



Carpet Fusing Calender CFC® 151/5500

Some features of the **CFC®**:

- user friendly operating system with state of the art storage of process parameters
- equal temperature within 1°C over the total width
- working width can be easily adjusted
- synchronised PLC control over dwelling time during production at any speed
- calibrating pressure roller
- heavy duty construction (22 Tons)

Roller and working width of **CFC®**:

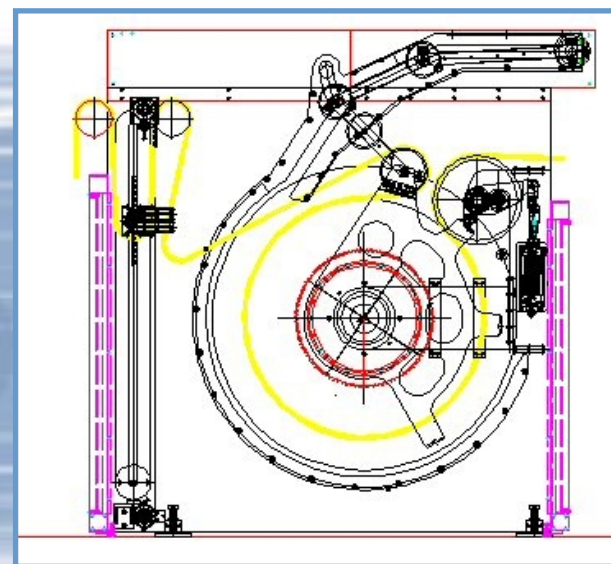
- | | |
|-------------------------|------------------|
| - working width | 2500 till 5500mm |
| - roller width | 2750 till 6000mm |
| - Diameter heating drum | 1350mm |
| - Mechanical speed | 1-30 m/min |



Klieverik has developed and engineered its **Carpet Fusing Calender®** with state of the art technology and with environmental concern in mind. The **CFC®** stand alone is able to replace a Latex production line for pre-coating of carpets.

By heating, the **CFC®** ensures a tuft-lock over the complete working width. As a result of this bonding effect the traditional latex pre-coat can be completely eliminated and the bonded carpet can still pass all regular testing methods. Together with the limited required energy this results in a significant lower production cost.

The **CFC®** together with the **Ecosafe®** Laminating machine is able to produce an entirely latex-free carpet by usage of scattering thermoplastic adhesive powder with a Powder Scattering Device **PSD™**.



— Trajectory of the carpet

The **CFC® 151/5500** is a compact machine of 8x3m, replacing a latex-line with latex applicator and drying section.

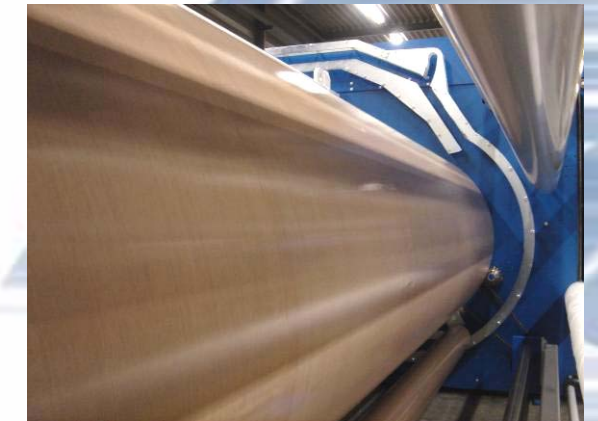
The external heated thermo-oil is pumped around at high speed through the special designed drum by an oil circulation system, ensuring a constant regulated flow of heated oil. The calibrating roller will equalize the fused carpet backside over the total width with an adjustable pressure.

Based on the characteristics and texture of the carpet components, temperature and speed will determine the required contact or dwelling time.

At start-up and at changes in speed during production, the contact area will be automatically adjusted so that the dwelling time will remain the same at all velocities, according the initial settings.

The **CFC®** can be installed in an existing production line or as stand-alone unit.

The heating cylinder is covered with special non-sticking material, which allows you to fuse most of the carpet materials in use. Easy cleaning due to good accessibility. The heated thermo-oil inside is constantly circulated through the inner drum, which ensures the equal temperature at all time during production at any speed. →



Heating cylinder



Rotary joint

Heavy duty rotary joint to ensure a constant flow of heated thermo-oil from an external gas boiler to the heating drum. ←

Adjustment of temperature, desired dwelling time and all relevant product and recipe data can be put into the PLC computer system of the **CFC®**. The set of controlling rollers will travel along the main cylinder re-adjusting the carpet contact surface, synchronised with the speed of the production line. The calibrating roller will equally flatten and compress the backside of the pile into the primary backing, resulting in maximum tuft-lock of the individual fibres. If the production has to be stopped, the carpet will be automatically removed from the heated drum. →



Set of controlling rollers