



WITH A KLIEVERIK YOU ALWAYS MAKE THE RIGHT CHOICE

There are many, many details that go into a Klieverik calender all with a specific purpose in mind. These details culminate into a world class calender which precisely controls the critical variables of **temperature**, **pressure** and **web handling** during the dye sublimation transfer or fixation process.

Our calenders use thermal oil for regulating and accurately maintaining the drum's surface temperature. We use a unique expansion vessel for the oil (which expands up to 20%) which insures that the drum is always 100% full of oil. This design, in junction with how we circulate the oil internally within the drum, means no colour output differences over the width or in time.

DYE SUBLIMATION TRANSFER PRINTING AND FIXATION

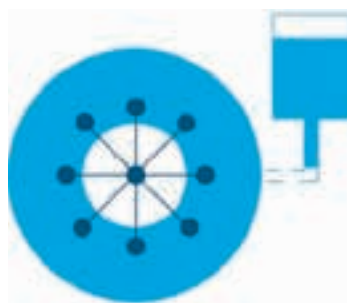
You will get high-value end-products with brilliant colours and sharp edge definition. A Klieverik machine offers reproducibility and high processing speeds. We offer first time right production, which means less waste and fewer re-prints. Klieverik calenders are made with high-quality components; it is a reliable machine. The down-time of the machine is limited, which means your production is guaranteed.

By using simple laws of thermodynamics, our heating elements are in direct contact with the thermal oil leading to shorter heating up times and higher energy efficiency.

Klieverik uses the longest belt in the industry and a specialized PID™ steering system which minimizes lateral movement of the belt preventing transfer defects. This feature also insures better longevity of the belt.

Our machines can also be customized with different options which are available to ideally match the manufacturing preferences of our customers.

Directly heated drum



Klieverik heated drum: a unique concept. Completely filled with oil because of expansion vessel. Directly heated because heating elements are directly in the oil. Best temperature consistency due to thorough mixing of the oil.

FEATURES AND OPTIONS

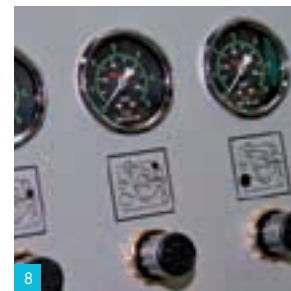
MODEL GTC

The calenders are standard equipped with:

- 1 Low tension textile unwind
- 2 Textile tensioning device
- 3 Universal unwind shaft for textiles rolls for any core diameter
- 4 Wind and unwinding shafts for transfer and protection paper, each with tensioning device
- 5 Contact winder for textile
- 6 Scraper blades to prevent paper or textile from wrapping around the drum and cleaning of the drum
- 7 Cooling down and start-up timer
- 8 Air pressure operated paper tension setting
- 9 Touchscreen

Options:

- 10 Low Tension textile winding for stretch sensitive materials
- 11 Driven substrate expander
- 12 Edge cutting unit
- 13 Compressor
- 14 Exhaust hood
- 15 Pressure laminating roller
- 16 Pneumatic winding shafts



SPECIFICATIONS

TYPE	DRUM SIZE MM	DRUM SIZE INCH	DRUM WIDTH MM	DRUM WIDTH INCH	WORKING WIDTH MM	WORKING WIDTH INCH	THROUGH PUT (30 SEC. DWELL) M ² /HR	THROUGH PUT (30 SEC. DWELL) FT ² /HR	LINEAR SPEED (30 SEC. DWELL) M/MIN	LINEAR SPEED (30 SEC. DWELL) FT/MIN
GTC 81-1850 SP-FL	195	7.7	1850	72.8	1650	64.9	59.4	642	0.60	2.0
GTC 101-1850 SP-FL	365	14.4	1850	72.8	1650	64.9	115	1226	1.15	3.8
GTC 111-2000 SP-FL	500	19.7	2000	78.7	1800	70.8	175	1884	1.6	5.3

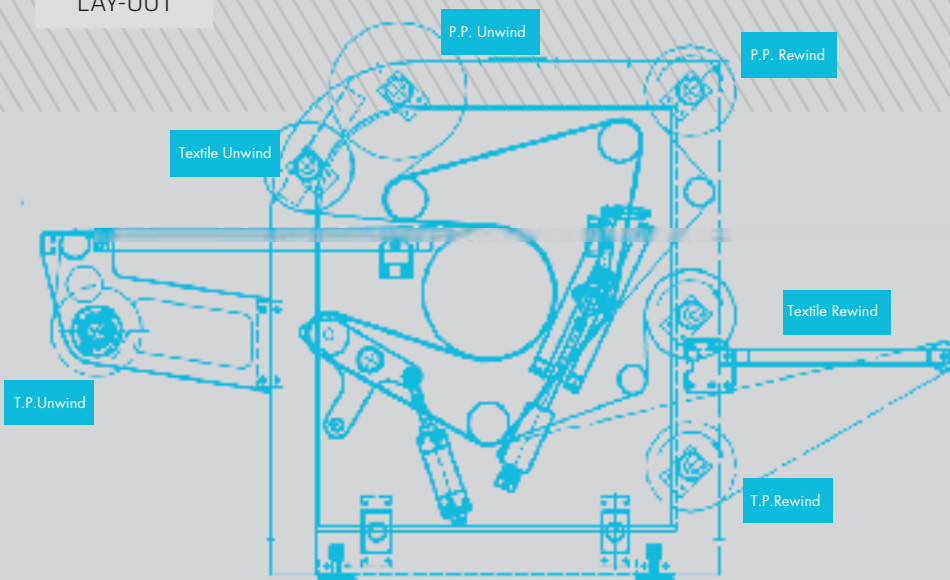
TRANSFER PRINTING CALENDERS SINGLE PIECES MODEL GTC- SP FLOWLINE

The GTC-SP Flowline model has been designed for the efficient production of single pieces transfer printing, but is also capable of cut sheet repeat jobs or roll-to-roll transfer printing. All kind of materials like woven – stretch – knits - non woven can be printed with applications ranging from athletic apparel to doormats. This calender is named 'Flowline' because of the way the material is transported through the machine. The blank pieces of fabric are first laid down on the infeed table and are then

automatically transported (or 'flow') to the back of the calender in the exact same order. The transferred pieces of fabric can easily be gathered and sorted by size and colour or design. It is also possible to have the transferred pieces flow to the front of the machine by simply changing the directional plate under the infeed table. This feature is great for sampling or short runs.



LAY-OUT



FEATURES AND OPTIONS

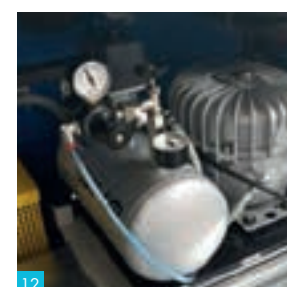
MODEL GTC-SP FLOWLINE

The calenders are standard equipped with:

- 1 Infeed table with adjustable height
- 2 Protection bar to prevent an operator from damaging the printed paper
- 3 Front outfeed for single sheet production
- 4 Wind and unwinding shafts for transfer and protection paper, each with tensioning device
- 5 Optimized work flow without 'ghosting' of the image
- 6 Cooling down and start-up timer
- 7 Textile unwind and winding position for roll-to-roll printing
- 8 Air pressure operated paper tension setting
- 9 Touchscreen
- 10 Exhaust extraction bar

Options:

- 11 Extended infeed table
- 12 Compressor
- 13 Low Tension textile winding for stretch sensitive materials
- 14 Pneumatic winding shafts



SPECIFICATIONS

TYPE	DRUM SIZE MM	DRUM SIZE INCH	DRUM WIDTH MM	DRUM WIDTH INCH	WORKING WIDTH MM	WORKING WIDTH INCH	THROUGH PUT (30 SEC. DWELL) M ² /HR	THROUGH PUT (30 SEC. DWELL) FT ² /HR	LINEAR SPEED (30 SEC. DWELL) M/MIN	LINEAR SPEED (30 SEC. DWELL) FT/MIN
GFC 81-1850	195	7.7	1850	72.8	1650	64.9	82.5	888	0.83	2.72
GFC 81-2750	195	7.7	2750	108.3	2550	100.4	128	1377	0.83	2.72
GFC 81-3400	195	7.7	3400	133.9	3200	125.9	160	1722	0.83	2.72
GFC 101-2000	365	14.4	2000	78.7	1800	70.8	169	1821	1.53	5
GFC 101-2750	365	14.4	2750	108.3	2550	100.4	239	2580	1.53	5
GFC 101-3500	365	14.4	3500	137.8	3200	125.9	310	3338	1.53	5

FIXATION CALENDERS MODEL GFC

The beltless calender type GFC is designed for the fixation of dispersed dyes and pigments printed directly on the material. Flags, banners and backlit material are ideal to be processed on this type of calender. The stable temperature thanks to the thermal oil and electrically heated drum will give you consistent brilliant colours. Tension of the substrate at the infeed and outfeed is very well controlled by means of special weights that keep the substrate from moving.



This machine is especially characterized by its low cost features.

- ▶ A low investment - no belt required
- ▶ Low cost of operation - no protection paper required
- ▶ Low cost of maintenance - no wear or tear parts of significant value

The machine is easy to operate and suitable for all kinds of (thermo-) stable materials. There is no risk of ink staining by non-fixated material as long as it is sufficiently dried and the rollers and drum are properly cleaned before start-up. Heating up is quick, less than 1 hour and there is no need for a cooling down period before switching off the machine.

FEATURES AND OPTIONS

MODEL GFC

The calenders are standard equipped with:

- 1 Driven winding and unwinding position
- 2 Tensioning guiding rollers
- 3 Exhaust hood specially designed for complete fume extraction with fan and lifting device
- 4 Touchscreen

Options:

- 5 Driven substrate expander for material with curly edges
- 6 Pneumatic winding shafts

LAY-OUT

