



## PHOENIX Belt Filter Presses

PHOENIX Model WX Belt Filter Press dewateres slurry of pre-thickened solids from a pumpable, liquid state to a solid, belt conveyable and stackable cake. Model WX is available in several different configurations, each suited to the specific application. Design includes fully welded mainframe, oversized bearings, and unique corrosion protection features. Several different compression zone arrangements are available.



PHOENIX Model WX  
Belt Filter Press

**Model WX** is available in several design configurations from Economy to High Performance with belt widths up to 3m. Options include Dual Gravity Zone, Independent Gravity Zone, Enclosure Panels and more.

For lower flow applications up to 65 gpm, **Model LC** is available in belt widths of 800mm and 1200mm.

**We're All About  
The Process**



### APPLICATIONS

- » Aggregate Tailings
- » Coal Refuse
- » Scrubber Effluent
- » Pulp & Paper Effluent
- » Municipal & Textile Wastewater
- » Dredging Slurries
- » Water Treatment Sludge
- » Domestic Biological Waste
- » Chemical, Food Process & Grease Trap Waste

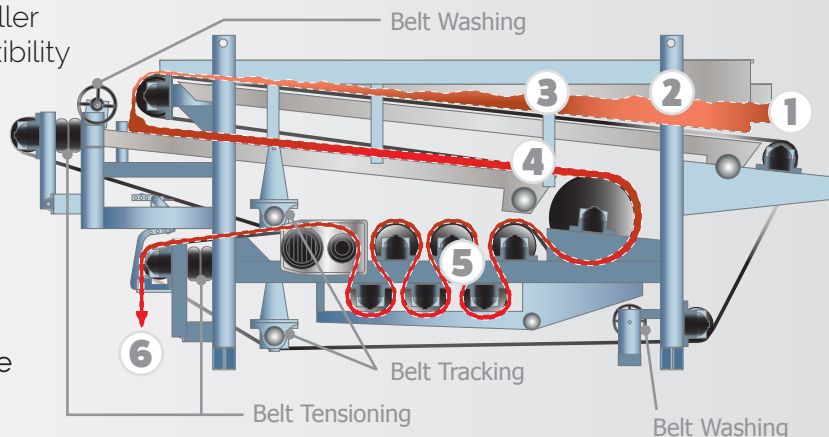


On-site field demonstrations available. Contact PHOENIX at 502-499-6198.



## FEATURES & BENEFITS

- » Heavy-duty all-welded main frame assures component alignment
- » Modular construction allows variable roller configuration for maximum process flexibility
- » Designed for continuous automatic operation which requires minimal operator attention & low maintenance
- » Open design provides easy access to all components
- » Epoxy over zinc coated frame provides maximum corrosion resistance
- » Pneumatic belt tracking/tensioning provides clean, safe operation with maximum reliability
- » Standard, extended, independent or dual gravity zone for versatile, effective dewatering performance



**1** Preconditioning (Flocculation): Most applications require the addition of polymers to the slurry prior to dewatering. The addition of these flocculants results in the agglomeration of solids, releasing free moisture. An inline mixer is provided for proper dispersal of polymer into the feed.

**2** Feed Distribution: Slurry is fed to a specially designed head box, where the material is evenly distributed for more efficient use of the filtering area.

**3** Gravity Drainage: Free moisture is separated from the solids by drainage through the moving filter belt.

**4** Wedge Pressure: Material advancing from the drainage zone is deposited into the adjustable wedge zone. Pressure is gradually applied as the upper and lower belts converge to form a **cake sandwich**.

**5** Compression/Shear: The belts follow an **S** path through a series of compression rollers. Surface pressure created by belt tension squeezes additional moisture from the solids. Simultaneous shearing of material opens additional voids for moisture release. The belts part, leaving a dry cake.

**6** Solids Discharge: Cake is separated from the belts by doctor blades and is discharged.



**Contact PHOENIX at 502-499-6198** for complete systems tailored to your requirements including: Classification, Separation, Scrubbing, Effluent Treatment, Water Recovery, Fines and Tailings Dewatering & Disposal.

Authorized representative:

