Truepress PAC 830F

A BRIGHT FUTURE FOR FLEXIBLE PACKAGE PRINTING

Single-pass Water Based Inkjet Digital Printing for Flexible Packaging

Market Trends in Flexible Packaging

The dynamic flexible packaging industry is undergoing a rapid transformation, with brand owners now seeking faster delivery, enhanced product diversification, and personalised messaging without compromising brand identity and print quality.

Challenges Faced by the Flexible Packaging Industry

Sustainable Printing Solutions – As consumer attitudes and regulations shift towards ethical and sustainable pratices, the flexible packaging industry seeks environmentally friendly printing options. Water-based inks offer a promising solution to reduce the environmental impact.

Customisation and Versioning – The industry now requires a greater level of packaging customisation and versioning, enabling brands to target specific customer segments effectively. Conventional printing methods cannot provide this level of flexiibility at market speed.

Short-Run Printing – Low volume quantities of printed packaging films are now ordered more frequently. Conventional printing processes struggle to cope with short-run printing demands, leading to increased costs and production inefficiencies.

Shorter lead times and Greater Product Diversification – Brand owners demand quick turnarounds and a wider range of product variations (SKUs) to keep up with ever-chaging market dynamics. Traditional analague printing methods struggle to meet these requirements efficiently.

Market Drivers in Printing

Enabling The Transition From Analogue To Digital Printing In Flexible Packaging.

SCREEN instroduces the Truepress PAC830F, a new single-pass industrial inkjet digital printing press that complements existing analogue printing processes while providing total flexibility to your operations. This agile, cost-effective press allows you to capitalise on emerging trends in flexible packaging, boosting profitability in short-runs.

- ✓ Maximise Press Capacity Efficiency
- ✓ 100% Inkjet Digital Printing Engine
- ✓ Reliable and stable Process Performance
- ✓ Water-based Food Compliant inks

Benefits of Digital Printing in Flexible Packaging Production

Speed and Agility

- Faster job turnaround times: think days, not weeks
- Rapid market response time with greater accuracy
- Production of urgent jobs with No tooling charges

Flexibility

- Wider product design options and frequent artwork changes
- Print small and medium volume orders with no MOQs
- Printing technology interchangeability with indistinguishable print quality

Sustainability

- Enable the production of recyclable packaging structures
- Drasti waster reduction improving your sustainability
- Low environmental impact printing

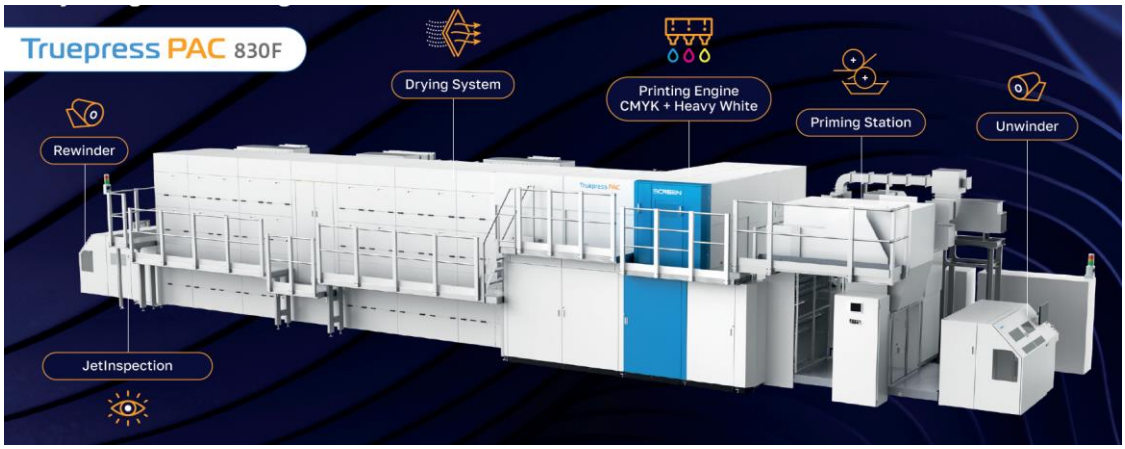
Operational efficiency

- Print cost-effectively short-run jobs and improve quality control
- Increased capacity utilisation in existing analogue printing presses
- Reduction in stock levels, capital tie-up and obsolete inventory

Drives value

- Print-on demand as as service differentiator to your customers
- Create new business models and value-added solution
- Endless opportunities in packaging personalisation and market segmentation

INNOVATIONS FOR HIGH PRODUCTIVITY INKJET DIGITAL PRINTING



Specifications	CMYK + Heavy White (Digital)
Speed: 75m/min	Printing width: 470-800mm
PET & BOPP Films*	Piezo Inkjet Print Heads
Reverse Printing	1200 x 1200 dpi
Water-based Inks	Drying: Hot Air

*MDO-PE & BOPE films under development

JetInspection – Built.in image capture ensures comprehensive, real-time image inspection, alerting operators to defects during full web inspection using a sensitive in-line sensor.

Drying Technology – Energy-efficient hot-air drying system delivers gentle and consistent ink drying, even at high ink coverages. Its unique web path design prevents intercolour bleeding, ensuring high umage quality.

Precise Web Handling – Superb web transport system for thin and heat-sensitive materials, featuring smart rollers with intelligent tension control for wrinkle prevention and printing process.

Dynamic Nozzle Shift – SCREEN's proprietary Dynamic Nozzel Shift (DNS) system allows the detection of web wander and performs real-time calculations and adjustments to print position based on the movement.

Priming Station – An in-line water-based primer is applied to the substrate prior to entering the inkjet digital printing engine to smooth over surface imperfections and enhance ink adhesion.

High Quality Printing

The Truepress PAC830F incorporates an advanced stochastic screening tool that enables printing high-definition images while effectively eliminating undesired defects like “moire” or “rattle” trhrough its high-resolution 1200 dpi printheads. High quality printing is achieved due to the precise non-contact ink deposition process of its piezo drop-on-demand printheads with variable drop size. This translates into extremely accurate dot placement to deliver fine details and smooth gradients to zero.

A specially developed Heavy Digital White Ink delivers the required white optical density for solid coverage on transparent films achieving high opacity levels comparable to analogue printing.

Colour consistency throughout the entire run is achieved thanks to a complex but very carefully controlled combination of parameters: precise inkjet printhead control, constant and stable ink supply, consistent ink jetting and printhead waveform optimisation.

Sustainability

Variable Data Printing (currently under development)

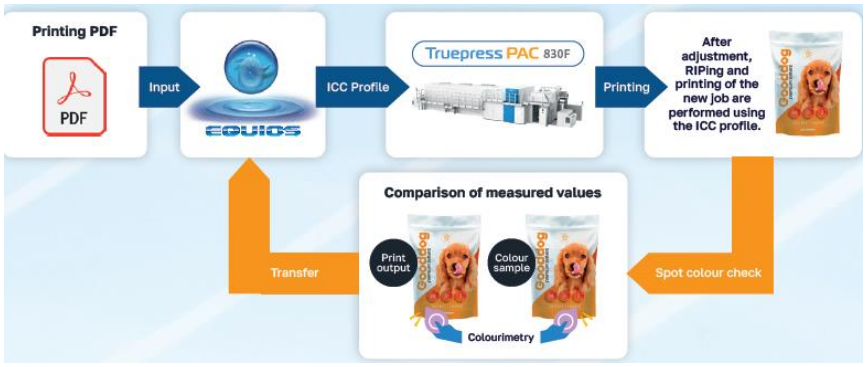
Digital printing empowers brand owners' creativity and personalisation in packaging. EQUIOS offers a robust variable data processing fuction that enables high-speed RIP processing of variable elements like numbering, barcordes, QR codes, enhancing shelf appeal, captivationg designs and customer engagement.

Profit Opportunity

The Truepress PAC830F digital press has been specifically designed to produce short printing runs in a cost-effective manner at 75m/min and the ability to print many jobs per day. This digital printing unit would enable converters to relieve their analogue printing equipment from the time-consuming task of producing small jobs and open a window of business opportunities for product innovation, value-added applications and take on new jobs that could not have been profitable in analogue printing.

EQUIOS Workflow: Advanced Colour Matching Expertise

EQUIOS, a universal workflow system, powered by Adobe's PDF print engine, guarantees high-speed processing. It features an advnaced substrate-linked colour management system, ensuring precise colour matching for perfect repeatability. EQUIOS leverages standard job colours as references, facilitating precise colour adjustements. The Spot Colour matching tool simplifies spot colour selection and matching. Its sophisticated colour automation algorithms maintain brand colour consistency and unifornity throughout the print job.



Truepress PAC 830F

Truepress PAC830F Specifications

Product Name	Truepress PAC 830F
Printing System	Piezo Single-pass Inkjet Printing
Market	Flexible Packaging
Resolution	1200 x 1200 dpi
Printing Speed	75m/min
Colours	CMYK + Heavy White
Web Width	470mm to 800mm
Printhead	Drop-on-Demand
Substrates	PET, BOPP
Thickness range	PET: 12µm-50µm, BOPP: 20µm-50µm
Inks	Water-based food compliant inks
Ink tank capacity	200 L
Primer	Water-based primer
Controller	EQUIOS Controller for PAC 830F
Dimensions (LxWxH)	20.7m x 6.7m x 3.5m
Power Requirements	Main unit 3Φ400V (380~415) 100A Dryer unit: 3Φ400V (400~415) 125A Always supplying: 1Φ200V (200~240) 20A PC: 1Φ200V (200~240) 30A Ink supplying panel: 1Φ200V (200~240) 3A
Operating Environments	Temperature: 20~24 °C (no sudden temperature change) Humidity: 40~60% (no condensation)
Drying System	Hot-air

TRUST Network Service

The Truepress PAC830F is covered by the TRUST Network Service which is a highly dependable solution for time sensitive production liines. TRUST Network Service is a proprietary client support program provided by SCREEN to prevent unexpected machine stoppages. TRUST Network offerta a full range of services including predictive mainenance, remote connectivity and fault diagnosis, powerful machine monitoring and reporting analytics.