STACKING MACHINE

ST-series

- Automatic sheet handling from cassettes
- Carrier palettes automatic loading / unloading
- Automatically removes carrier film before stacking
- Automatic vision alignment
- High force pre-lamination press included
- Suitable for high layer count stacks

Automatic high layer stack production solution
The ST series of stackers were specifically developed for high layers count applications where up to 8 different patterns need to be stacked automatically. These stackers are available in automatic or manual versions. On these machines the carrier film is removed first, then the sheet is pressed on to a previous one using relatively low force. After the stack is built up, it moves to the pre-lamination press, where it is pre-laminated with a higher pressing force. The sheets are handled with a vacuum chuck, so these stackers are not suitable for components with through-holes or cavities. Stacks up to 12 mm are normally built on a carrier block. Higher stacks are built in a cavity, which prevents the layers from becoming misaligned. Using this approach stacks of up to 100 mm in height can be made. The stacks are built on a single carrier block. Up to 20 carrier blocks can be processed simultaneously. Carrier blocks are loaded automatically from a magazine and placed back into the magazine after the stacking sequence is finished. On the fully automatic units the sheets are automatically loaded from sheet cassettes, aligned using a vision system, the carrier film is removed and finally they are stacked. On the manual version, sheets are loaded by the operator. The stacking sequence is programmable via a touch screen interface. Two high resolution cameras controlled by a PC vision system detect the sheet position. A short cycle time and high stacking accuracy make the ST stackers the best choice for high layer count individual sheet stacking machine available on the market today.

Technical specification:

- Number of foil cassettes: up to 8
- Number of carrier blocks magazines: 2 (one empty, one full)
- Number of carrier blocks in magazine: 20 PCS
- Stacking force: up to 80 kN
- Electricity: according to the customer requirements
- Pre-laminating force: up to 200 kN
- Stacking temperature: up to 80 °C (180 °F)
- Pre-laminating temperature: up to 120 °C (250 °F)
- Typical cycle time: 12 sec. (depends of stacking time)
- Cavity option: compatible with Keko - Thermal lamination press TPR
- Control: PLC + PC vision
- App. dimensions: depends of configuration
- ST-6AVP: L: 2350 mm (128 inch)
- W: 2520 mm (100 inch)
- H: 2270 mm (90 inch)
- ST-6AVP app. 12 kW
- Compressed air: 0.6 MPa (90 PSI), 300 L/min.
- Vacuum: -0.09 MPa (0.02 MPa absolute) 200 L/min.

How to order: *  

ST-xxxx  

P - Carrier plates auto loading  
C - cavity, for high stacks, without pressing possibility  
V - vision alignment  
P - pin alignment  
Sheet loading: M - Manual  
A - Automatic  
Sheet size: 6, 8 inch  
Stacker ST type

* Options and other requirements have to be specified separately.