

Ceramic Membrane Ultrafiltration for E-coat Pretreatment



Ceramic membrane ultrafiltration is a time tested technology that is relatively new to the e-coating industry. It can be used to extend the life of the Alkaline cleaner bath. Membrane filters are also suitable for E-coat paint UF systems.

Product features of the ceramic membrane filter include:

- Excellent chemical resistance
- Broad pH range of 2-13
- Inert to solvents and common chemicals
- Can be aggressively cleaned
- Suitable for alkaline and acidic baths
- Allows for higher flux recovery
- High temperature operation – to 200° F
- Low thermal coefficient of expansion– membrane pore size stability
- Backpulsing capable
- Tolerance to pressure excursions
- High concentrations possible
- Favorable solids loading capability



Alkaline Cleaner Bath: Contemporary Problematic Issues

Costs and issues associated with frequent bath disposal

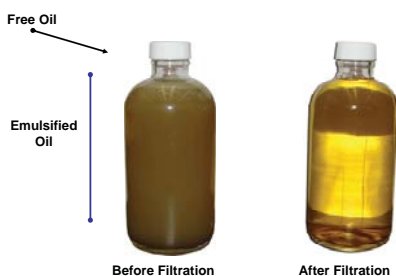
Bath Dumping
Labor/downtime
Hauling
Administrative compliance
Environmental impact

Costs and issues associated with frequent bath regeneration

Energy
Labor
Chemicals
Water

Maintenance

Nozzle plugging
Parts cleanliness issues
Variability
Re-work/scrap



Ceramic Membrane Filter

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