so|Ecta

DAIRY MEMBRANE PROCESS HELPFUL HINTS

Maintaining high-quality standards while optimizing yield and production uptime is critical to your operation, process economics and clients. Efficient and effective separation is paramount, and small changes can significantly impact your operation and business.

How can you tell if you are achieving your performance targets?

- Set **Key Process Indicators (KPIs)** tied to each process step to measure performance over time
- Set a baseline and regularly compare back to it

Solecta's holistic approach to membrane separations leverages process expertise to deliver reliable data and critical insights to maximize gains during a client's separation process. Our team brings deep industry expertise and works with our clients to define and deliver solutions with maximum value.

MAINTENANCE

Preparation is the key to success – Do you have your hit list of activities and understand what are regular maintenance items?

- Spend / budget
- Spare parts list

CLEAN-IN-PLACE (CIP)

How do you know if your CIP was successful?

- Element efficiency & life depends upon effective CIP protocols
- Water flux trends compared to baseline
- Chemical concentration maintenance throughout the wash steps

Are you within target set points?

- Recommended pH range
- Correct temperature and chemical concentration
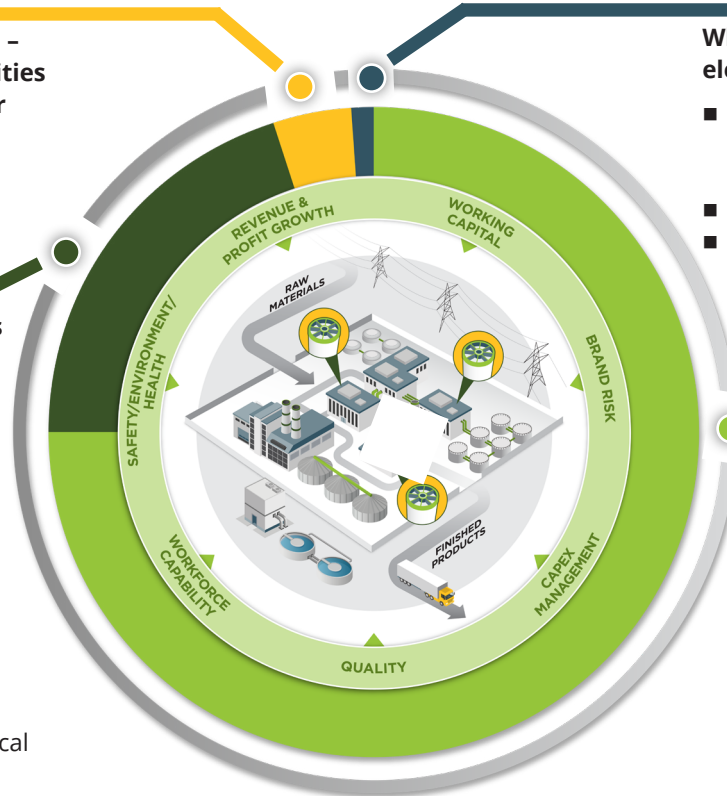
ELEMENT CHANGEOUT

When is the right time to change out elements?

- Permeate quality
  - Permeate protein
  - Permeate COD / conductivity
- Permeate flow rates
- System pressure profile

PROCESS

How can you preserve the health of your membrane systems to meet your target daily throughput?

- Pretreatment
- Maintaining pressure drops
  - How long does it take to add a new stage?
  - Has this time decreased significantly?
- Check o-rings / lip seals
- Permeate flow rates
- Appropriate lubricant