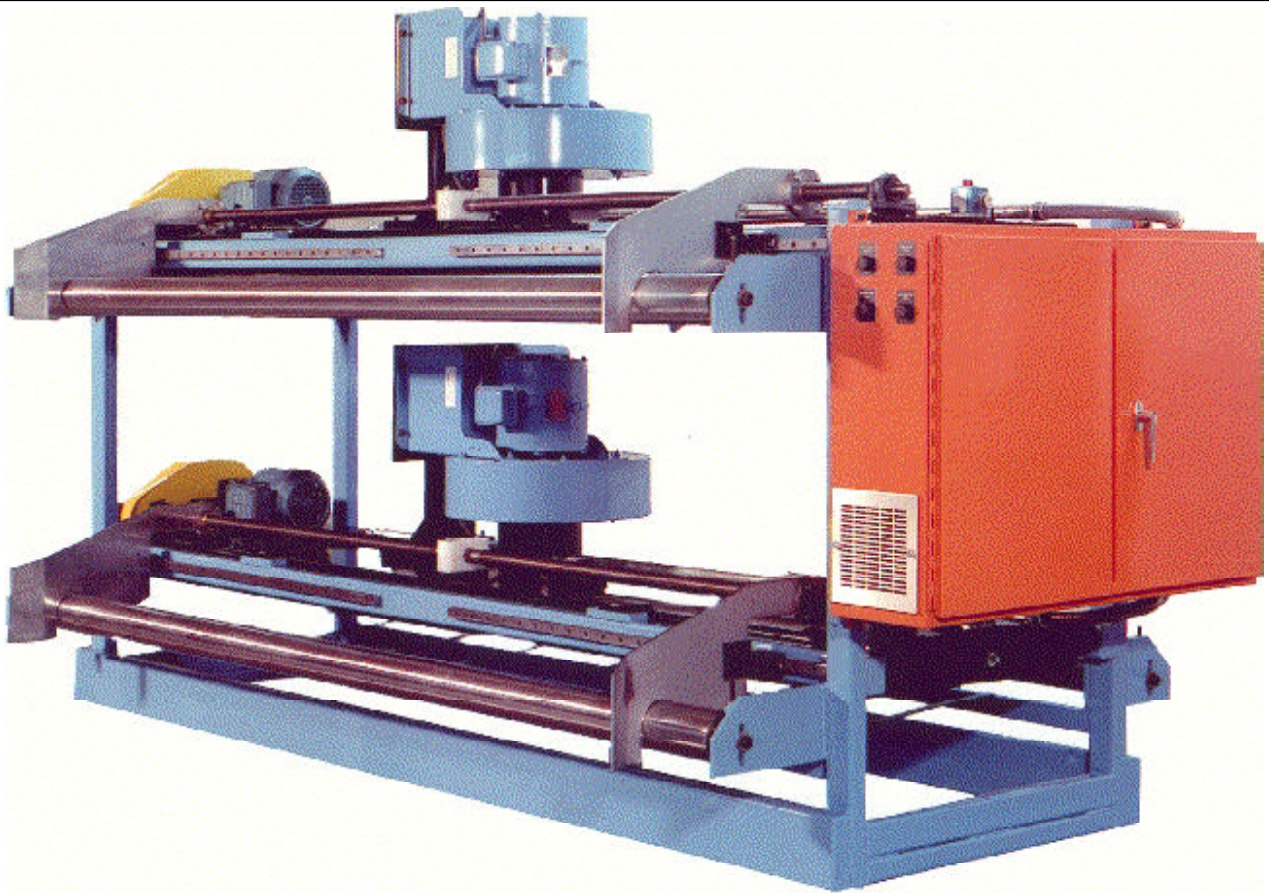


Vacuum Bridge Guide



General Information:

-Installations: 67 prior to Jan 2001

-Installation over a weekend. Typically a Saturday only required.

-Since: 1989

-Available Sizes: All machines are manufactured with a maximum 98" width...have manufactured for 108" corrugators.

-Available Options: Three models.

CM-1 is a center mounted machine, no lateral adjustment.

LA-1, each chamber mounted on linear bearings with a handwheel for each station for manual alignment

LA-2, LA-1 with a motor to position each chamber. Controls at entrance to hot plate section and at the slitter scorer. Each chamber has a display to display position relative to center line of machine to use as a reference for the operator.

-Quoted Delivery: 12 weeks.

Purpose



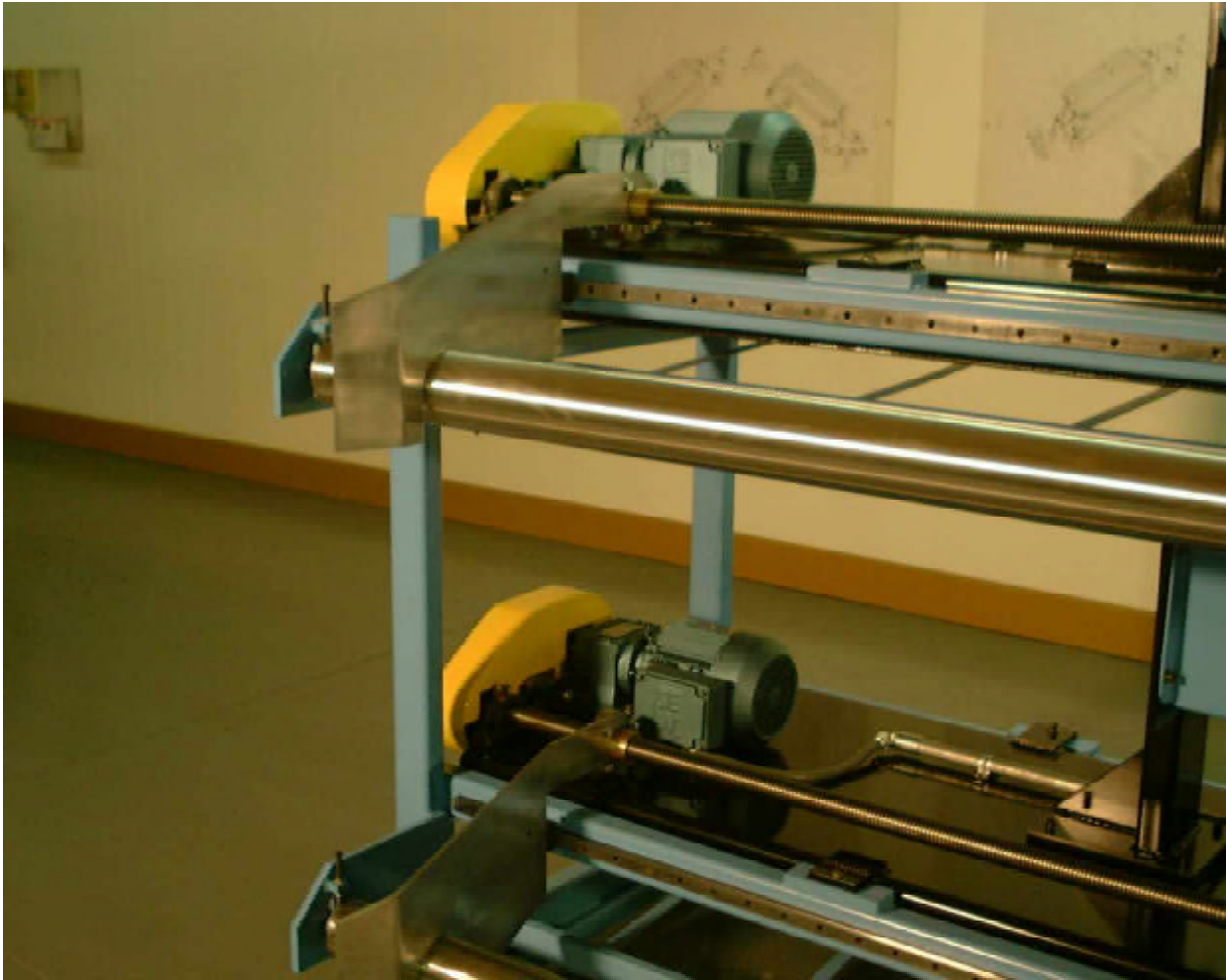
Even tension across full width of web provides many benefits over conventional bridge guiding and tensioning devices. Improved paper quality is accomplished by providing more even heat transfer at the preheaters and more even glue application at the glue machine. The even tension across the full width provides even contact with preheaters and glue applicator rolls.

The full width tension and improved guides provide improved warp control.

Web walk is also reduced which will reduce trim requirements.

Improvements in operator control releases the double backer operator to do other more important duties during paper width changes. Next order is preset and order change is accomplished with one button press.

Very simple and open design provides a very reliable machine with virtually no down time. All surfaces exposed to paper contact are hard chrome plated to provide superior life and reliability.



Machine consists of two chambers equipped with a 5HP blower to provide vacuum. Vacuum is controlled by means of a variable speed controller for each motor. Percent of vacuum is displayed on the touch screen operator interface.

Each guide is a hard chrome plated steel plate 1/4" thick. The widths are controlled using one screw with opposite threads on each end to position guides relative to the centerline of the machine. The motor that drives the screw for the guides also drives a screw for each damper inside of each chamber. This opens and closes the size of the chamber to match the width of the paper. This provides full width tension without allowing any vacuum to escape. Guides are mounted on linear bearings and the nut is made of brass. No lubrication is required, any used will only attract dust and reduce life of brass nuts. The internal dampers are made of UHMW plastic with a brass nut insert identical to the ones used on the guides. The motors for the positioning of the guides are two speed motors. Full speed until within a preset range, then the guides "creep" to the final position. Guides always come to a stop from the close position to eliminate any backlash.

The paper is fed over one roller, below the vacuum plate, then over the exit roller. The lack of unnecessary rollers reduces the chance for any misalignment which causes tracking problems.

If machine equipped with motorized shifting (LA-2) Each chamber is mounted onto linear bearings and a screw is used to position the chambers. The motor used is a brake motor with a high reduction inline gearbox. The chamber can be positioned approximately 2 1/2" off center in each direction for alignment, and also allows alignment of varying web widths.