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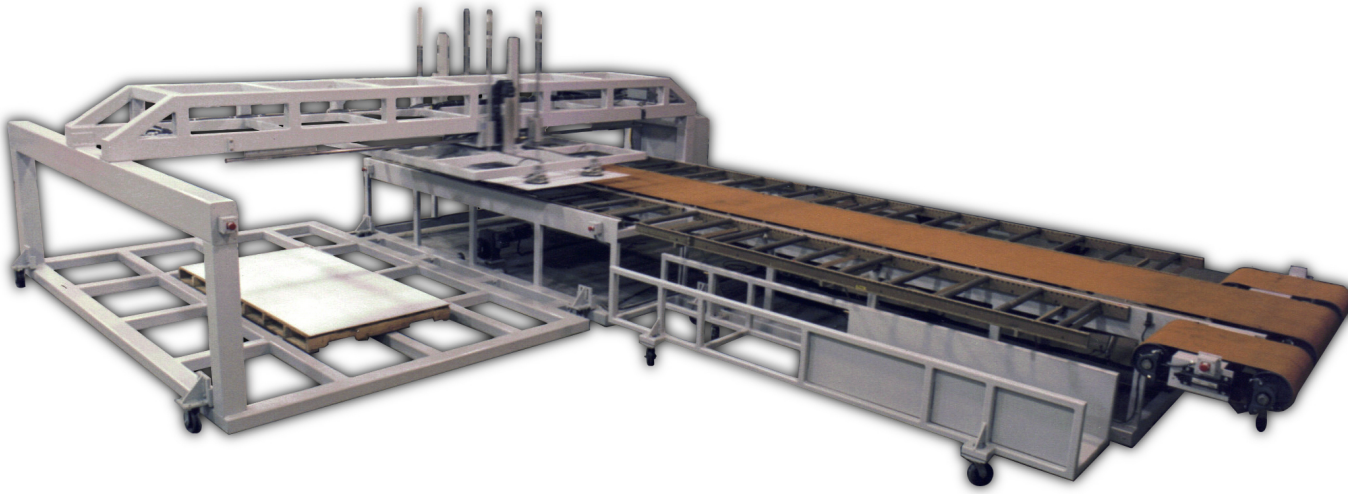
Engineering Makes The Difference™

VACUUM SHEET STACKER
VSS Series



Sheet Width (inches)	Sheet Length (inches)			
	72	96	120	144
48	VSS46	VSS48	VSS410	VSS412
60	VSS56	VSS58	VSS510	VSS512
72	VSS66	VSS68	VSS610	VSS612
84	VSS76	VSS78	VSS710	VSS712
96	VSS86	VSS88	VSS810	VSS812
108	VSS96	VSS98	VSS910	VSS912
120	VSS106	VSS108	VSS1010	VSS1012
132	VSS116	VSS118	VSS1110	VSS1112
144	VSS126	VSS128	VSS1210	VSS1212

APPLICATION:

- The Vacuum Sheet Stacker consists of a powered conveyor backed up to a customer's furnished shear or saw. After the sheet is cut and released to the conveyor, the conveyor accelerates the sheet to a position under the vacuum cup carriage. The sheet is then transferred to the carriage for subsequent transportation to the pallet and release to the stack.

PROGRAMMABLE CONTROLS:

- 4.1" LCD touch screen HMI
- Proprietary software driven display
  - Guides operator through set-up and prevents input errors
- Start pushbutton
- Emergency stop pushbutton
- Single turn line speed potentiometer (for manual operation)
- Automatic/manual locking selector switch
- Manual counter override with counter reset
  - Pushbutton for reset after package

CONVEYOR:

- Belt conveyor is two ply construction with center guide
- The conveyor design allows 4" take-up of belt length
- Conveyor is driven by 1 HP AC variable speed drive
  - Drive will accelerate the belt to the above line speed to develop gap between sheets
- Belt conveyor length exceeds max. sheet length

VACUUM CUP SHUTTLE:

- Shuttle drive is AC servo motor driven
- Drive train arrangement includes a rack and pinion assembly to provide precise horizontal positioning and repeatability of the carriage movement during each cycle
- Shuttle assembly moves on a lineal bearing/lineal shafting assembly

CARRAIGE VERTICAL MOVEMENT:

- Vertical movement of the carriage to the stack is powered by AC servo drive
- Drive train includes vertical rack and pinion assembly to provide vertical movement of the sheet to the stack
- Unique rack design ensures parallel carriage movement even with non-symmetrical loading

CONVEYOR:

- Vacuum cup size, number and location designed for customer's specific requirements
- Vacuum cup location adjustable in cross-line direction
- Individual shut-off valves located on each cup
- Pick-up mode – compression of vacuum cup against sheet trips limit switch which evacuates the cup and reverses the direction of the carriage
- Drop-off mode – compression of cup by sheet contact with stack, actuates limit switch that releases vacuum and reverses the direction of the carriage
- Vacuum generated via customer's furnished compressed air source for venturi type vacuum system
- Multiple independent vacuum circuits ensure sheet holding capability in the event a cup does not seal

DRIVE TRAIN:

- Drive Motor are class H, low inertia, brushless AC servo motors
- Stacker drives are geared in at customer's desired max. speed

FRAME:

- Heavy wall tubing, steel plate and structural sections
- Two rigid and two swivel casters and hold-downs
- Screw type floor jacks
- Fully guarded drive train and electrical components

ELECTRICAL:

- Standard Electrical is 230 Volt/3 Phase/60 Hertz
  - Electrical other than the above is available as an option

OPTIONS:

- A hydraulic lift table of 3000 lbs. capacity will have an empty table height equal to the drop-off height of the carriage. As sheet is loaded on the lift table the stack increase is photo sensor detected and the hydraulic table is lowered to the desired incremental amount
- A pallet shutting system consisting of a platform at least three times the sheet length mounted next to the sheet stacker with the center position located in the stacking station. Two pallet shuttles are rail mounted to the platform. When the pallet being loaded is at full count, the shuttle is actuated and the full pallet is moved on the rails to the unload station and concurrently an empty pallet is shuttled into the stacking position.

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