

XSYS

Thermoflex **Edge 80**

3rd Generation Flexo Laser Imager





XSYS

Thermoflex Edge 80



Flexo prepress today goes beyond high resolution imaging. It requires efficiency, flexibility, and seamless integration within increasingly complex production environments.

The **Thermoflex** platform is designed to meet these demands. With its open architecture and intuitive operation, it integrates effortlessly into all major prepress workflows while maintaining maximum flexibility across applications. The **Thermoflex Edge 80** represents the third generation of laser imaging technology, setting a new benchmark in flexo plate production. Combining proven reliability with outstanding imaging quality, it delivers next level performance that maximizes Overall Equipment Effectiveness and enables a fast return on investment.

Designed for scalable, modular integration from standalone operation to fully automated plate production with Catena+, the **Thermoflex Edge** meets the highest requirements of modern flexography.

With its unique combination of flexibility, usability, and proven performance, **Thermoflex** provides a solid foundation for highly efficient and future ready flexo platemaking.

INDUSTRY LEADERSHIP WITH BEST-IN-CLASS OEE

THE MARKET'S FASTEST IMAGER.

Designed to be the fastest imager on the market, the **Thermoflex Edge 80** reaches speeds of up to 15 m²/h, significantly boosting plate production capacity.

PREMIUM SURFACE SCREENING WITHOUT BOTTLENECKS.

Even with high-quality surface screening such as **Woodpecker Nano 2000**, the imager achieves speeds up to 10 m²/h, ensuring that superior print quality is no longer limited by platemaking performance.

2400 PPI. ZERO COMPROMISE.

Building on the proven **Nano 2000**, introduced in 2019 as the first true lossless surface screening, **Nano 2400** sets a new benchmark with the highest output frequency at 2400 ppi. It delivers even finer detail, smoother solids and enhanced ink transfer, enabling premium print quality without compromising productivity. With **Nano 2400**, high-end surface screening becomes faster, sharper and more efficient than ever before.

SEAMLESSLY IN SYNC WITH CATENA+.

Thermoflex Edge is designed for seamless integration into **Catena+**, **XSYS**' end-to-end solution for automated flexo plate production.

Catena+ connects all steps of the platemaking process: from imaging to solvent processing, drying and finishing into a continuous, fully synchronized workflow. By eliminating manual intervention between process steps, it enables true touch-free production with maximum consistency and repeatability.

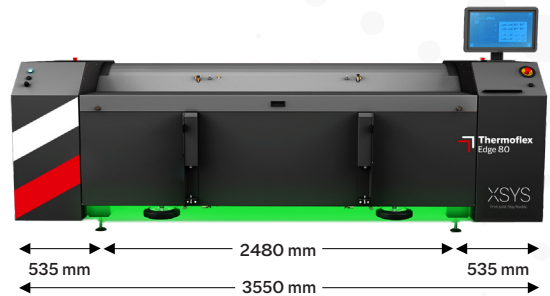
WORKS WITH WHAT YOU ALREADY USE.

Using industry standard 1-bit TIFF files, flexibility to all available workflows on the market is guaranteed. Also .LEN files are supported.

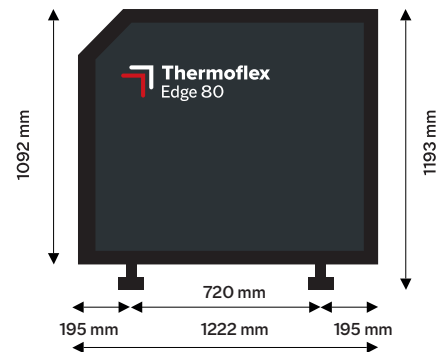
ADVANCED DIAGNOSTICS. RELIABLE OUTPUT.

Maximizing uptime is at the core of the **Thermoflex Edge 80**, supported by industry-leading remote service capabilities. Advanced diagnostics, real-time monitoring and rapid remote intervention minimize downtime and ensure continuous production. This proactive service approach enables faster issue resolution, reduces service costs and keeps operations running at peak performance.

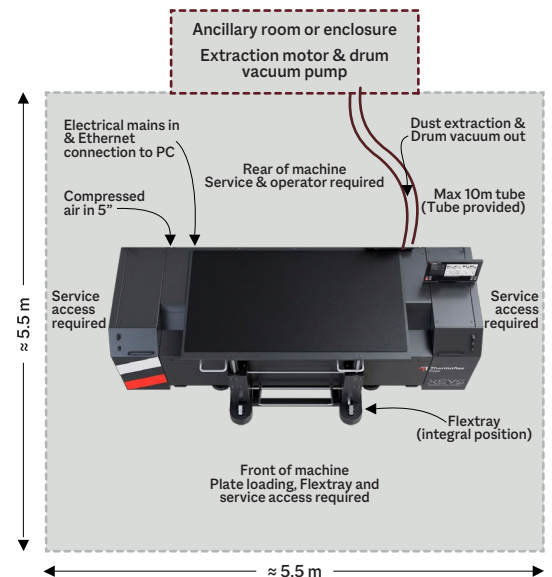
Front view



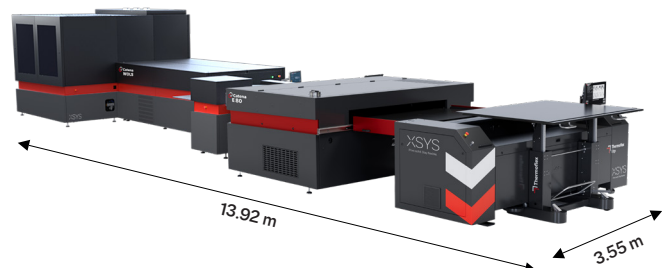
Side view

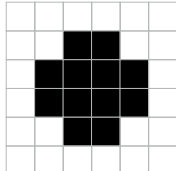
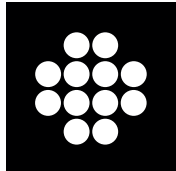


Floor plan

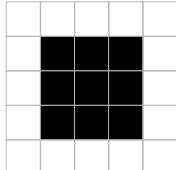
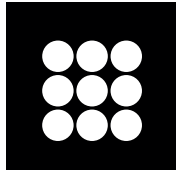


Catena + Full Line

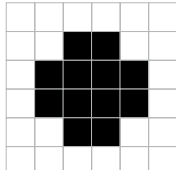
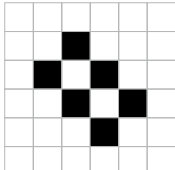
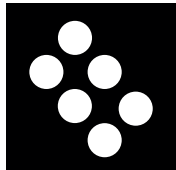
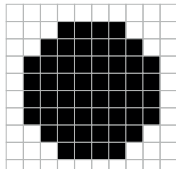
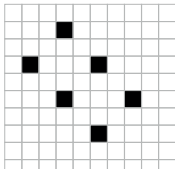
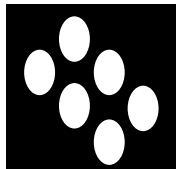


	File image resolution	Halftone dot	Surface screening applied	Laserdots on LAMS	Data loss	Gray levels @ 150 lpi	Plate output frequency
Nano 2400	10.6 μ m 2400 dpi				0%	256	2400 pi

Highest number of gray levels available • Highest output frequency at 2400 pi

Nano 2000	12.7 μ m 2000 dpi				0%	178	2000 pi
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World's first lossless surface screening since 2019 • High output frequency at 2000 pi • Lightweight input files

Sharp 2400	10.6 μ m 2400 dpi						50%	128	1700 pi
Traditional Surface Screening	6.4 μ m 4000 dpi						87.5%	89	1400 pi

EVERY PIXEL PRESERVED. EVERY DETAIL DELIVERED.

With **Nano** surface screening, every pixel of the original image data is preserved, allowing surface structures to be reproduced without any loss of information. The result is a significant increase in gray levels, smoother solids, and outstanding print consistency, especially in demanding flexible packaging applications. As part of the **Woodpecker** screening portfolio, **Nano 2400** extends a complete range of solutions designed to cover every flexo application, from the finest surface structures to robust day to day printing. Together with the proven **Nano 2000** and versatile options such as **Sharp**, **Nevis**, and **Replay**, it enables users to select the optimal screening approach for each job, and this without any speed penalty disrupting the platemaking efficiency.

This flexibility allows converters to adapt easily to changing market requirements, switch technologies when needed, and consistently achieve the highest print quality without compromising throughput speed.

In flexo imaging, higher dpi values are often perceived as the key to better print quality. However, nominal resolution alone does not determine the final result.

Conventional 4000 dpi imaging techniques rely on data resampling and interpolation. During this process, image information is approximated, which can lead to a significant loss of detail and inconsistency in dot reproduction.

Beyond performance and automation, **Thermoflex Edge** is designed to simplify daily operation and improve overall efficiency in the prepress environment.

Intuitive system control, ergonomic handling solutions and intelligent automation features reduce operator workload and ensure smooth, reliable production, even in demanding, high-throughput environments.

■ EASY PARTIAL PLATES.

The integrated vacuum slider enables automatic, tape-less loading of partial plates, ensuring fast setup and consistent positioning.

■ LASER PROTECTION PLATE.

High-value laser optics are safely shielded against plate fly-offs, ensuring long-term reliability and reduced maintenance.

■ INTUITIVE, MODERN USER INTERFACE.

A state-of-the-art graphical user interface provides operators with a clear, real-time overview of the entire process that makes operation simple, efficient, and user-friendly.

■ MULTI RESOLUTION.

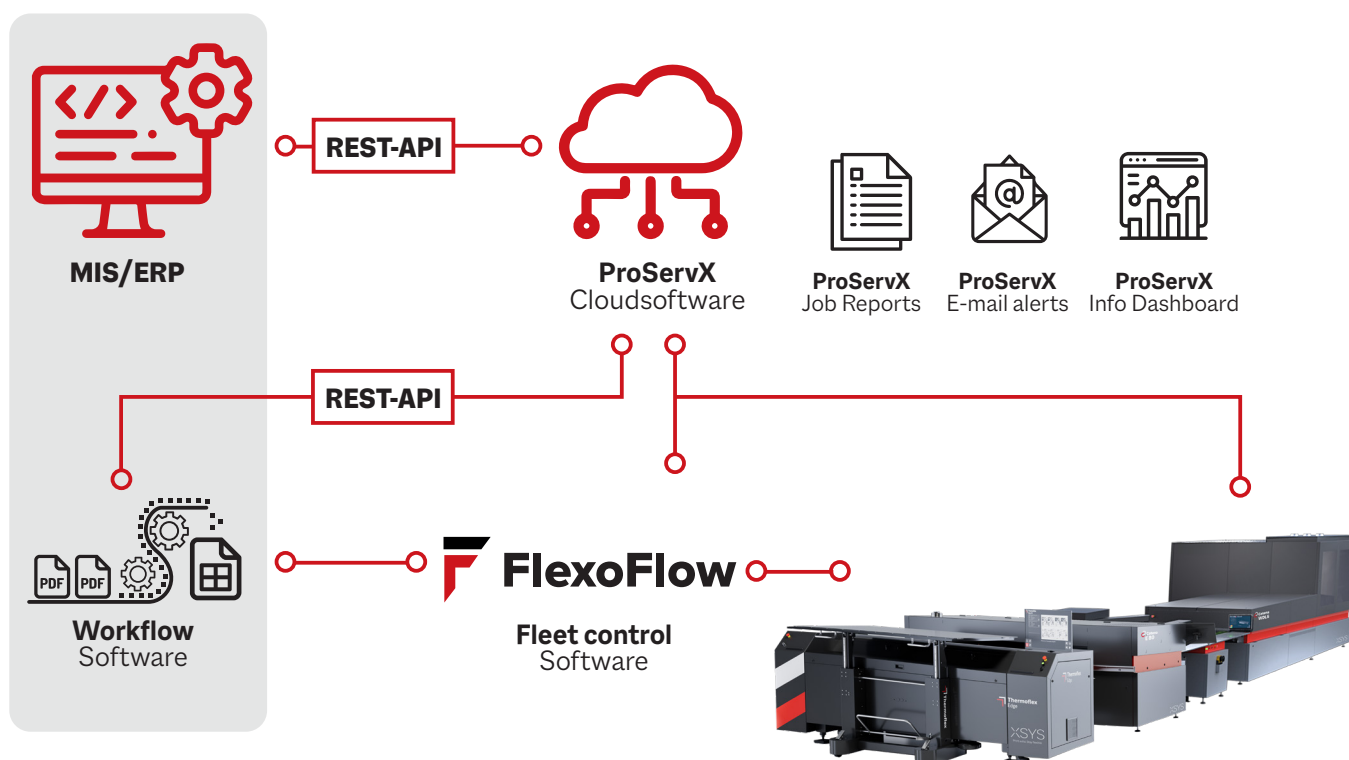
Different resolutions and imaging methods can be combined on a single plate in one pass, delivering maximum flexibility without compromising productivity.

■ INDUSTRY 4.0 CONNECTIVITY.

Seamless integration with **FlexoFlow** Fleet Control and **ProServX** Fleet management enables automated job preparation while providing access to a centralized data platform that supports data driven decision making, predictive maintenance, and advanced productivity and quality reporting.

■ FLEXTRAY.

The **FlexTray** system simplifies plate pick-up, transport and loading: improving operator ergonomics and reducing handling time.



Technical characteristics

Thermoflex Edge 80

Laser type	Fiber laser 1064 nm
Laser power	400 W
Standard resolution	2400 - 2540 dpi
High resolution	4000 - 4800 - 5080 dpi
Resolution change	Automatic
Productivity 2400 dpi	Up to 15 m ² /h*
Productivity 4000 dpi	Up to 12 m ² /h*
Productivity Nano 2000 Surface Screening	Up to 10 m ² /h*
Productivity Nano 2400 Surface Screening	Up to 6.5 m ² /h*
Loading system	FlexTray Manual/Automatic Optional fully automated operator-free loading & unloading
Clamping system	Automatic Toothed or flat clamps 15mm/0.6" clamp space required
Partial plate handling	Automatic Vacuum Slider
Maximum plate size	1270 x 2032 mm or 50" x 80" (width: 2032 mm / circumference: 1270 mm)
Supported plate thicknesses	0.73 to 6.35 mm 0.029 to 0.25"
Supported plate material	All LAMS flexo and letterpress plates with polyester base Dry films 0.2 mm Digital screens Gallus Screeny
Applications	Corrugated Packaging Folding Carton Flexible Packaging
Machine dimensions	Width: 3550 mm / 139.8" Depth: 1223 mm / 48.2" Height: 1200 mm / 47.3"
Required floor space	5100 x 5500 mm 200" x 216"
Weight	3700 kg / 8157 lb
Compressed air	Min. 6 bar - free of oil/condensation Compressor not included - 0.5" connection
Electrical connection	Voltage: 3x400 V (+/- 5%) N, PE Frequency: 50 Hz - 60 Hz Fuse: 20A Power consumption 5.6 kVA
Exhaust system	External exhaust with replaceable carbon filters
Operating conditions	Humidity, max 70% Temperature 15 - 26° / 59 - 79 F / (+/- 2%)
Flexoflow software	Windows 11 pc with intel i5
Platform specification	min 16 GB RAM 22" HD Screen or better 1 TB Hard Disk Dual network interface

Please contact us for additional information.

equipment@xsyglobal.com • www.xsyglobal.com

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