



## CONSERVATION OF RESOURCES

# Tank Optimization and TNK1C Save Customer ~\$900 Per Unit, Streamline Tank Package Sourcing

Technical Application Bulletin

### CHALLENGE

An OEM manufacturing concrete finishing equipment was sourcing three different tanks per machine, all without in-tank filtration, resulting in overcomplicated part number management and increased cost. The supplemental offline filtration, compensating for the lack of in-tank filtration, took up extra space on the machine. The customer sought solutions to streamline their systems and enable better purchasing efficiency.

### APPROACH

Through the Tank Optimization analysis program, Schroeder Industries was able to evaluate the existing reservoirs, then design and manufacture a single tank solution to replace the three different tank designs—the **TNK1C**. With high performance Air Fusion Technology (AFT) in-tank filtration included in the TNK1C packages, the onboard supplemental filter systems were no longer required.

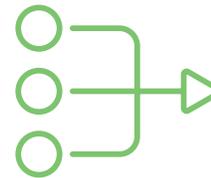
### RESULTS

- Streamlined sourcing and part number management. The TNK1C was able to replace the individual tank designs, allowing the customer to source a single tank solution with filtration included and simplify their part number management.
  - By transitioning to the TNK1C, the customer saved approximately \$900 per machine
  - Removal of supplemental filtration & transition to rotomolded reservoirs reduced overall system weight
- AFT filtration and Schroeder Industries synthetic media elements greatly improve cleanliness, deaeration.



CUSTOMER SEEKING TO STREAMLINE SYSTEM UTILIZING 3 DIFFERENT TANK DESIGNS

EFFICIENT DESIGN ALTERNATIVE DEVELOPED THROUGH TANK OPTIMIZATION



STREAMLINED SOURCING TO **SINGLE** TNK TANK DESIGN

OVERALL SYSTEM WEIGHT REDUCED



DESIGN IMPROVEMENT SAVED APPROX. **\$900 USD** PER UNIT

- Tank Optimization uses cutting-edge simulations and CFD analyses to discover inefficiencies in existing tank assemblies and develop efficient solutions
- TNK Series: Complete tank packages with filter housings, breathers, other components; engineered for improved degassing and durability in operating extremes

