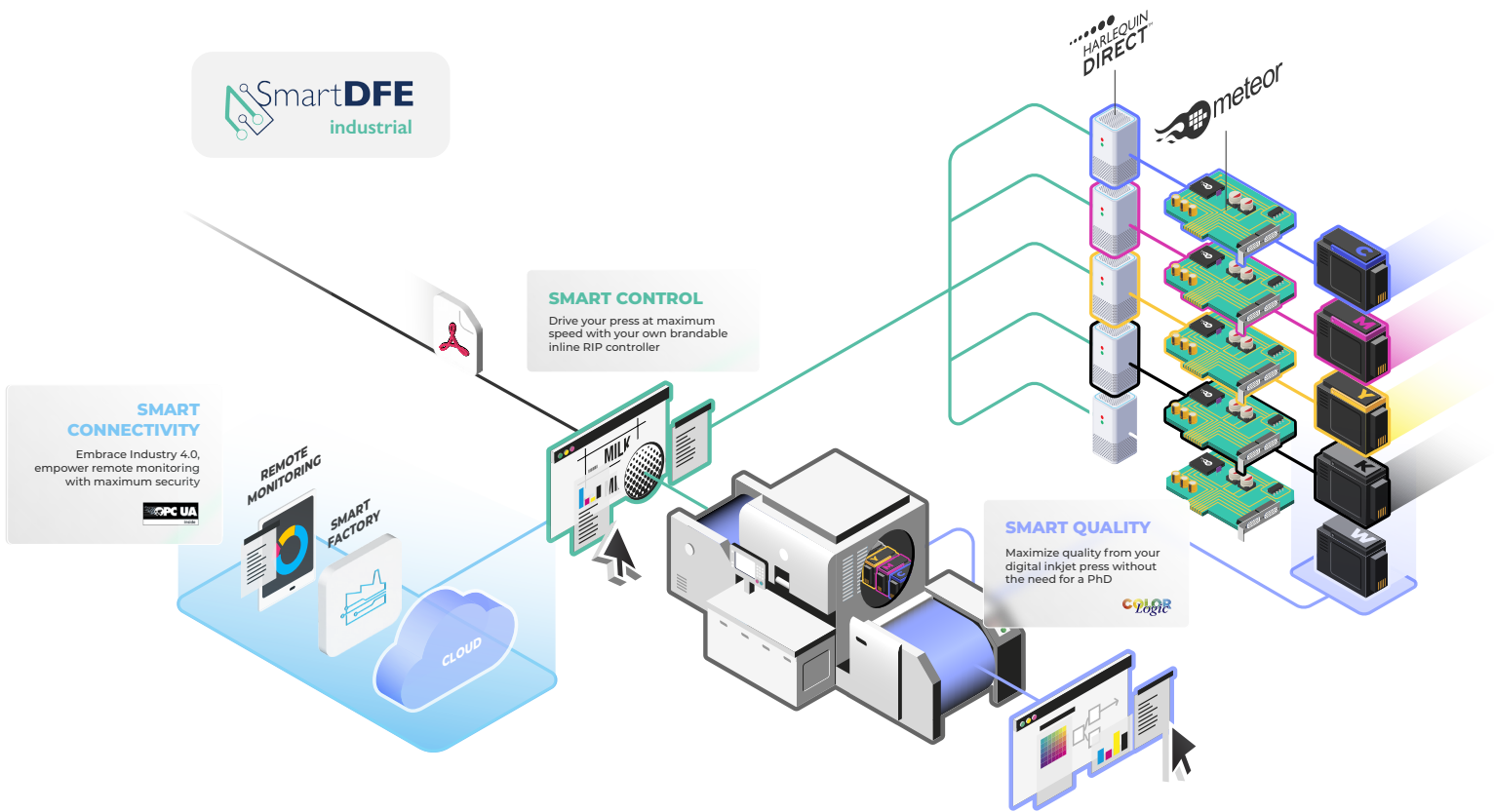
In today's printing landscape, achieving top-quality prints and precise colors often relies on skilled print operators. However, there's a shortage of these experts. This is especially noticeable in industries integrating print into broader processes, where non-specialists take on printing tasks. To address this, Smart Quality combines advanced technologies like PrintFlat™, ScreenPro™, and ColorLogic into a user-friendly system, making it easier for any operator to achieve excellent print quality. Autotune also enhances performance automatically by adjusting jobs and RIP processes, leveraging our dual ownership of the RIP and PDF analysis technology.

SMARTQI Synchronize SmartDFE with advanced vision systems

Incorporating an additional RIP Server PC into your system establishes a direct link with a vision system for quality assessment using SmartQI™. This server is adept at delivering RGB composite images to your inspection system, ensuring they are in sync with the rasters sent to the press. Such synchronization is crucial for uniform control of both the printing and inspection processes.

UNIVERSAL SUPPORT FOR PRINthead DRIVE ELECTRONICS

SmartDFE works with any printhead drive electronics and supports various file types like PRT and TIFF. Quick support for new electronics or formats is often available within weeks through a BreakThrough project. It's already compatible with printhead drive electronics from Meteor Inkjet, known for its wide support in industrial inkjet printing. This allows easy integration of different printheads, even from various manufacturers, in one press.



SmartDFE makes adding an inkjet printing station to a factory as straightforward as adding any other industrial component.

STREAMLINE YOUR SMARTDFE SOLUTION WITH A SINGLE SUPPLIER

Our approach combines the convenience of a single supplier for SmartDFE components with the flexibility to choose different options, supported by our 30 years in printing. We use open standards like OPC UA for better compatibility. Committed to innovation, we offer key components as SDKs, allowing customization to meet your unique market needs.

ACCELERATE TO MARKET WITH OUR FREE BREAKTHROUGH SERVICE

Our business model, centered on partnering with you, offers SmartDFE licenses linked to your printer sales, starting when your product is ready for the market. Our objective is to help you launch quickly. Our BreakThrough service adds our expert engineers and scientists to your team, accelerating your product's market launch. You can buy this service in blocks of days, and the cost will be balanced against SmartDFE licenses once your press ships, effectively making it free. This service is part of our commitment to your success, aiming to reduce challenges and speed up your market entry, benefiting both of us.



www.globalgraphics.com

Global Graphics Software Inc
6601 S Tamiami Trail
Suite 176
Sarasota, FL 34231
United States of America
Tel: +1 (941) 925-1303

Global Graphics Software Ltd
Building 2030
Cambourne Business Park
Cambourne, Cambridge
CB23 6DW UK
Tel: +44 (0)1954 283100

Global Graphics KK
613 AIOS Nagatacho Bldg.
2-17-17 Nagatacho, Chiyoda-ku,
Tokyo 100-0014
Japan
Tel: +81-3-6273-3198



SmartDFE, Harlequin Direct, ScreenPro, Streamline Autotune, PrintFlat and SmartQI are trademarks of Global Graphics Software Limited which may be registered in certain jurisdictions. Global Graphics Software is a registered trademark of Hybrid Software Group. All other brand and product names are the registered trademarks or trademarks of their respective owners. Global Graphics makes no warranty and accepts no liability for any loss or damage arising from the use of information or particulars in this document. Copyright © 2025 Global Graphics Software Limited. All rights reserved.

May 2025 v2