



**EDUCATION SESSION** 

### Solving Reclaim Headaches

# Reclaim should be an asset, not a daily source of frustration

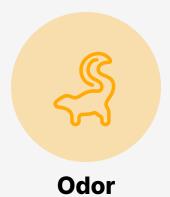
### Reclaim Headaches

### **Reclaim Headaches**











# Operators have gotten used to these headaches—but they shouldn't have to.

"My managers shouldn't have to touch the system. They shouldn't even know it exists.





### **What We Built**

A Reclaim System that works better, requires less, and delivers more.



### Our Approach

### Our Approach

Headache	Our Solution	
Labor & Maintenance	Simplified, durable design with fewer daily tasks	
Water Quality & Clogged Nozzles	Direct media filtration	
Odor	Chemical dosing	



### **Daily Labor & Maintenance**

Before (Traditional Reclaim Systems)
Prime pumps
Clean strainer basket
Check ozone generator
Clear nozzle clogs

After (Hoffman innovateIT Reclaim System)

Put system into 'Run' mode



### **Water Quality**



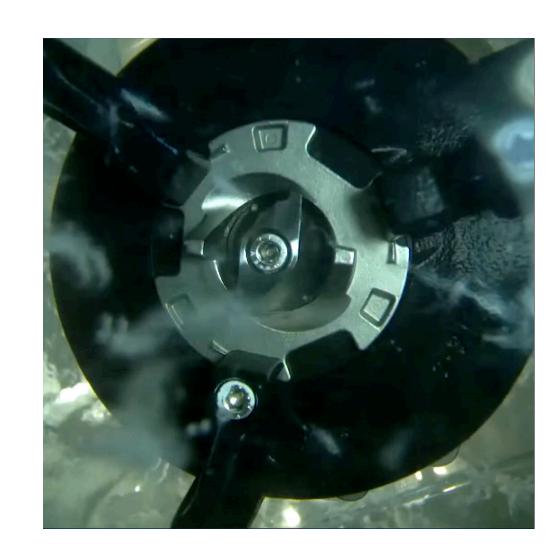
#### **True Filtration**

- High-capacity filter removes over 99% of particles over 10 microns
- Addresses neutrally buoyant particles that pass through centrifugal separators, reducing clogged nozzles
- Proprietary media blend and automatic flushing of the system reduce water usage
- Maximizes usage for high-pressure functions

### **Water Quality**

#### **Grundfos SEG Pump**

- Replaces the need for a strainer basket, eliminating daily maintenance
- Prevents any foreign object from clogging the filter or lines
- Designed to handle "flushable materials" such as cloth, wood chips, paper, and plastic
- Mounted to a stand to reduce the possibility of ingesting non-floating materials that could damage the pump



### **Odor Control**

Typical Systems		
$\bowtie$	Short lifespan, often replaced yearly	
$\bowtie$	Loses effectiveness quickly in reclaim tanks	
$\bowtie$	Dangerous to handle and monitor	
$\bowtie$	Difficult to know if it's working	
×	Ongoing costs for generator replacement	

Our Solution			
$ \checkmark $	Long-lasting dosing with consistent results		
$\checkmark$	Maintains presense in system with longer half- life		
$ \checkmark $	Safer to manage, easier to regulate		
$\checkmark$	Operator-adjustable chemical delivery		
$ \checkmark $	Less maintenance, no generators required		



#### **Odor Control**



#### **Micro Bubbler**

 Increases dissolved oxygen levels in the water circulating in underground tank system

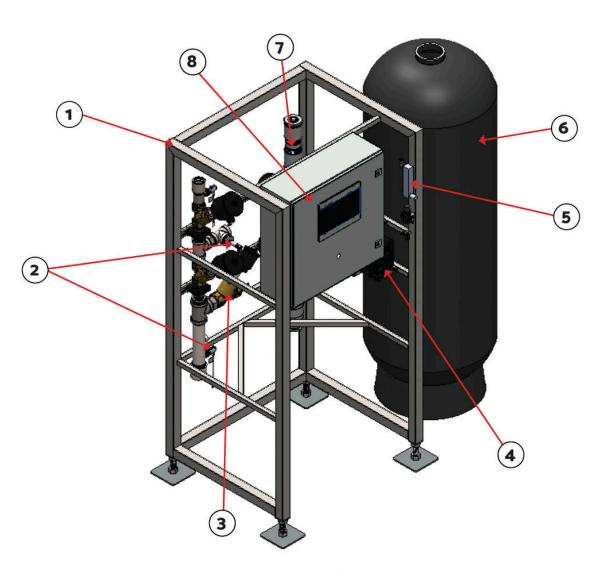


#### **Dosing Pump**

- Injects chemical oxidizer into reclaim flow
- Operator-adjustable dosing from HMI
- 0.25-1 gallon of treatIT chemical used per day (site dependent)

### System Overview

### **System Overview - Components**



- 1 Stainless Steel Frame
- 2 Process Sensors
- 3 Process Valves
- 4 Grundfos Dosing Pump
- 5 Air Flow Regulator
- 6 Multimedia Filter
- 7 Flow Regulators
- 8 Electrical Enclosure

### System Overview - Configurations



#### Two sizes depending on your wash's reclaim needs

	Standard Flow	High Flow	
Reclaim Production	25 GPM	50 GPM	
Dimensions (Main Frame)	40" w x 73" h x 34" d		
Dimensions (Filter)	24" w x 72" h	30" w x 72" h	

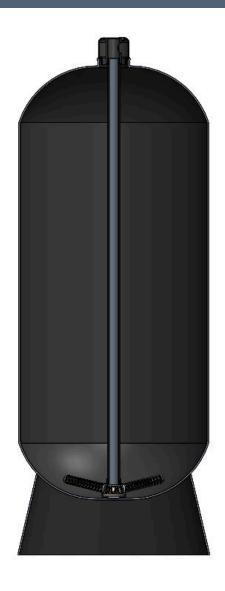


#### Collection

Used wash water collected in wash pit Recirculation **Chemical Treatment** Reuse **!** Water is reused in the car wash Water is dosed with chemical <u>-</u> **Filtration** Storage or Direct Reuse **Transfer** Collected water goes through multimedia filtration Water transferred into holding tanks or

fed to high-pressure pump

#### Filter Backflush



#### Automatic backflush of the multimedia filter removes debris and maintains flow

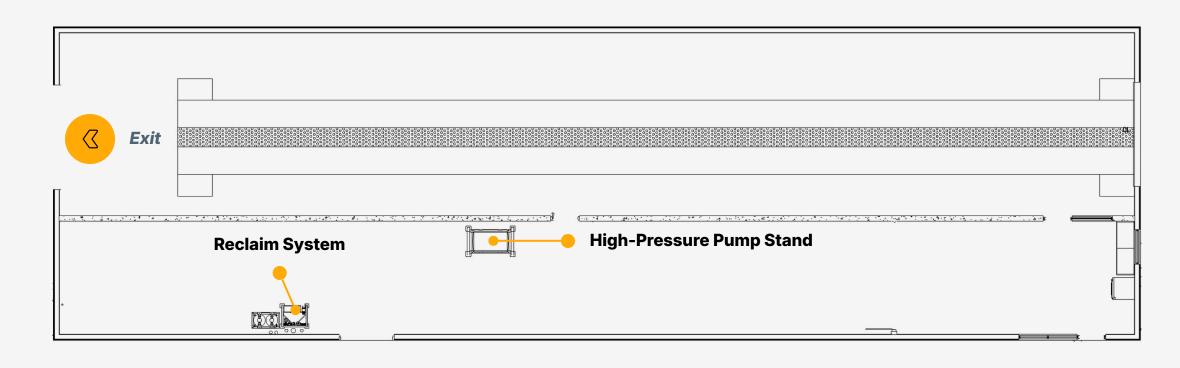
- Two initiation methods:
  - Pressure-based: Activates when differential pressure is high
  - Scheduled: Runs at preset times or intervals

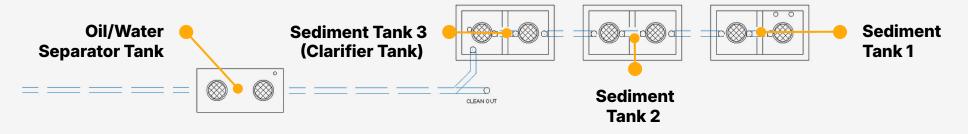
#### Backflush Requirements

- 10-20 minutes
- Standard Flow (30 GPM)
  - Between 300-600 gallons of water used

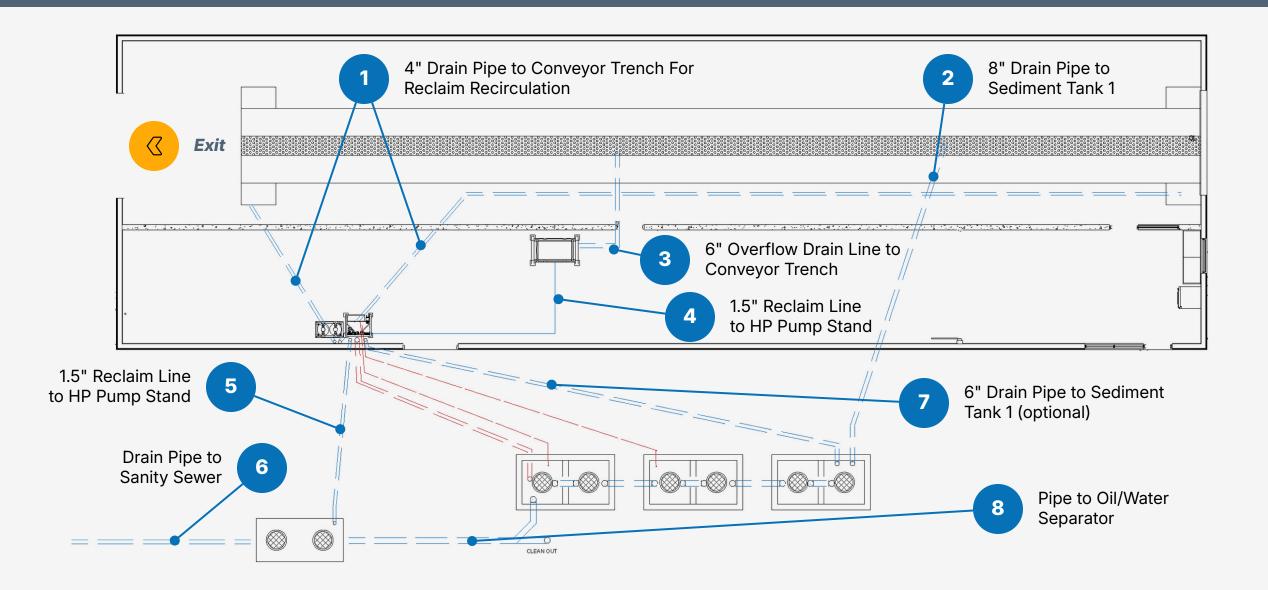
### Installation & Integration

### **Integration - Site Layout**

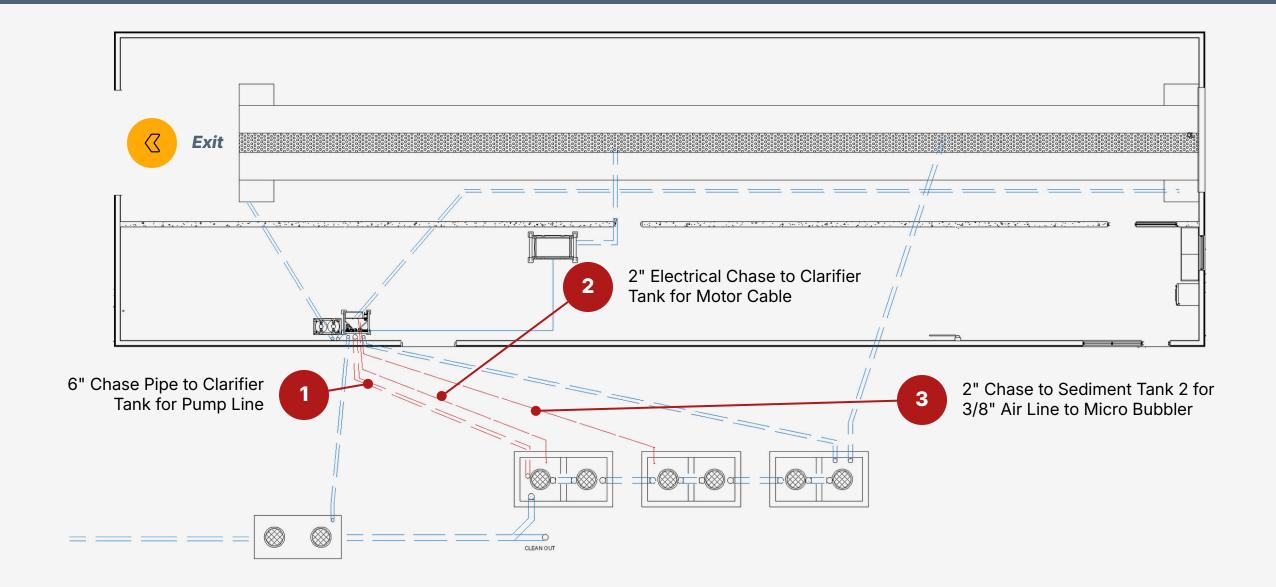




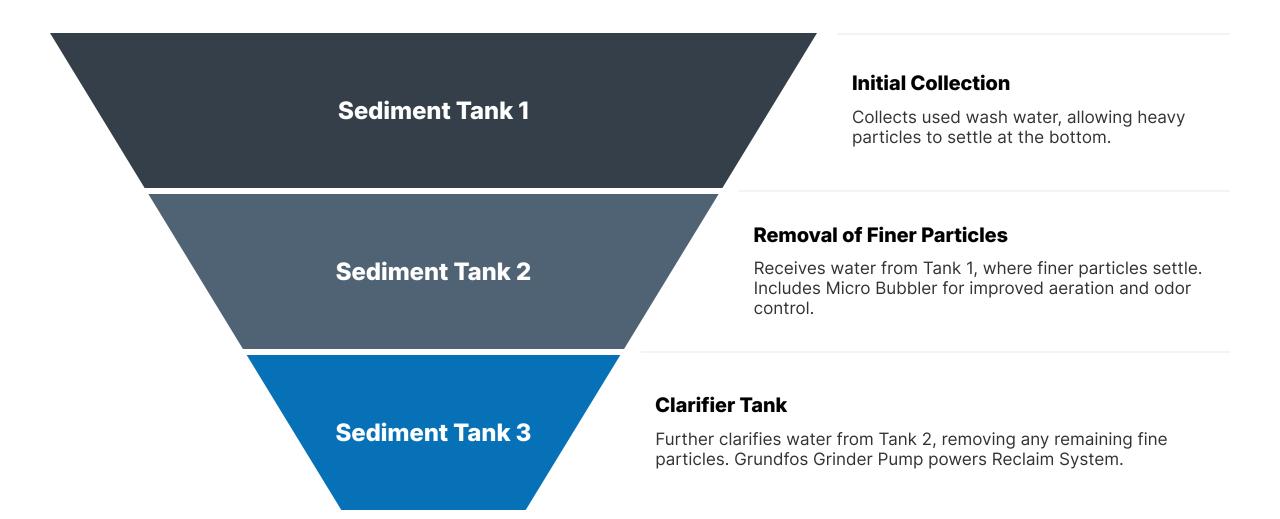
### **Integration - Site Layout**



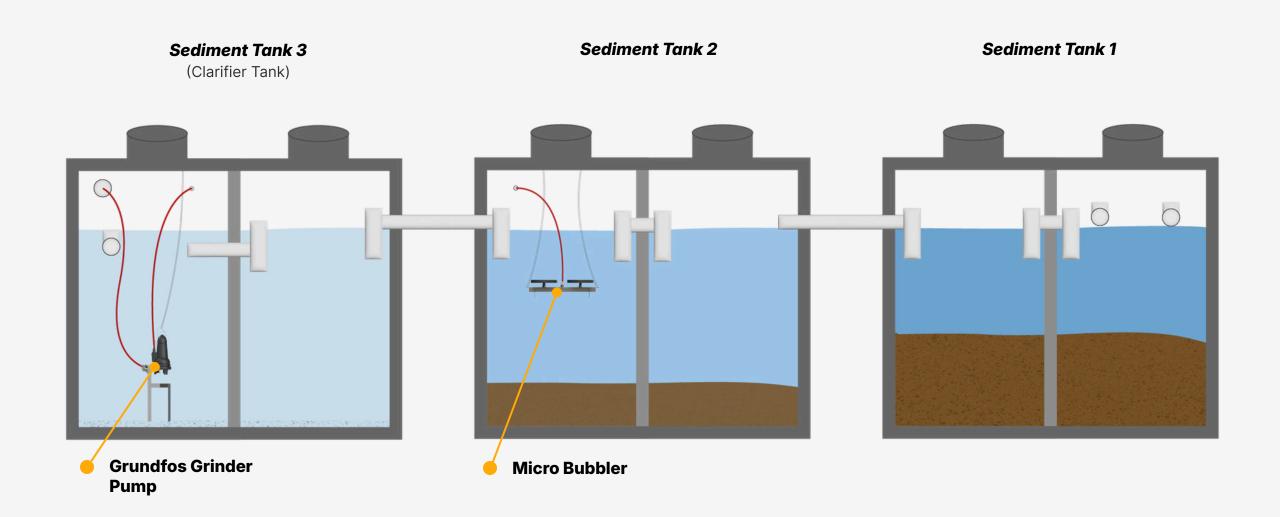
### **Integration - Site Layout**



### Integration - In-Ground Sediment Tanks



### **Integration - In-Ground Sediment Tanks**



### **Our Approach - Installation**

Typical Systems	Our Solution	
Multiple Schedule 80 pipes need to be installed underground and carefully backfilled to prevent cracking	Single 6" chase pipe used for Grundfos Grinder Pump hose, electric, and air line	
Pipes must precisely installed through concrete in the backroom to connect to the filtration system	Allows for flexible positioning and placement	
High complexity with specific dimensions required for proper connection	Simplified approach reduces installation time and complexity	



### Maintenance

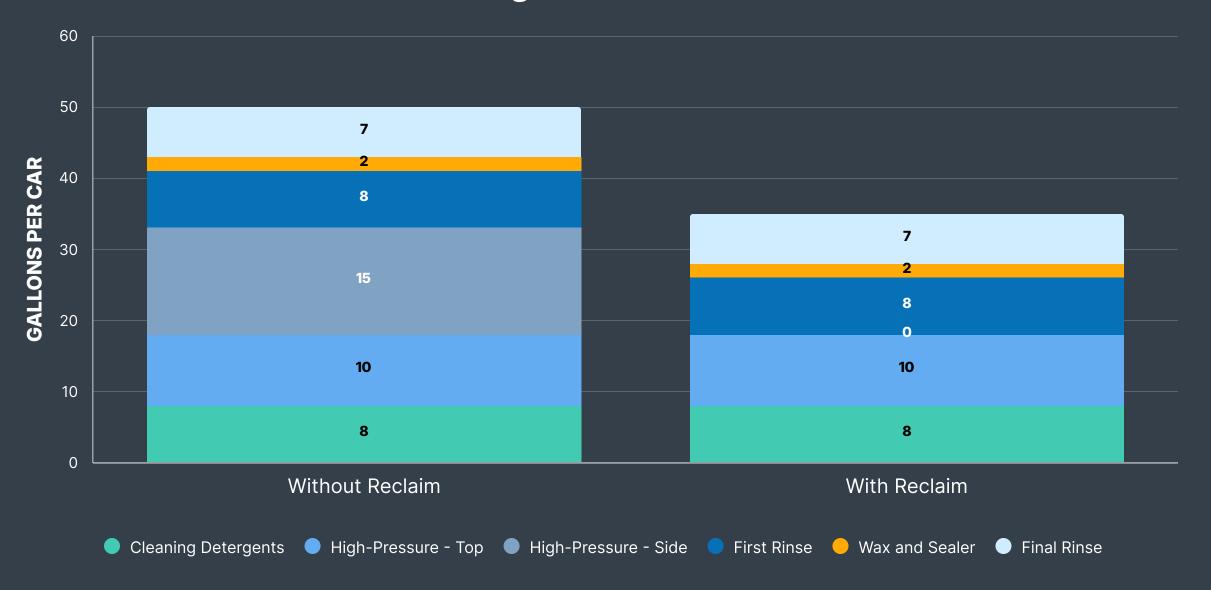
### **Maintenance Items**

Check	Frequency	
Visual Inspection (all connections, hoses, manifolds, pumps)	Daily	
Clean SEG and Dosing Pump Surfaces	Weekly	
SEG Pump Inspection (cables, impeller, housing, grinder system)	Every 3,000 hrs OR at least once a year	
Change Oil in SEG Pump	Every 3,000 hrs OR at least once a year	
Dosing Pump Inspection & Cleaning	Weekly	
Check Dosing Pump Head Screws	Every 3 months	
Check Internal Height of Media Bed	1 x Year	



### Water Savings

#### Freshwater Usage Without vs. With Reclaim



### **Water Savings**

	Standard Flow		High Flow	
Cars Per Day	350		1,000	
Water & Sewer \$/Gallon	\$0.008	\$0.014	\$0.014	\$0.014
Gallons Per Car (w/o Reclaim)	50	50	50	50
Gallons Per Car (with Reclaim)	35	35	25	25
Back Flush Time (Minutes)	10	10	20	20
Daily Back Flush (Gallons)	300	300	1,200	1,200
Water Savings (Gallons/Year)	1,782,000	1,782,000	8,568,000	8,568,000
Cost Savings (\$/Year)	\$14,250	\$24,950	\$68,600	\$120,000



# Trusted By Industry Leaders

















## Thank You!