Welcome to a new era of sustainable liner.

Avoid the inevitable consequence of liner waste with Core Linerless Solutions®: a technological platform based on a multifunctional smart liner that changes from waste into resource.
HOW IT WORKS

CORE LINERLESS SOLUTIONS®: a turnkey solution
Core Linerless Solutions® consists of a self-adhesive laminated label without liner though, much thinner than a standard label.

The process begins with Ritrama’s self-adhesive thin construction* (polypropylene with siliconized polyester multifunctional smart liner), printed using traditional methods and converted by a specific process, resulting in a reel of laminated labels ready to be easily dispensed on products using an ILTI linerless labelling machine.

For the converting process machinery, Ritrama has been collaborating with two leaders with specific technical expertise: OMET for the lamination phase and SPILKER for the finishing phase.

MULTIFUNCTIONAL SMART LINER CLS®

Thin material construction

- Print: all methods
- Face: TC OPP
- Adhesive: permanent acrylic
- Siliconized liner: CLEAR PET
- Adhesive: by thermal activation

After the converting process

- Siliconized liner: CLEAR PET
- Adhesive: by thermal activation
- Print: all methods
- Face: TC OPP
- Adhesive: permanent acrylic

* available versions: gloss white, silver and clear.
CORE LINERLESS SOLUTIONS®: a new business opportunity

Be the first to offer your customers a technology that eliminates liner disposal and reduces reel replenishments thanks to a higher number of labels per reel.

You will gain the following benefits:

- No matrix waste to be disposed of.
- Label always protected by lamination film.
- Conventional printing techniques and inks.
- Increased printing speed.
- 50% reduction of transport and storage costs thanks to more labels per reel.
- Turnkey solution.

Reducing waste is one of the biggest economic and industrial challenges. Brand owners, driven by consumers, governments and institutions, are reviewing production processes and packaging with the aim of reducing resource consumption and waste.

The liner waste has always been seen by the industry as an inevitable consequence. After some years of research, Ritrama has developed Core Linerless Solutions®: the technological platform based on a multifunctional smart liner, able to transform the liner from waste into resource.
CORE LINERLESS SOLUTIONS® converting process
Lamination Phase

After the printing process, the reel is loaded into the lamination module where the self-adhesive material is delaminated while managed by an accurate tension control. The smart liner is then hot-laminated on top of the face material, thus becoming an integral part of the label and protecting the printed surface.

OMET CLS® lamination module

Benefits:

- Easy-to-use with intuitive adjustments that can be made directly on the unit.
- Quick set-up; ergonomic configuration of the operation areas and control panel.
- Cost-effective management and ease-of-use accelerate the return on investment.
- Easy access to the unit and guarantee of the operator safety.

Technical features:

- Max. speed: 150 m/min (490 fpm).
- Max. web width: 530 mm (21”).
- Max. outside diameter: 760 mm (30”).
- Core: 76 or 152 mm.
- Reel to reel off-line solution.
- Unwinding unit for reels with tension control according to the materials CLS specifications.
- Joint table.
- Corona treater.
- Delamination unit with tension control according to the CLS® materials specifications.
- Alignment unit.
- Calandra with heating system.
- Lamination roller with speed & torque control.
- Rewinding unit equipped with dancer arm to eliminate air bubbles between coils.
- Device for reels loading and unloading up to 620 mm outside diameter included.
- Device for reels loading and unloading up to 760 mm outside diameter optional.
CORE LINERLESS SOLUTIONS® converting process
Finishing Phase

The laminated reel is transferred to the finishing unit specifically designed to die-cut and inspect the CLS® materials at high speed.

SPILKER S-CON Starline CLS® 500 finishing module

Benefits:

- Very short set-up time, easy handling.
- High-speed and large web width process.
- Suitable for both CLS® and PS labels.
- Full inspection system ensures product and process quality.

Technical features:

- Max. speed: max. 150 m/min (490 fpm).
- Max. web width: max. 500 mm (20”).
- Max. outside diameter - unwinder: 800 mm (31,5”).
- Max. outside diameter - rewinder: 510 mm (20”).
- Max. cutting tool circumference: 635 mm (25”).
- Two vacuum pull stations ensure optimum web tension.
- Die-cutting unit makes a cross web microperforation by a through cut and simultaneously applies the longitudinal cut to separate lanes.
- Camera inspection system assures product and process quality.
- Integrated tandem winder with friction shafts ensures optimally wound single reels even for narrow labels.