

Super-Vac (SID/MV) Combination Filter



Automatic Operation

Combines the best of wedgewire and media filtration

Minimizes filter tank space providing more filter area

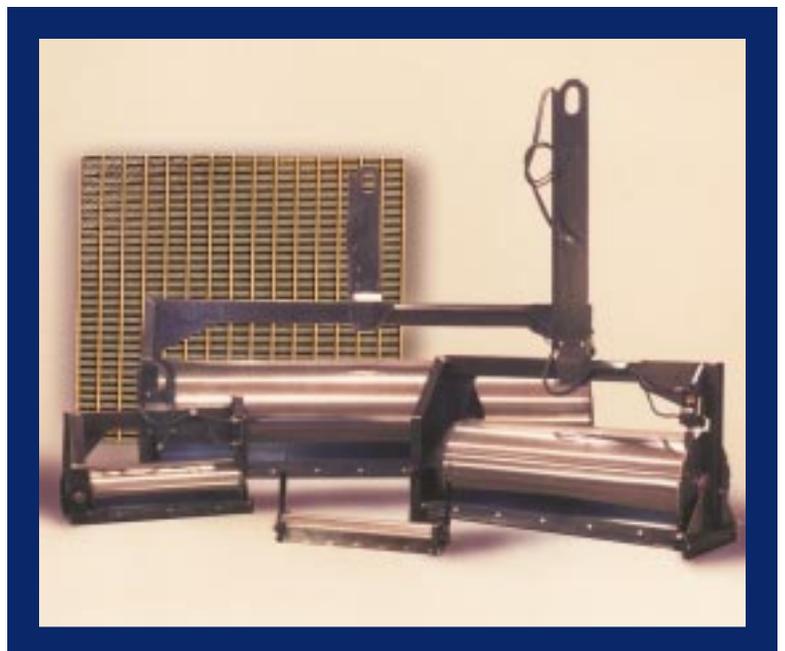
Two different clarities achievable simultaneously

Permanent stainless steel filter screen

Modular design for inspection on-the-fly

Spring-loaded radius arm allows large objects to pass without jamming conveyors

Easy adjustment - minimal maintenance



Super-Vac (SID/MV) Combination Filter Operation

Basic Flow through a Super-Vac Filter

1. Contaminated coolant enters the dirty tank and is pulled through both the filter drum and the filter media, providing two different clarities.
2. The main filter drum pumps draw coolant into one suction box, and sends it out to the machines, flume flush or other destinations.
3. The media filter pumps draw coolant into the other suction box, and sends it out to the machines for through-tool, high pressure or other special purposes.
4. Excess coolant drawn by all pumps is returned to separate clean reservoirs to keep them full and overflowing.

Sequence of Events during an Index Cycle

1. The filter drums and filter media will index independent of each other to minimize plant compressed air usage.
2. The filter senses that the vacuum or time limit on the media or drums has reached the pre-set point and signals the appropriate filter to index.
3. The appropriate Vacuum Release Valve opens, allowing coolant from the clean tank to enter the suction box and break the vacuum. This coolant is delivered to the machines, to provide continuous, uninterrupted flow.
4. After a dwell time, the appropriate filter (either drums or media) will begin its cleaning cycle. The drums will rotate a partial turn, removing the heaviest chipload with a positive wiper. Or, the conveyor will advance a pre-set amount of clean media into to the filter tank.
5. After the drum has rotated, or the media has been advanced, the Vacuum Release Valve closes and flow through the filters resumes as the filter enters a new filter cycle.

This sequence maintains a porous cake allowing in-depth filtration and extended cycles.

