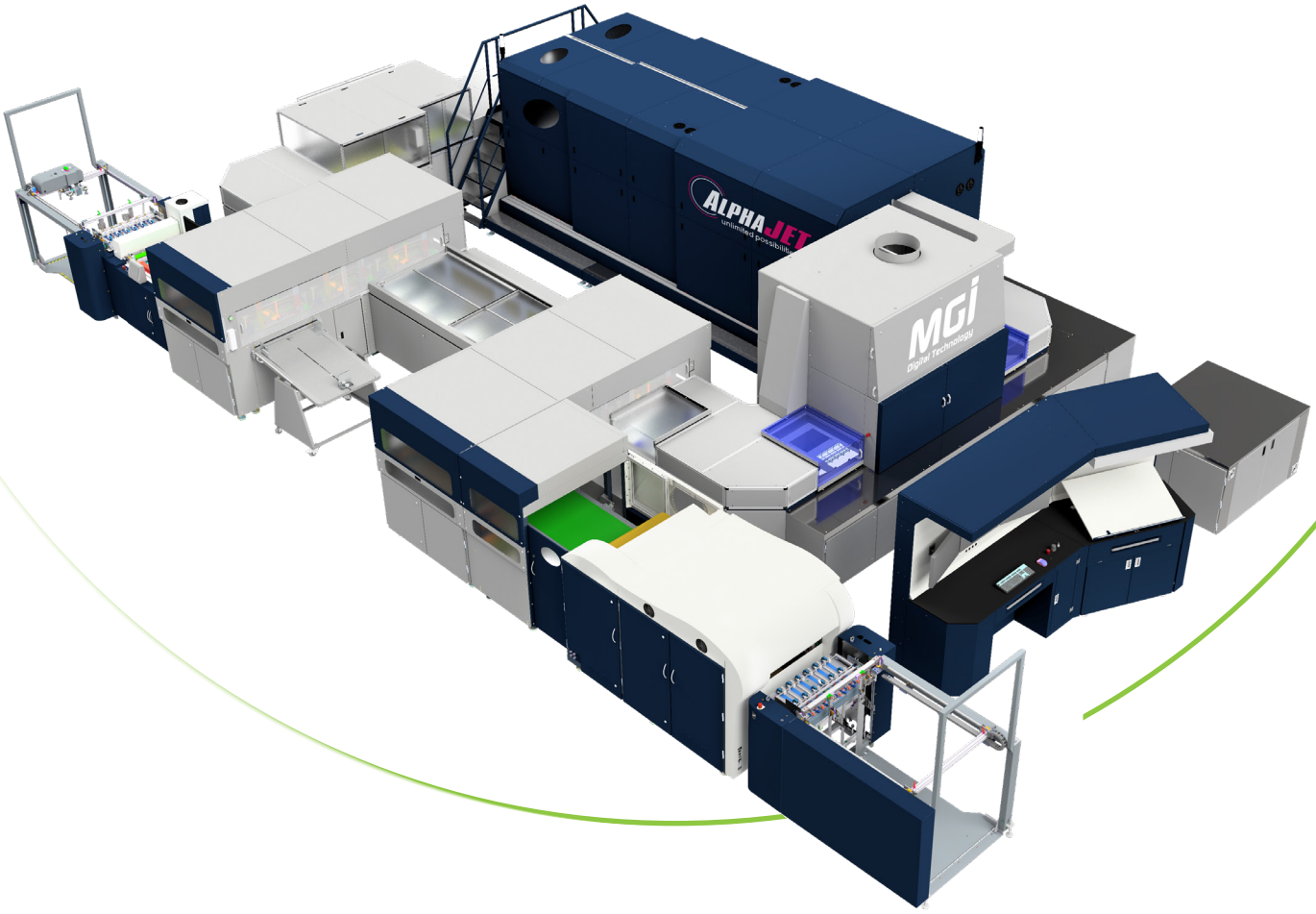
ALPHAJET
unlimited possibilities

DIGITAL PRINTING 5.0

ECO-RESPONSIBLE



MGI Digital Technology
KONICA MINOLTA

INDUSTRIAL DIGITAL PRINTING

SINGLE PASS

TO PRINT, VARNISH AND HOT FOIL IN 72x110 (B1+) OR 52x74 (B2)

100% DIGITAL, THE ALPHAJET ALLOWS TO REALIZE ALL TYPES OF PRINTS

Variable data, selective varnish, hot foil stamping, from a few sheets to several tens of thousands of sheets, without any break in the line, thanks to its Single Pass concept: a single set-up makes it possible to obtain a printed, varnished and gilded sheet, ready for finishing. Driven by a single operator, the AlphaJET makes simple what has always been complicated.

01 ● ERP PRINTING INTEGRATION

Integration of the AlphaJET in the production flow of the printing company, through its ERP, via JDF connection, for a total fluidity of the transfer of the files and the job-tickets.

02 ● CONTROL AND PILOTING STATION

Intuitive control station, allowing to plan the production, to launch it, to follow the different stages - helped by 9 cameras - to calculate and optimize its OEE in real time, and to have at any time the printing data of all the productions, stored in the cloud.

03 ● HIGH CAPACITY PALLET FEEDER

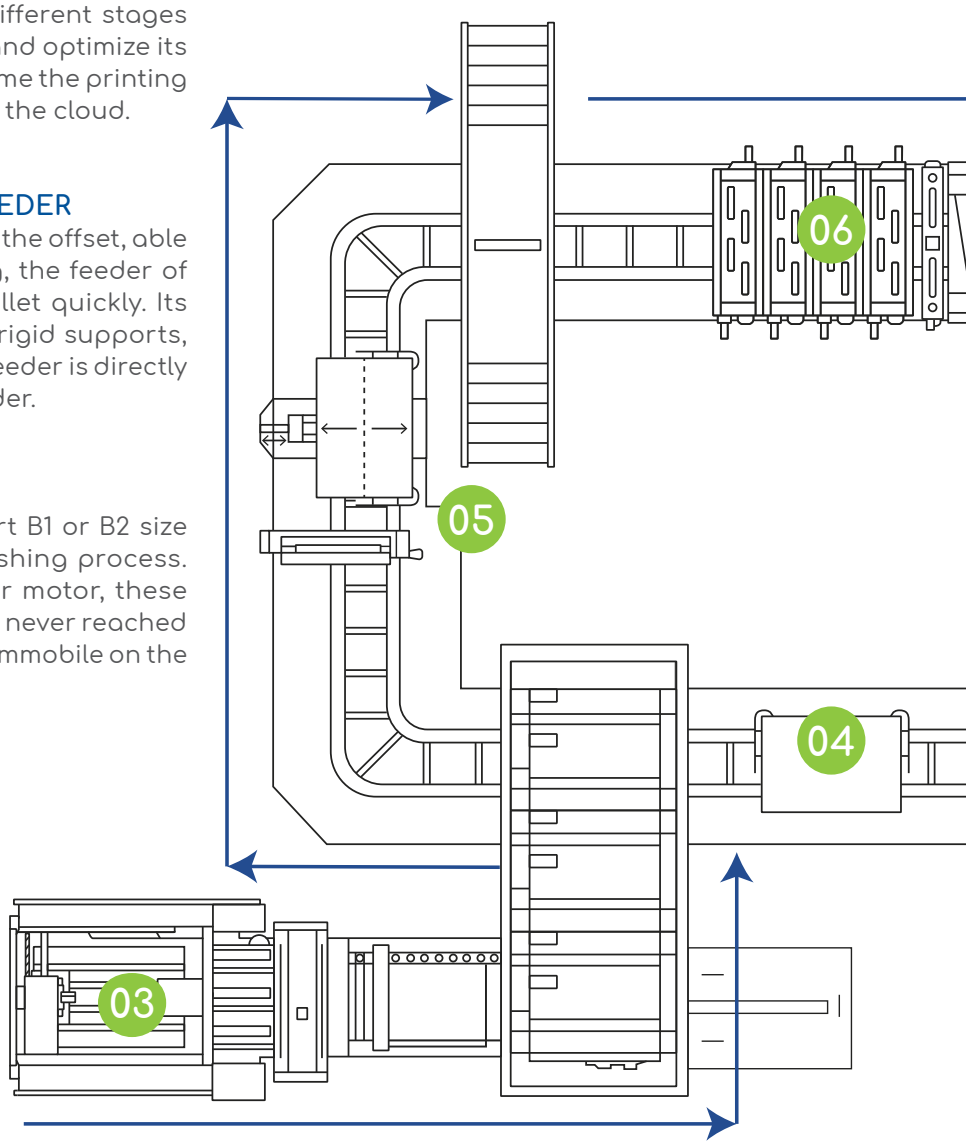
Based on a technology resulting from the offset, able to accomodate 2400 sheets B1+ 350g, the feeder of AlphaJET is conceived to load a pallet quickly. Its suction system adapts to flexible or rigid supports, from 135g/m2 to 2mm thickness. The feeder is directly connected to the automatic tray loader.

04 ● SUCTION TRAYS

11 suction trays are used to transport B1 or B2 size sheets throughout the printing/finishing process. Driven by an electromagnetic linear motor, these trays follow a process with a precision never reached in industrial printing, the sheets held immobile on the trays allowing a perfect registration.

05 ● ARTIFICIAL INTELLIGENCE SCANNER

Artificial intelligence driven AIS scanner, scanning every sheet to be printed and every space to be coated, for a perfect registration of the four-color printing, the UV selective varnish application, the OPV protective varnish application and the digital hot foil Green Foil, in the order of microns.



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INDUSTRIAL DIGITAL PRINTING

06 ● CMJN HIGH DEFINITION AQUEOUS INKJET ECO-PRINTING

MGI inkjet print engine, Memjet Duralink Food Compliant aqueous heads and inks. High definition printing 1600x1600dpi, wide gamut, Fogra certification. Compatibility coated papers / uncoated papers and deinkability Ingede 11 on some substrates, ensured by the Eco-Coating MGI Eco Inks. Automatic washing of the heads for a permanent availability of the line.

07 ● ECO SPOT UV VARNISH (ECO VARNISH)

MGI inkjet printing engine and UV Eco Varnish, offering excellent adhesion on all types of substrates, while being confirmed de-inkable on some substrates according to the Ingede 11 standard. The MGI UV Eco Varnish allows to anticipate the expectations of the principals in terms of eco-responsibility of their prints and packaging. Automatic washing of the heads for a permanent availability of the line.

08 ● ECO- PROTECTIVE VARNISH (OPV)

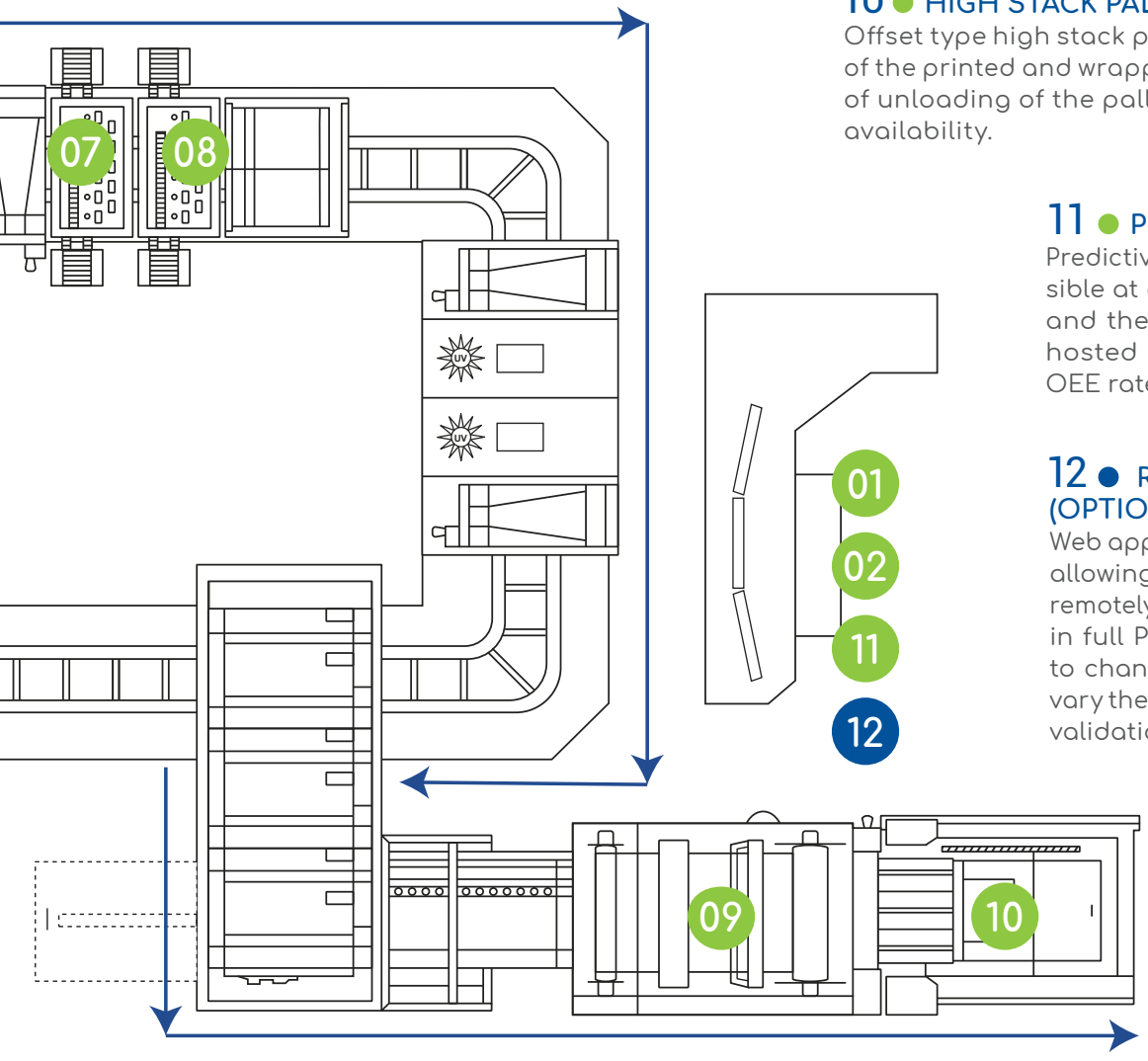
MGI's inkjet printing engine and Eco-Protective Varnish (OPV), offering excellent adhesion, both in flat and relief use, confirmed de-inkable according to the Ingede 11 standard on some substrates. MGI's OPV is the equivalent of an offset machine varnish and can, depending on its texture, offer an eco-responsible alternative to lamination. Automatic washing of the heads for a permanent availability of the line.

09 ● ECO-DIGITAL HOT FOIL STAMP (GREEN FOIL)

Hot foil stamping, flat or embossed, of the MGI Green Foil on the protective Eco Varnish. Green Foil MGI meets the Ingede 11 de-inkability standard on some substrates. MGI Green Foil waste generated by printers is de-inked and recycled in a unique way, allowing us to offer an Eco-Responsible Hot Foil Stamping.

10 ● HIGH STACK PALLET DELIVERY

Offset type high stack pallet, allowing a total integrity of the printed and wrapped sheets, and a great facility of unloading of the pallet, for a high rate of machine availability.



11 ● PREDICTIVE MAINTENANCE

Predictive maintenance program accessible at any time from the pilot station and the Dashboard of the AlphaJET, hosted on the Cloud, to optimize its OEE rate.

12 ● REMOTE PROOF APPROVE (OPTION)

Web application available to customers allowing them to view and manipulate remotely realistic 3D proofs (packaging) in full PDF format, to annotate them, to change the types of gilding and to vary the thickness of the varnish, before validation.

GLOBAL SAVINGS OF A PACKAGING PRODUCTION
ALPHAJET VS CONVENTIONAL

PRODUCTION WASTE
-600%

No waste with AlphaJET
vs. conventional process:
600 sheets waste/job

SOLVENTS & SINGLE-USE CONSUMABLES
0

INGEDE

No plate, no screen, no dies, deinkable proccesses, no powder, no solvent, no damping solution

IMMOBILIZED FLOOR SPACE
-47%

AlphaJET: 147 sqm
vs. conventional process:
270 sqm

LABOR COST
-78%

Only 1 operator for AlphaJET
vs. conventional process:
4.5 operators

CARBON FOOTPRINT RAW MATERIALS USED :
-60%

AlphaJET: 20 tons
vs conventional process:
67 tons

ELECTRICITY CONSUMED
-30%

for a better carbon footprint

ALPHAJET
UNIQUE VALUE SELLING POINTS

B1 SINGLE PASS FACTORY 5.0

- CMYK print
- Dispersion varnish *(protective varnish)*
- Flat or relief spot UV coating
- Flat or relief hot foil stamping

COLOR DENSITY MANAGEMENT

- Highest print resolution 1600 DPI
- High gamut range
- MGI RIP engine for 1800 B1 VDP sheets per hour

HIGHEST PRINTING QUALITY

- **Resolution:** 1600 x 1585 DPI
- **Redundancy:** 5 nozzles
- **Water-based CMYK inks:** food packaging compatible
- **Inkjet heads included in the ink price:** 1 million B1 prints lifetime *(40% ink coverage)*

MGI AIS SCANNERS© x2

- 2 artificial intelligence scanners
- Perfect and automatic print & embellishment registration
- Color calibration & colorimetric adjustment
- Sheet-by-sheet on the fly 100% automatic process

ELECTROMAGNETIC LINEAR TRANSPORT

- Stability & flat paper transport allowing perfect registration
- Technology moves around the substrates: no movement, no friction, no vibration, no jams

IOT SYSTEM & MGI CONNECT

Cloud-based plateform:
- MGI Dashboard
- MGI Approve

OEE & EFFICIENCY

- 80% of AlphaJET OEE: print +varnish +hot foil vs 20% offset +screen printing +hot foil
- No break-down essential between processes, no set up, no waste

TOTAL COST OF OWNERSHIP

- No tooling
- No waste
- No preparation
- Less expensive than offset printing