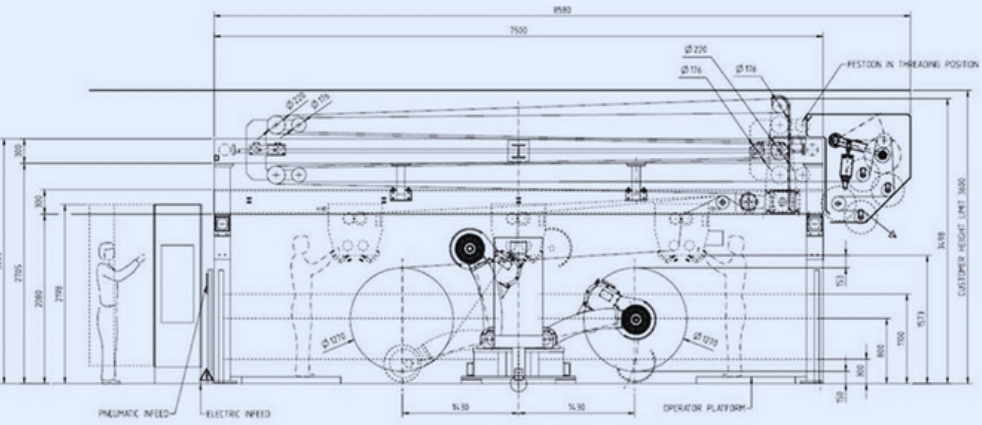
TENSIONFLEX

Over the past few years, the Paper Converting industry has experienced a growing need to work with a wide range of substrates, from lightweight materials to high grammage papers. One of the challenges this presents is that **the same converting line needs to be capable of running a wide range of substrate basis weights**, complicating web tension control.

Our customers are changing their product specifications in order to meet new market demands. The change must be quick and involve the least number of modifications in the production process. This trend has led the industry to seek innovative and technological solutions providing greater **versatility and efficiency**.

MTorres has developed an advanced tension control system, TensionFlex, capable of running webs between 30 – 500 gsm (18 – 307#/3000 ft²), with a wide tension range window, 100 – 1,300N. This option is available on our most commonly sold splice units and the increase of this range for specific application can be also analysed.



By integrating the TensionFlex into the festoon, we are able to provide accurate tension control, while reducing floorspace. **The system is designed to absorb the web tension fluctuations** generated from roller inertia during the splice sequence. Our equipment provides accurate tension control throughout the unwinding, splicing sequence, and speed variation of the process.

In addition, this TensionFlex incorporates an AC motor to control the festoon. Based on positional feedback, the motor torque will increase or decrease in order to move the festoon, rapidly compensating for any tension variation during the splice sequence.

New development to increase web tension range.

New controls strategy: updated for a more efficient and flexible converting process.

Increased versatility and precise control, which translates to a highly flexible converting process.

The TensionFlex provides robustness and reliability to the overall process. With no clutch pads to replace, maintenance is reduced, and tension will remain constant, as it is based on motor torque readings, not pressure to a clutch.