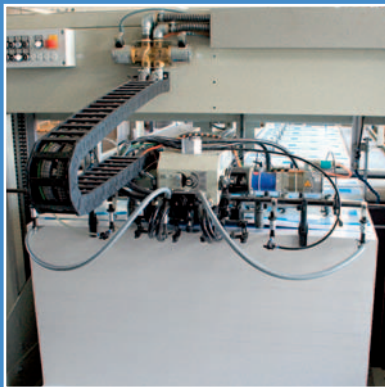


Sheet – to – Sheet Laminating Machines from Hand Fed Machine Model 123 to the Fully Automatic Model 14R5678



- production up to 8,000 sheets per hour
- short make ready times (set-up)
- little maintenance requirement
- just a very few wearing parts
- easy machine operation
- high reliability and availability of the machine
- modular system: a simple hand fed machine can be upgraded to a semi- or a fully auto machine at any time
- reliable sheet mounting, simple registration
- minimum glue application, for producing flat sheets
- simple and fast wash-up of the glue rollers – using tools
- equipped a well proved suction belt feeder for carrier sheets
- fully developed turning and stacking system, non-stop type
- semi-automatic production mode – on an automatic machine – for just mounting a few samples
- special machine for laminating board to board available

Sheet Laminating Machines

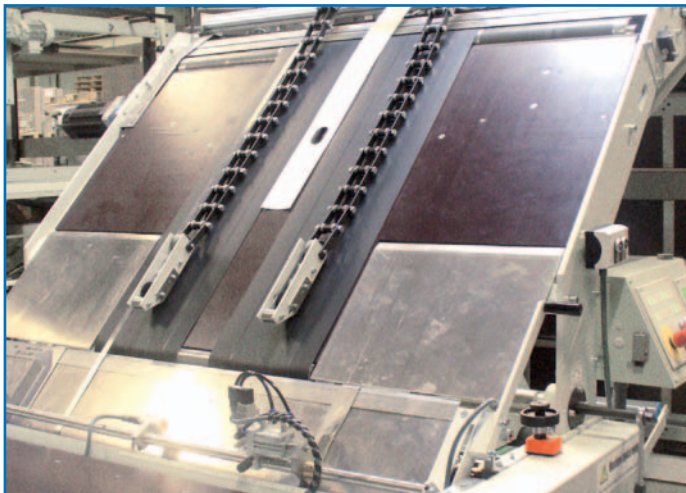
Proven Design and Efficient

Machines are suitable for all (packaging) box makers, POP-display producers, trade finishers, designed for single faced corrugated board, single- and double-wall corrugated board, solid board and other faced substrate materials with high quality offset (litho) printed sheet, using a commercial white resin glue. A special machine for laminating mainly board to board – up to 1,200 gsm – is available as well.



Quality of Laminating Materials

Smooth and flat surface square and clean cut, of an even overall thickness. Although this requirements are not always fulfilled, our machines continue to produce the best quality.



Automatic Laminator

Construction

All rollers are coated and run on ball bearings. The main-drive is adjustable. During breaks in working or other machine stop periods, the gluing unit, driven by a separate motor, carries on running. The frame and machine sides are of solid construction and the machine is running trouble free and requires less maintenance. Central adjustment: 2 hand wheels for adjusting the rollers to different material thicknesses, therefore short make-ready times are possible. Automatic sheet feeders for the substrate and the printed sheets are available. Adjustable pressure belt with parallel lifting pressure rollers. If required, available with pre-loading device and other options. Down-stacker (pile delivery) with non-stop operation, for accurate sheet stacking. Flip-flop (batch pile turner) with 3 different modes, dependent on sheet flatness after the lamination: 1) alternate inverting, when the sheets are warped; 2) Without inverting, when the sheets are flat; 3) Always inverting.



Suction-belt feeder for substrate sheets



Options available:

- push lay for printed sheets
- pallet logistics (roller conveyor system)
- pre-loading device for printed sheet feeder



Automatic laminator with down-stacker and pallet logistic



Automatic non-stop down-stacker and flip-flop



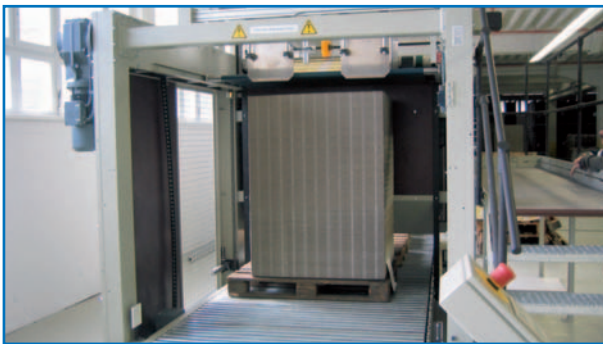
Semi-automatic machine



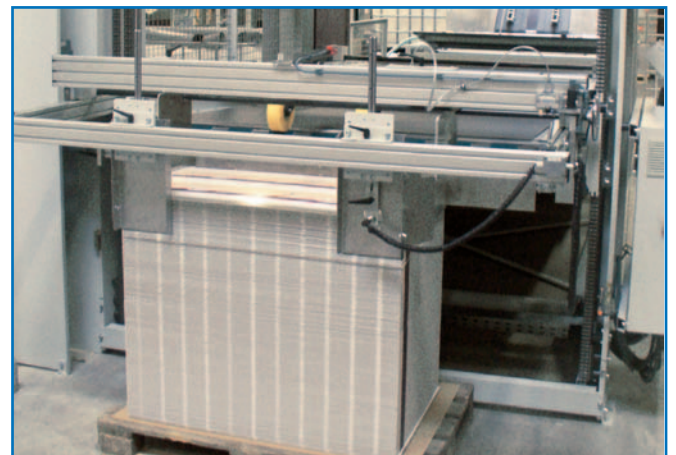
Manually printed sheet feeding



Automatic non-stop flip-flop



Non-stop down-stacker with pallet logistics



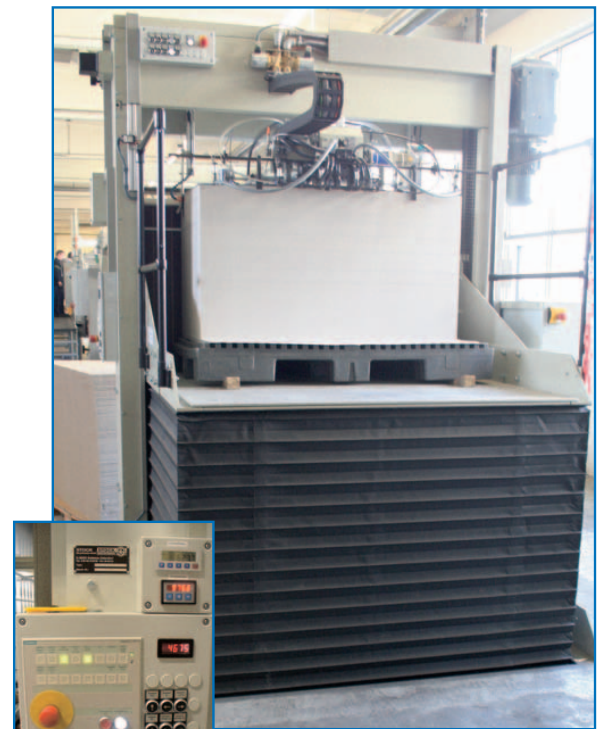
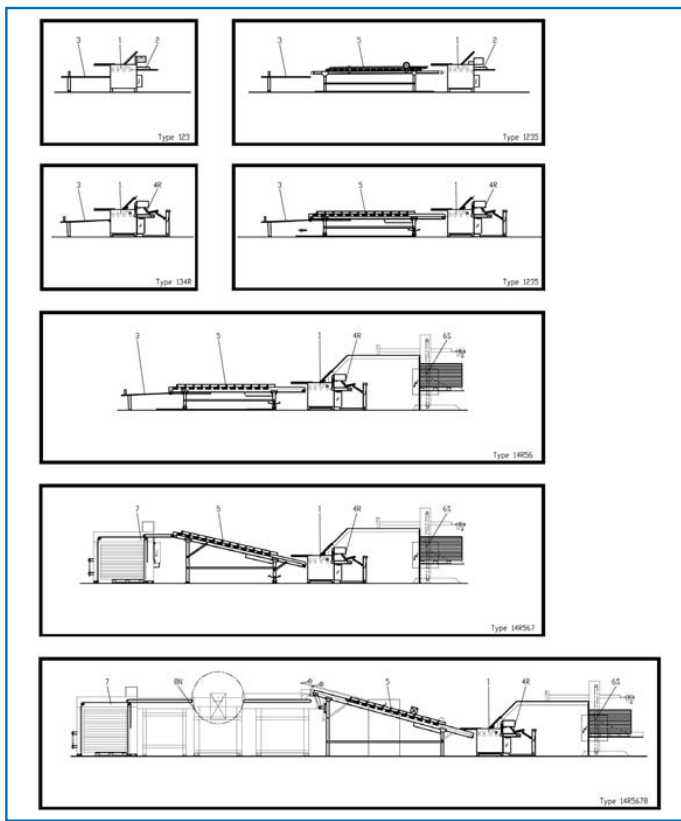
**Combined pressure-belt-stacker (up-stacker):
For automatic sheet delivery to a pallet with the option
to take-off warped sheet batches contemporary
by hand and flip them over**



Method of Operation

The printed sheets being approx. 5-10 mm larger in length and width than the substrate sheet is fed to a front lay. The pre-aligned corrugated sheet is pushed between the infeed rollers, glued beneath the coating rollers from above and collects the waiting printed sheet. After passing through the two pressure rollers, the sheets pile up on a simple delivery table and are stacked on a pallet by hand.

An additional pressure belt improves the quality of the finished product as this belt has a variable speed so the pressure drying time is adjustable. This leads to savings in adhesive and improves the sheet flatness. Feeding is not subject to a working cycle, therefore smaller sheets result in increased output (sheets/h).



**Printed sheet feeder
Model 6
– with motorized set-up**

Model range:

- | | |
|-----------------------------|-----------------------------------|
| 1 = laminating machine | 5 = pressure belt |
| 2 = feeding table (manual) | 6 = printed sheet feeder |
| 3 = take-off table (manual) | 7 = non-stop down-stacker |
| 4R = substrate sheet feeder | 8 = flip-flop (batch pile turner) |

Technical Data

- Working width: 1,250 / 1,500 / 1,650 mm
- Max. sheet width: 1,260 / 1,420 / 1,620 mm
- Max. sheet length: 1,620 mm
- Sheet width & length: 2,050 mm – on request
- Production (sheets per hour) for model
 - 123,5: up to 1,200 sph – with 3 operators
 - 134R,5: up to 2,000 sph – with 2 operators
 - 134R56,78: up to 8,000 sph – with 2 operators
- Set-up times for machine model
 - 123,5: approx. 3 minutes
 - 134R,5: approx. 5 minutes
 - 134R56: approx. 10 minutes
- 14R567 / 14R5678: approx. 15 / 20 minutes
- laminating tolerances: +/- 1.5 mm

Material Thickness

- Substrate (carrier) materials from 0.6 – 7 mm. Single faced corrugated can only be fed with flutes in running direction for the machine (standing flutes). For board from approx. 400 – 500 gsm, an additional stripping needle bar is required to prevent the Substrate sheets from wrapping around the glue application roller.
- Cover (top) materials from approx. 150 – 400 gsm. With the special machine (model SP) up to 1,200 gsm.
- Variations are permitted according to quality.

Glue Application

- Adhesives with a white resin (PVAc) or starch base can be used. The automatic glue feeding system (P) is included in the delivery. Glue consumption dependent up on type of paper (board), content of humidity and adhesive. Single faced corrugated board up to 25 – 30 gsm; double faced corrugated board and solid board approx. 40 – 60 gsm.

Our delivery program:

Sheet-to-Sheet Laminating Machines; Reel-to-Sheet Laminating Machines; Inline-Laminating Machines; Gluing Machines; Pattern (Stencil) Gluing Machines; Spot Labeling Machines (Spot Labelers); Sheet Feeders; Down-Stacker; Pressure Belts; Display Processing Machines Rotary Sheeter (Knife); Special Machines