

... a perfect lay-flat book



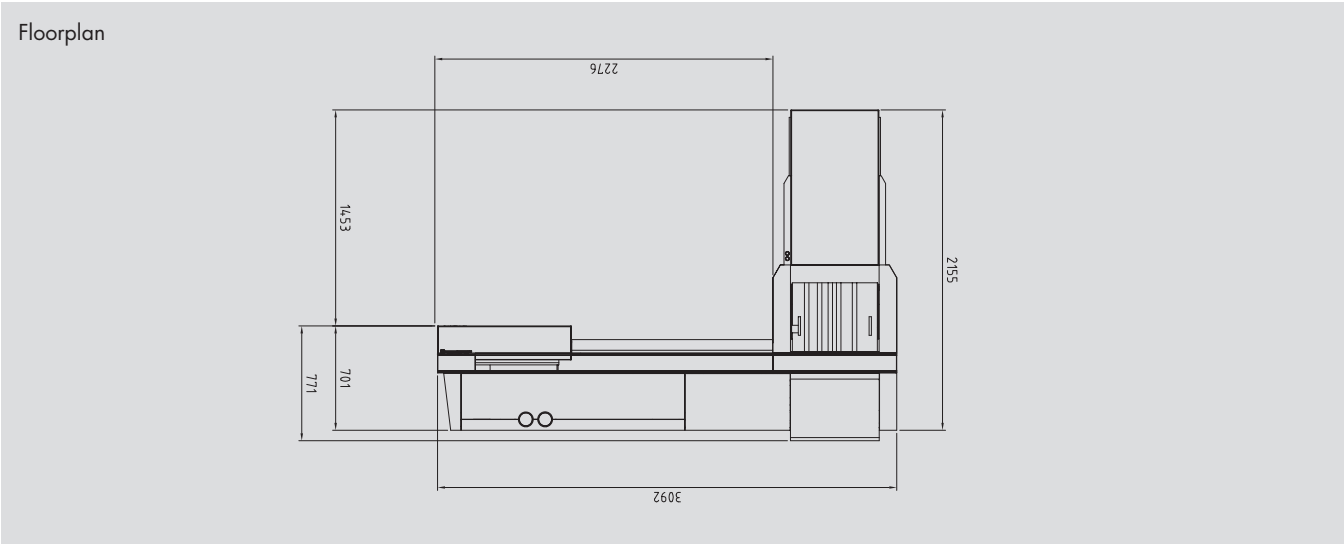
Advantages of our smartflat technology:

- **Books lay perfectly flat when lay opened**
- **Eco-friendly technology:**
 - Low energy consumption
 - No toxic fumes
 - Uses a highly flexible green adhesive
- **Added benefits:**
 - Even laminated, coated paper can be firmly bound
 - Adhesion remains strong even at extreme temperatures
- **Quick and easy cleaning with water:**
 - The closed-adhesive system must not be emptied and cleaned daily
- **Very low production costs:**
 - No heating-up time
 - The **smartliner240** is ready for use immediately
 - No extraction required
 - Automatic format settings, eliminating operator error
 - Low energy consumption

All paper qualities, whether coated or even laminated, can be bound into an especially long-lasting and perfectly lay-flat product. Short set-up times thanks to automation, “green” technology as well as simple operation and cleaning make the **smartliner240** the perfect choice **for book-on-demand production, book binderies, printers and copy shops** – in short, for everyone wanting to produce one-of-a-kind lay-flat binding.

Technical Data

| smartliner240 | |
|-----------------------------|-------------------------------------|
| Min. format: | 140 mm x 90 mm (5 ½" x 3 ½") |
| Max. format: | 430 mm x 350 mm (17" x 13 ¾") |
| Block thickness: | 3 mm – 40 mm (1/8" – 1 ½") |
| Contents: | 50 g/qm – 150 g/qm |
| Cover: | 135 g/qm – 300 g/qm |
| Linen material by agreement | |
| Performance: | max. 240 books/h |
| Electrical supply: | 230V/3 ~ 25A/9KW or 400V/3~ 16A/9KW |
| Compressed air supply: | 6 bar, 100 ltr/min. |



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Sample service

Would you like a sample using your own product?

Please contact your **smartliner** agent or **palamides** direct. After consultation, we will bind your product using smartflat technology and send the sample back to you.



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smartliner240

Lay-flat perfect binder with Ribler technology



smartflat guarantees ...

... environmentally friendly
production of your books

smartflat technology



Lay-flat perfect binder smartliner240

smartflat technology:

- **palamides**, worldwide leader for automatic delivery systems, is now introducing the brand new **smartliner240** perfect binding system, based on Ribler technology.
- **smartflat** means that books can be bound in an environmentally friendly way and at the same time, will lay perfectly flat when flipped open. Important advantage: Almost all types of paper and grammage can be processed.
- **smartliner240** was awarded the Baden-Wuerttemberg 2013 Environmental Technology Prize for its low energy consumption and its green material usage.
- The **hydrosive** adhesive together with a unique spine preparation, ensures that pages are held firmly in the book block.
- The great flexibility of the glue results in the coveted lay-flat properties.

Conventional binding methods:

- Today most books are using either EVA or PUR hotmelt glues. Unlike the **smartflat** spine preparation, which loosens the paper fibers, all hotmelt binders grind some sort of grooves/notches in the book block to increase the contact area for the glue. This creates a strong bonding, especially when using PUR. However when opened, books with this type of binding are often criticized for their bad lay-flat quality. Manufacturing these books is very energy intensive. Further, hotmelt glues produce toxic fumes which need to be exhausted from the work area.

The **smartliner240** is equipped with one clamp into which the book blocks are fed by hand. The clamp transports the book block at a constant speed over specially developed **smartflat** components to do the innovative spine preparation. An important feature of **smartflat** technology is the **hydrosive** adhesive, which is applied using a closed nozzle system. Various covers can be buffered in a manual cover

feeder. The automatic bar-creasing-unit with up to 4 creases, uses a new kind of humidifying device. Using a pressing plate, the cover is applied to the spine from below and the sides. The untrimmed products cure in the automatic book delivery. After approx. 5 minutes they have achieved the necessary stability for removal.

Technical features:

- **Manual book block feeder**
- **Manual cover feeder**
- **Patented spine processing**
- **Automatic cover creasing device**
- **Automatic nozzle application system**
- **Pre-drying unit**
- **Automatic book delivery system**

Options:

- **Side glueing**
- **Signature cutting unit**



Conventional binding



With smartflat technology

Cook books:

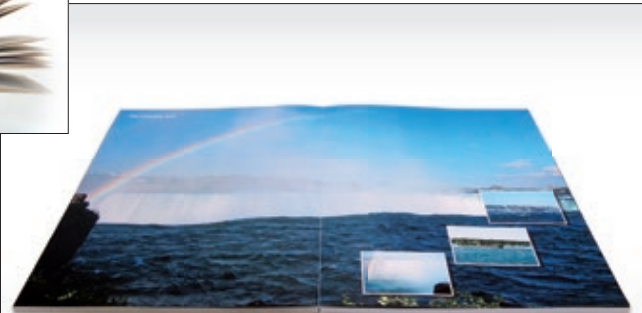
Lay-flat on the kitchen table and do not need to be held down by any weights.

Travel books:

Road maps that lay absolutely flat and can be read all the way to the spine.



Conventional binding



With smartflat technology

Photo books:

Panoramic holiday pictures no longer have to be pressed flat.

Music books:

Remain open on the music stand and no longer fall closed on their own.



Conventional binding



With smartflat technology

Paperbacks:

No longer close back shut because of an inflexible spine.

Instruction manuals:

Will stay open on the selected page; so both hands are free to operate the device.

Text books:

Lay-flat means easy copying, without having to press down the spine, creating a distorted image.