Dow Minimal Liquid Discharge (MLD) Solution

A water management approach that can help you increase recovery and reduce costs.

1. Equalization Basin
2. Lime Softening (Optional)
3. Industry Waste Water
4. Sand Filter (Optional)
5. Achieve up to 95% liquid discharge recovery but at a fraction of ZLD’s costs.
DOW INTEGRAFLUX™ XP ULTRAFILTRATION MODULES
• High productivity ultrafiltration modules with industry leading membrane area and high permeability XP fiber
• High mechanical strength PVDF fiber with excellent chemical resistance providing long membrane life and reliable operation
• Outside-in flow configuration allowing a wide range of solids in the feed water minimizing the need for pretreatment processes and reducing the backwash volume compared to inside-out configurations

DOW AMBERLITE™ IRC83 WAC RESIN FOR HARDNESS REMOVAL
• Up to 30% more operating capacity than current weak acid cation resins
• Fewer regeneration cycles reduce waste volume up to 15%
• Superior physical stability yields long resin life

DOW FILMTEC™ FORTILIFE™ CR100 RO MEMBRANES
• Up to 50% less frequent cleanings due to bio-fouling
• Improved hydraulic balance for low organic fouling and lower energy
• Reduced rate of flux loss in challenging waters
• Highly cleanable membrane chemistry
• Up to 10% lower energy operation
• High permeate quality to enable blending with higher TDS for reuse

DOW FILMTEC™ FORTILIFE™ XC 70 RO MEMBRANES
• Maximize purity of reuse water while concentrating the brine to >70,000 ppm TDS within standard operating limits
• Fouling resistance
• Increase productivity
• Less frequent cleaning, more up-time, longer element life

DOW FILMTEC™ FORTILIFE™ XC 80 RO MEMBRANES
• Lower brine volume and maximize recovery by concentrating the brine to > 80,000 ppm TDS, within standard operating limits
• Fouling resistance
• Reduce discharge with standard RO system designs
• Less frequent cleaning, more up-time, longer element life
• Low energy RO operation

DOW™ SPECIALTY MEMBRANES UHP RO
• Reduce brine volume and achieve concentrations of 100,000 to 200,000 ppm TDS thus significantly reducing discharge volume and downstream processes
• Distinctive ultra-high pressure element construction allowing operation up to 120 bar (1,740 psi)
• High pressure, fouling-resistant DOW FILMTEC™ SW30 flat sheet

DOW FILMTEC™ FORTILIFE™ XC-N RO MEMBRANES
• Highly selective membrane with high mono-valent ion passage and di-valent ion rejection
• High permeability at low pressures and high TDS levels
• Purified, high concentration brine solution for reuse
• Less dissolved solid wastes
• Low energy operation