High Resolution™ Forming System

Structure Details
- Dual compartment for additional vacuum graduation
- Full width J-legs for high dewatering capacity
- Pedestal mounted
- 41-44" wide depending on blade pitch
- Nominal 30" height for correct vacuum levels
- Height can be customized for obstructions
- Typically engineered with 9½" pultruded tees
- Fabricated from 316L stainless steel

Overview

Features
- High capacity, multi-compartment structures
- Engineered stepfoil technology creates activity, drainage, and formation
- HRVVCV™ valves are force balanced controllers that maintain high accuracy (+/- 0.50 inches of water)

Benefits
- Optimizes activity for each basis weight from the DCS
- Increases water handling capabilities
- No on-machine moving parts
- Vacuum controlled, not speed dependent
- Easy access for maintenance
- Drives down total cost

Vacuum Control Details
- Forced balance design allows valve to continuously maintain a preset vacuum level despite continually changing stock freeness and vacuum supply levels
- Easy interface with DCS
- Easy access for simple maintenance
- 316L stainless steel housing

Stepfoil Blade Details
- Ceramic tipped with hydrophobic polyethylene base
- Step depth engineered by grade
- Blade width engineered based on blade pitch
- As vacuum is increased, the fabric deflects farther into the step, and the pulse amplitude increases
- Positive pulse re-fluidizes sheet minimizing sheet sealing or setting which increases drainage
Case Study 1:
A packaging grade mill for 35#-96# liner was seeking improved formation to improve shoe press loading. After installing a High Resolution forming system, the mill press load increased 2000 PLI and machine speed records were broken. This machine set a world record for TPD/inch. The mill recently achieved 2800 fpm on 52#.

Case Study 2:
A packaging grade mill for 26#-52# liner wanted to increase couch solids to 28% with 200 fpm speed increase on 35# after removal of top dewatering unit. Within days of installing a High Resolution forming system, the machine achieved 28% couch solids. The mill set a machine record of 3000 fpm on 42#. The machine routinely produces 35# at 3000 fpm, exceeding the original goal.