How does the Petax filtration system work?

- Vessel is full of process water and operates at low pressure less than 2.5 psig (0.1 to 0.3 bar)
- Disks are completely submerged and slowly rotate
- Rotation speed increases to maintain low vessel pressure controlled by transducer monitoring pressure
- Clean filtrate passes through the media to central hollow shaft
- Disks are continuously cleaned in three stages:
  1. Filter cake is doctored off and pumped away (if necessary)
  2. Clean filtrate is pulled back through media removing debris
  3. Oscillating high pressure, submerged shower cleans the media

Overview

Features
- Patented filtering technology
- Three-stage media cleaning system
- Unique engineered filter medium
- Filtrate quality less than 20 ppm
- Particle removal less than 20 micron in size
- No chemicals or flocculants required

Benefits
- Water and treatment costs savings
- Heat, fiber, and chemical savings
- Reduce municipal treatment plant charges
- Eliminate plugged nozzles
- Improved machine cleanliness

Applications
- Clear leg save-all whitewater
- DAF and Clarifier Filtrate
- Reuse whitewater on wet-end and press section showers
- Effluent solids reduction
- Cooling tower water
Results using Petax filtration system
Petax vs. DAF @ 100% OCC recycled corrugating medium mill

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Application and Results

Machine shower
Clear filtrate
Reject

Wire Pit  
Couch Pit

Installation example