Transforming Wine Production

Company Background

- AMS Filtration is an advanced manufacturing company based in Lonsdale
- AMS Filtration founder, Gilbert Erskine, has worked in the filtration industry for 30 years – primarily fabricating robust plant & equipment for many industries including the Wine Industry
- Key technology: patented titanium membranes and filtration systems used for advanced solid/liquid separation

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Titanium and Membranes

- Titanium is an advanced separation material
- Membranes inherit the superior performance properties of titanium
  - Pressure Resistant – high fracture toughness
  - Temperature Resistant – melting point 1725°C
  - pH Resistant – allowable pH range 0.0 – 14.0
  - Non Corrosive
  - Biologically Inert

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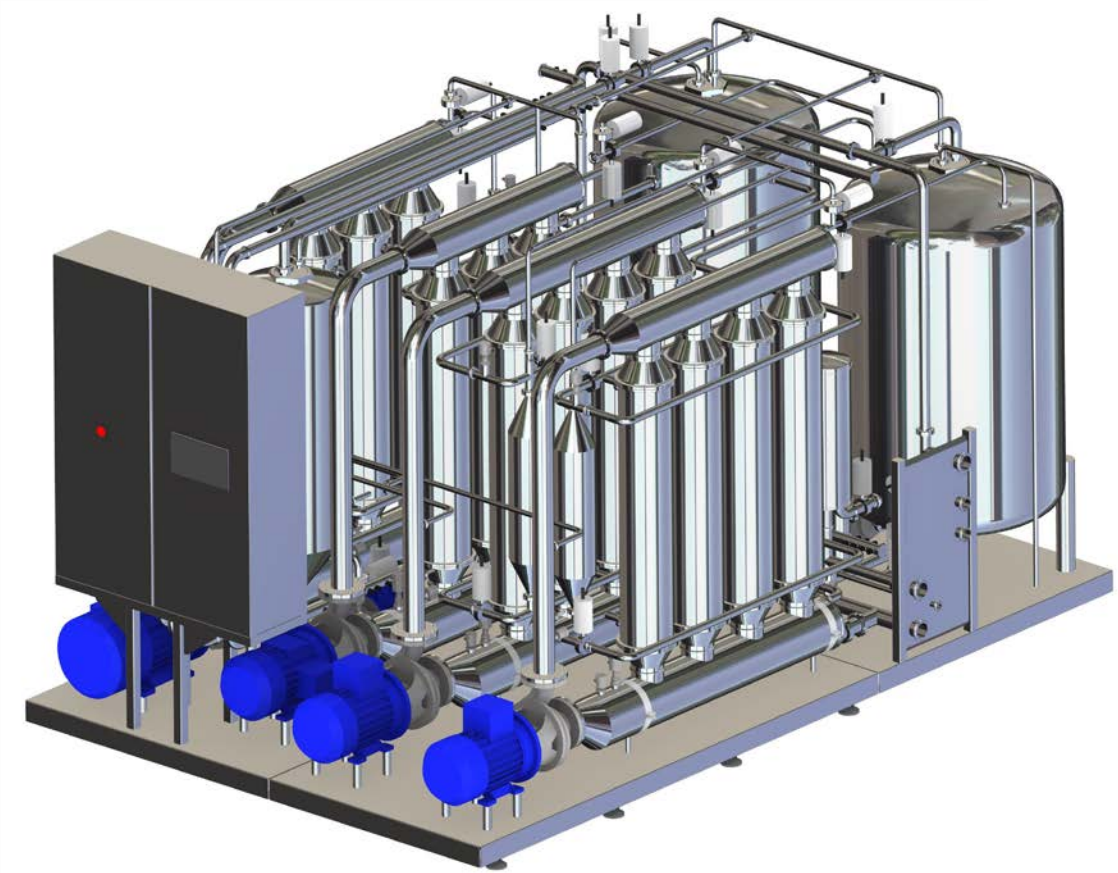
Titanium Membranes

- Ultra high solids processing
- Fouling resistant
  - Withstand periodic back pulse to keep membranes free from fouling for longer
  - Can be CIP back to day 1 condition for the life of the membrane
  - CIP with steam or chemicals
  - Do not react with feed streams
- Biologically inert – non tainting
- Hydrophilic and paramagnetic
- Food Safe

ViTi Flow© System



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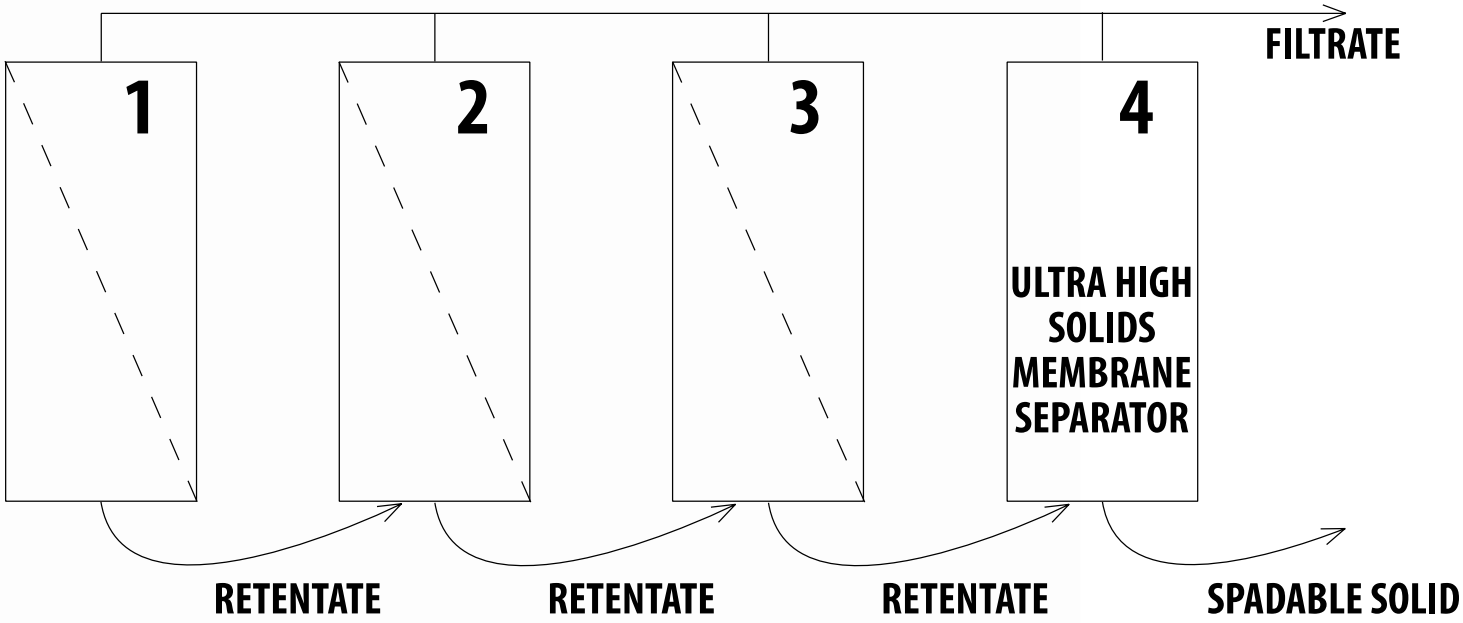
One System - Juice and Finished Wine



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Key Performance Outcomes

- Ultra high solid capabilities
- Concentrate solids – product recovery, spadable retentate
- Process bentonite
- Process above and below racking valves
- Long processing runs
- Single step – simplify logistics, no product loss, improve product quality
- Cold stabilisation
- No temperature pick up
- Modular system sizes

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ViTi Flow© Value Proposition

- Financial Benefits – product recovery, no product downgrades
- Operational Benefits – single pass, less downtime for cleaning, long processing runs, reduce monitoring and maintenance
- Complexity Benefits – no ‘spaghetti bucket’, reduced retentate volumes, easy waste disposal
- Asset Benefits – less equipment, no idle machinery, free up tank capacity

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Next Stop

- Wastewater Treatment
- Processing Irrigation Water
- Brewing
- Cider Production

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Thank You

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