

# DRYER INFEED VACUUM FEEDER



You won't find a better Dryer Infeed Vacuum Feeder than Westmill's. We took the basic proven concepts and made them better.

### Westmill's Powered Roll Vacuum Feeder improves Dryer production while lowering operating costs:

- **Keeps your Dryer fed as much as possible** and minimizes empty spots and gaps associated with manual feeding. This is especially true on Heartwood Dryers and 6 to 8-deck Dryers, where the feed demand is greater than an operator can keep up with at 100% effectiveness over an 8-hour shift.
- **Lower staffing requirements**: Automatic feeding allows you to only ever require one operator to feed full 4' x 8' sheets. Some plants use one operator for 2 dryers.
- Repetitive motion injuries are significantly reduced, along with expensive Worker's Compensation claims.
- Operator can spend more time supervising the line instead of feeding.

## Why Westmill™?

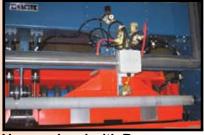
Westmill™ has been successful in designing the best Vacuum Feeder available today. We took the basic concepts that work well, and re-engineered key areas related to vacuum and airflow to produce a 3-head, drop-box style machine with better pick-up suction. Westmill's engineering department has many years of experience in design and servicing of Vacuum Feeders to the veneer industry.



Simple bolted or welded attachment to feeder



Vacuum box (orange) with powered rolls (gray)



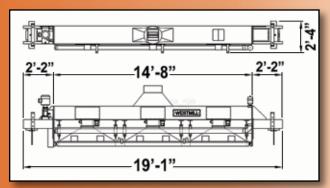
Vacuum head with Ross pneumatic valves and Banner photo eye wired to junction box



Airbag and roll drive

### **Product Features**

Three vacuum heads move up and down in unison, picking up three veneer sheets at the same time. A vacuum fan is used to pick up sheets from the load stacks, and powered rolls automatically advance the sheets to the Feeder Tipple stop gate.



The Vacuum Feeder works automatically, but an operator at the infeed station still monitors the feeding status, and may have to occasionally feed sheets manually (for example, when veneers stick together due to mold or freezing) to prevent double feeds.

A Variable Frequency Drive (VFD) is supplied with the fan. The VFD allows the fan speed (and amount of vacuum) to be adjusted depending on veneer species, thickness, moisture sort, and other properties. Vacuum can also be adjusted to compensate for moldy sheets

(in winter) and for redry sheets (which have lower weight) and are more prone to double feeds. Westmill's VFD speed is pre-set in your Dryer's menu-based touch-screen interface (optional) so that the vacuum is always correct for the product being fed. It's a much more flexible solution than manual or cylinder operated inlet dampers offered by others.

#### Westmill's supply includes:

- Main frame (mounted to Dryer Feeder)
- 25 HP Vacuum fan assembly complete with motor, VFD, sheaves, and v-belts
- Three vacuum heads including up/down cylinders
- One cylinder activated shut-off damper per head
- All pneumatic cylinders, valves, and pneumatic lines to one main customer hook-up
- Two airbags to lift assembly up and out of the way (for maintenance, or for when feeding randoms by hand)
- Flexible duct connector between Vacuum Feeder and fan assembly
- Filter/Regulator/Lubricator unit
- Cylinder exhaust header (PVC pipe) complete with mist separator. Keeps oil out of plant air to make environment cleaner

# **Veneer Specifications**

| Veneer size:                   | <ul> <li>4' clip width x 8'-length veneer</li> <li>27" clip width x 8'-length veneer</li> <li>4' clip width x 4'-length veneer</li> </ul> |
|--------------------------------|---|
| Veneer species:                | Any   |
| Green veneer moisture content: | Any, including redry sheets   |

# **Machinery Specifications**

| Electrical requirements: | Fan: 25 HP motor (3-phase) with supplied VFD Rolls: 2 HP motor (3-phase) |
|--------------------------|--|
| Field mounting:          | Bolted or welded to (existing) Dryer Feeder Tipple                       |
| Air requirements:        | 60 PSI   |

# More Vacuum Feeding Options by Westmill™

- Westmill's "Quick-Vak" Vacuum Feeder: A pendulum-motion based Vacuum Feeder with high feed rates. Installations at West Fraser (Quesnel, BC) and Sunpine Forest Products (Rocky Mountain House, AB)
- <u>Two-head Vacuum Feeder</u> for 6' wide veneer
- Multi-head Vacuum Feeder for feeding of random-width veneer

