Breakthrough Concept for Treatment of High Concentrated Fluids

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Salttech: Company characteristics

SALTTECH BV
- Located in Sneek/ Leeuwarden, NL
- 100% privately owned by DWT
- Founded in 2011
- Group of 30+ employees (2012)
- Member of the Water Campus

TECHNOLOGY
- Strong IP portfolio (by DWT)
- Multiple patents pending
- Strong launching customers
Executive Summary

• DVR applicable for all kinds of high concentrated fluids
  • TDS removal technology (DESALINATION)
  • TSS removal technology
  • Volatiles removal technology
  • Disinfection technology
• DVR is modular system
• DVR uses no chemicals,
• DVR uses no membranes
• DVR requires little operator attention.
• DVR has very high energy efficiency.
• DVR is insensitive to scaling or fouling
• DVR is designed for continuous operation.
• DVR removes bacteriological contamination
Executive summary (2)

Modular desal system:
• 1 cyclone = 50l/h = 7.5 bbl/day
• 10 cyclones = 1 module
• 1 module = 75bbl/day
• 12 modules in 1 container system
• 1 system = 1000 bbl/day

Influent is injected from side manifold, pure water vapor comes out the top and concentrated brine flows out the bottom.
DVR operational modes

For treatment of all kinds of saline water or liquids different operating modes are available:

1. Hardness removal
   • Knock out scaling and hardness components
   • High throughput systems
2. Desalination
   • Full desalination of brines
   • High water efficiency,
   • Liquid (over) saturated brine
3. Zero Liquid Discharge
   • Highest water efficiency,
   • Solids production, crystalline salts
Modular systems
Static and mobile (containerized)
Benefits of DVR Technology

Strong USP’s

- Extreme high water efficiency
- Removal of TDS, TSS, VOC combi
- Production of salt crystals
- Disinfection of fluids
- Insensitive for other pollutants
- No fouling
- No scaling
- No salt concentration limitations
- Inexpensive materials
- Low energy
- Robust equipment
- Simple operation compared to conventional systems