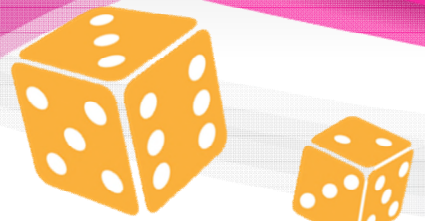
gainey's



The Ins and Outs of Filtration for Small WWTP's

Chad Dannemann

AquaPyr

Smaller Flow WWTP Filtration Challenges

???

Process Complexity

Project Execution

Operations

Total $$$

AquaPyr

SIMPLE. RELIABLE. FILTRATION.

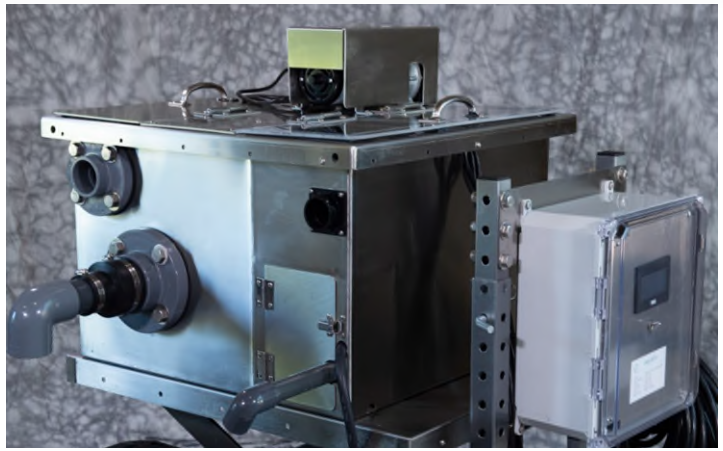
gainey's

The Root Cause of the Challenge?

Backwash Water Management:

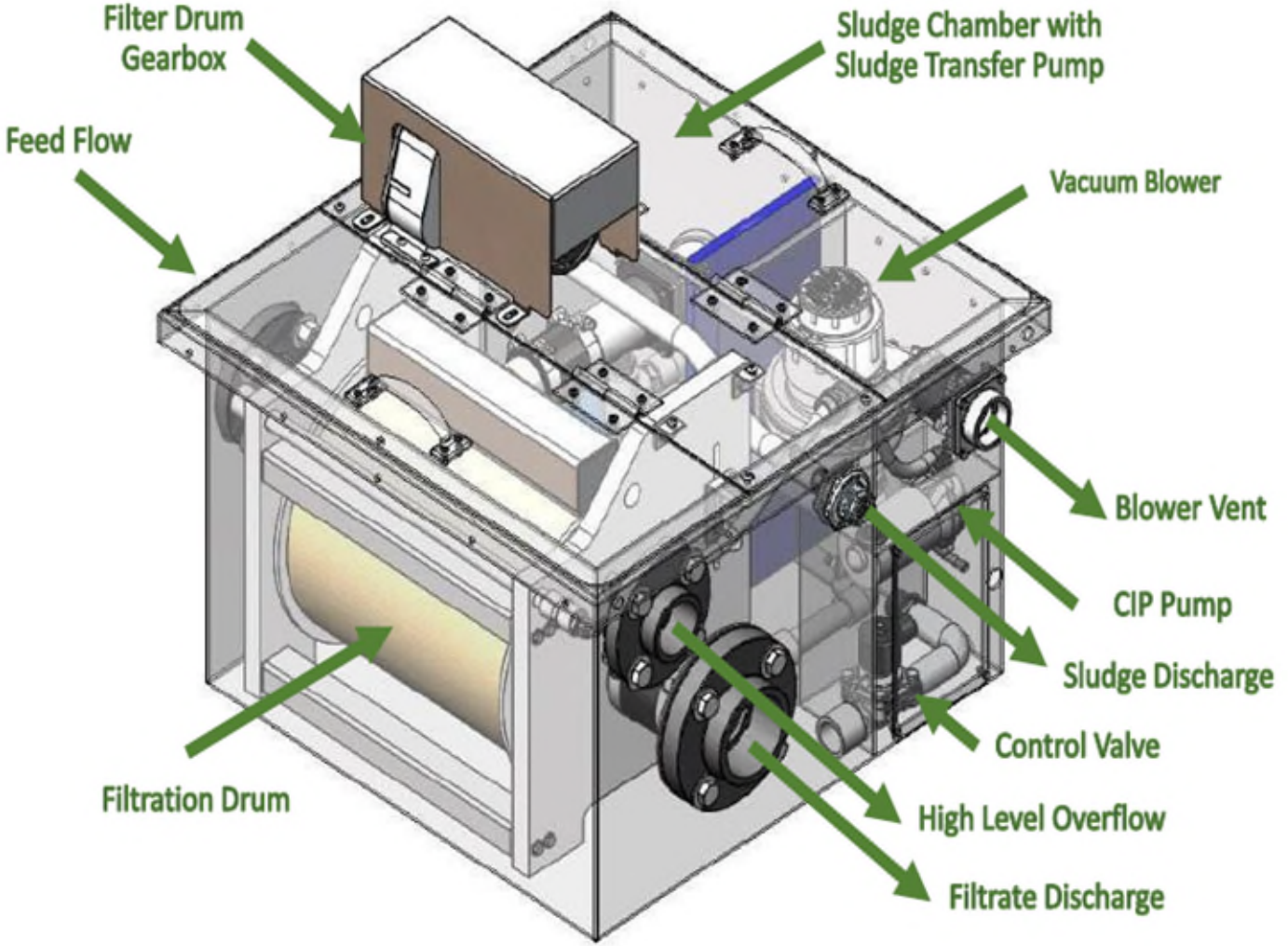
Storing BW Water	=	Complexity
Pumping BW Water		Maintenance
Returning BW to Front of Plant		Cost
Running Out of BW Water		Trouble

AquaPyr ULWF – It's a Product



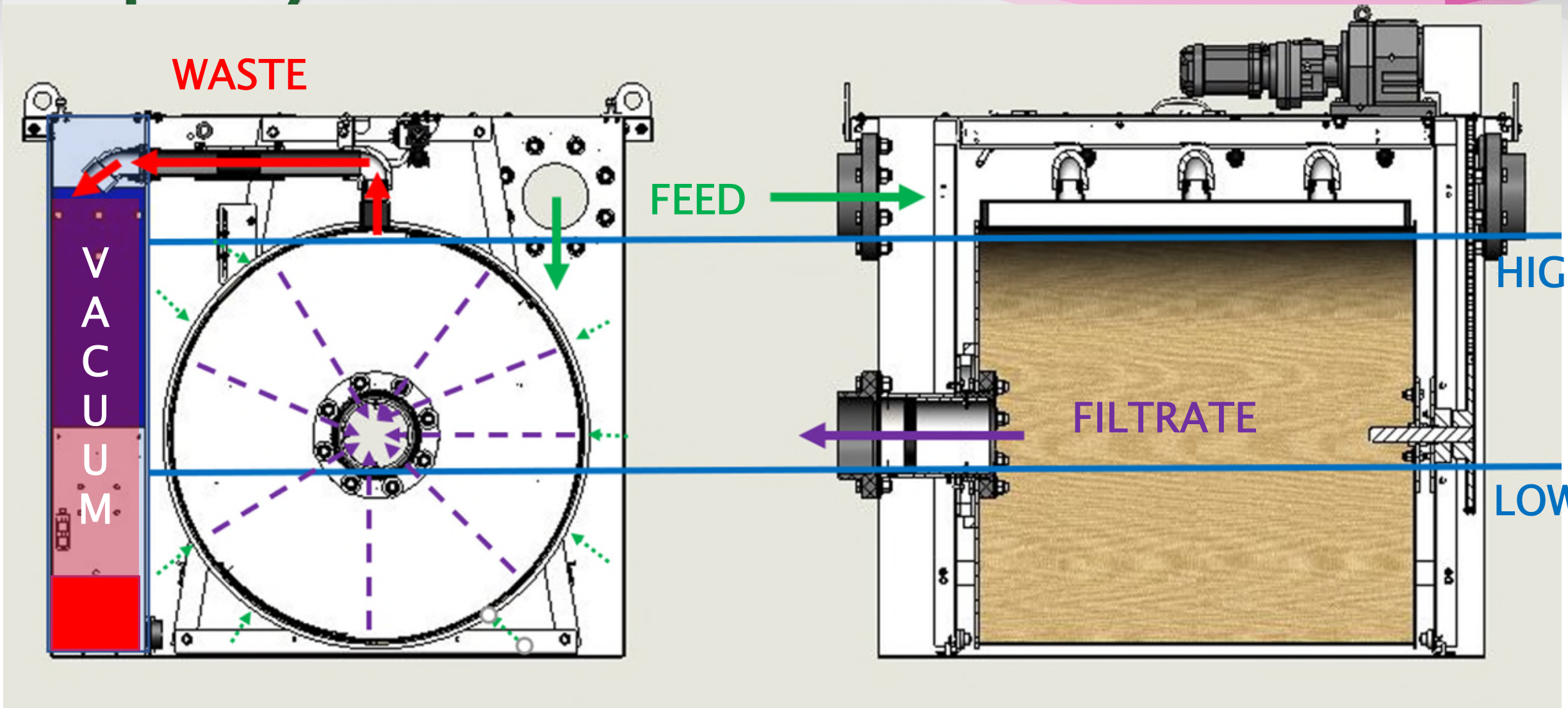
The AquaPyr ULWF is a factory packaged, all inclusive design. All components are sheltered within the filter assembly.

There are only 5 field connections to make for installation.



AquaPyr
SIMPLE. RELIABLE. FILTRATION.
gainey's

AquaPyr ULWF Process – How it Works



AquaPyr
SIMPLE. RELIABLE. FILTRATION.
gainey's

AquaPyr

Process Benefits

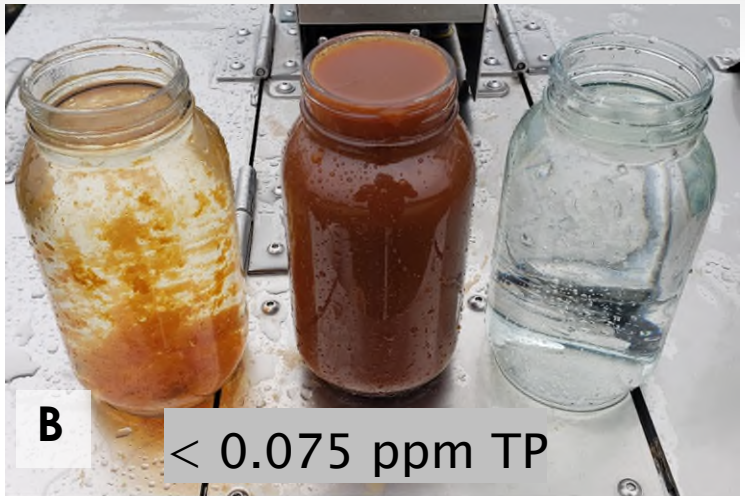
- Ultra Low Waste Volumes
  - Waste Vol. of 0.05% to 3% Feed Volume
  - Waste Typically 0.5% to 3% Dry Solids
- Easy to Understand – Reliable Process
  - Visibly Inspectable During Operation
- Robust Cleaning Options for Oil & Grease
  - Periodic, Deep Clean, Reverse Cycling
  - O&G Removing Chemical CIP
  - Run Dry Capable
- Low Power Consumption (~ 35kw*hr / MGal)
  - Moving Air << Power then Water
  - Very Fast Cleaning
- Simple Controls, Self Adapting Process
  - Set it & Forget it Control System
  - Self Adjusts to Variable Flow & TSS Loads

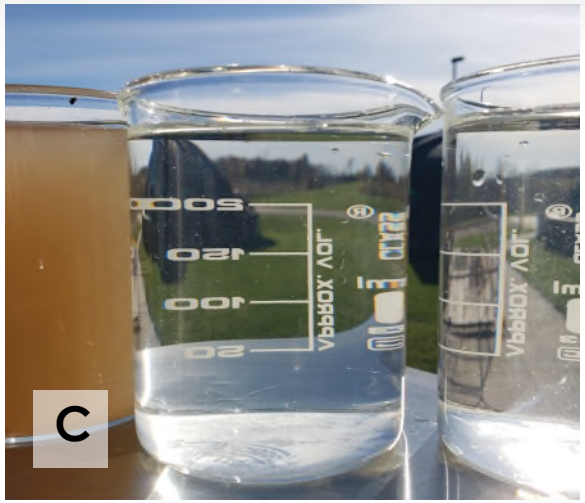
The Cloth Media of the AquaPyr ULWF is easy to inspect with the filter in operation.

AquaPyr
SIMPLE. RELIABLE. FILTRATION.

gainey's

Select AquaPyr ULWF Applications



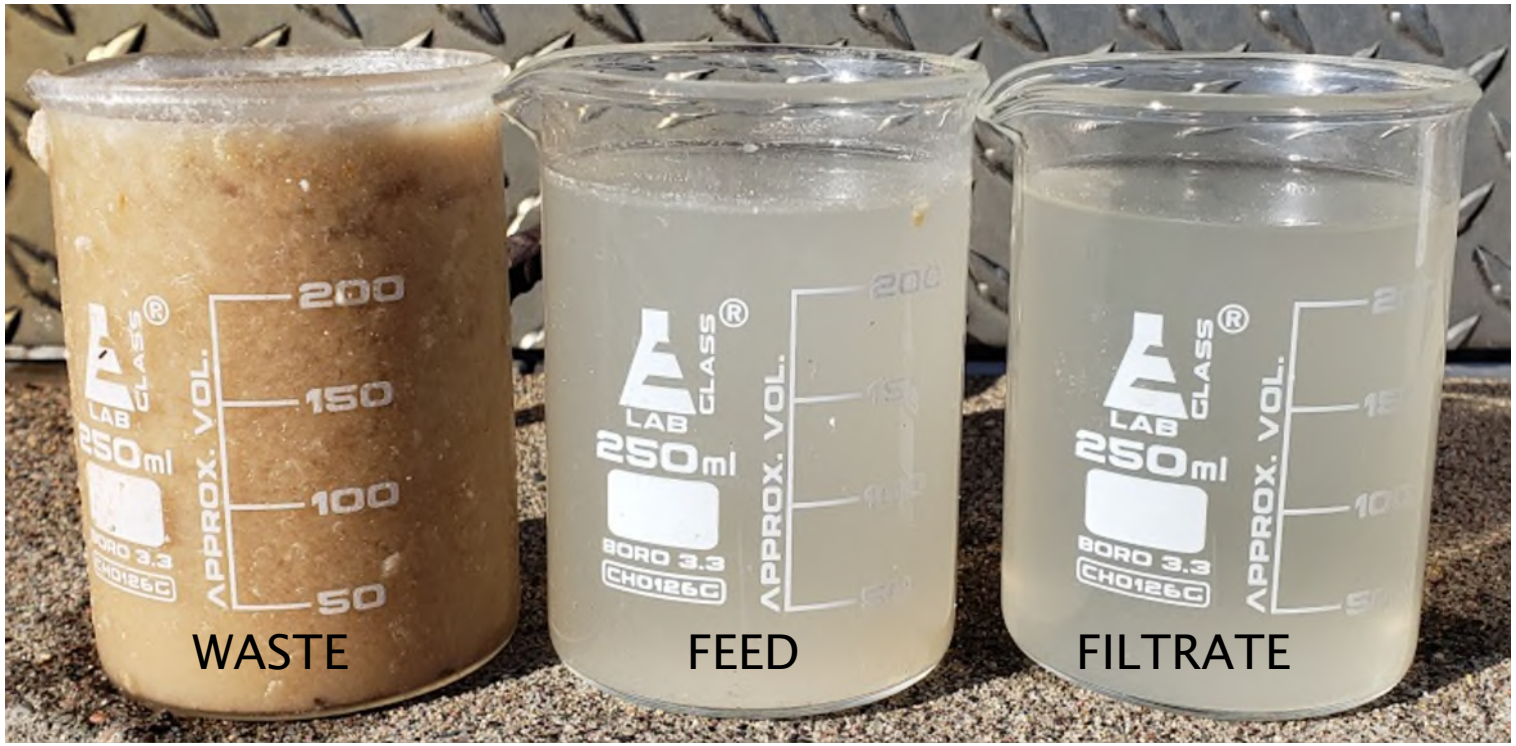


A: Recirculated Laundry Waste Clarification B: Municipal TP Removal w/ Fe & Polymer C: Muni Tertiary Polishing of Alum Floc (TP)
D: Muni / Tertiary Polishing RE (TP) E: Algae Removal With Iron Addition F: Aqua-Culture

AquaPyr
SIMPLE. RELIABLE. FILTRATION.
gainey's

AquaPyr ULWF – Primary Filtration

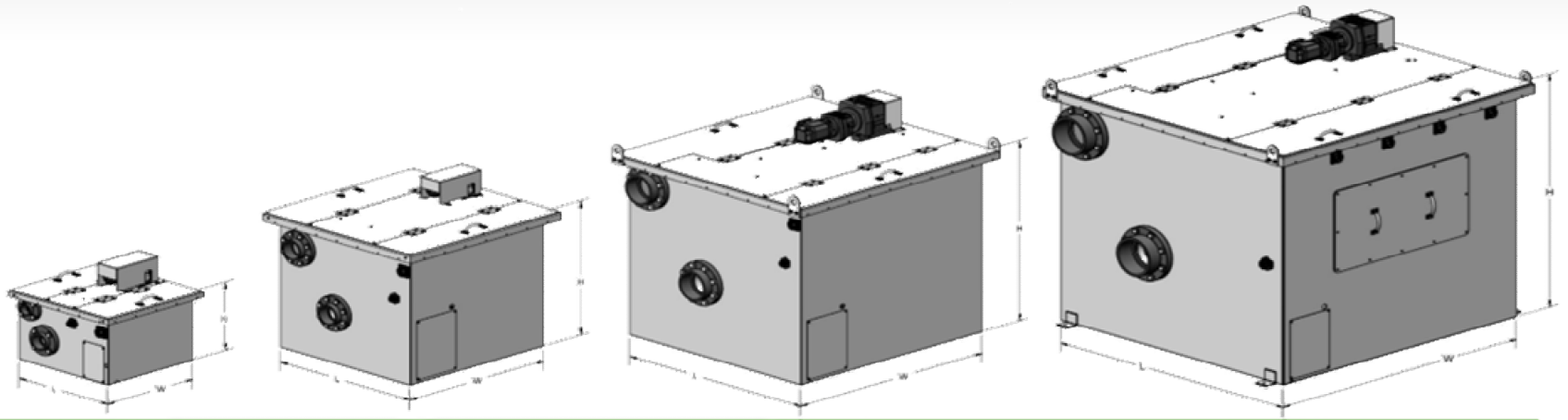
- **TSS Reduction:** 78%
- **COD Reduction:** 47.7%
- **TP Reduction:** 20.2%
- **Waste Volume:** < 1.0% Feed
- **Waste Dry Solids:** 2.4%



AquaPyr
SIMPLE. RELIABLE. FILTRATION.

gainey's

AquaPyr ULWF – Standardized Product Range

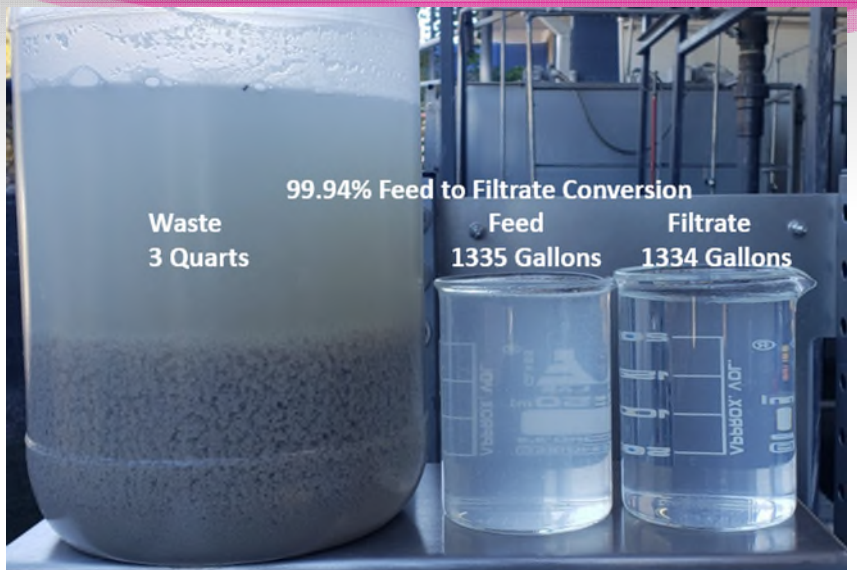


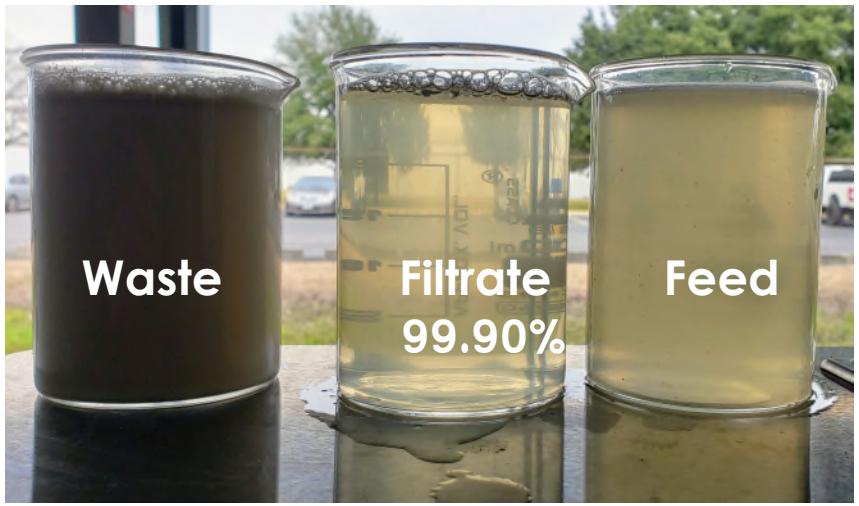
	Model 25	Model 65	Model 100	Model 250
Filter Area (ft^2)	3.4	7.5	13	28
Foot Print (inches) L x W x H	26 x 25 x 18	34 x 33 x 28	38 x 39 x 35	50 x 53 x 47
Operating Weight (lb)	600	850	1150	4750
Electrical 115 (230) Volt 60Hz	20A (10A)	20A (10A)	35A (20A)	35A (20A)
Flow Range (gpm)	0 – 25	0 – 65	0 – 100	0 – 250
Est. Waste Volume / Clean (Gallons)	< 0.8	1.8	3.0	7.0

AquaPyr
SIMPLE. RELIABLE. FILTRATION.

gainey's

AquaPyr ULWF – Demonstration Units





Simple to deploy & install field Demos verify:

- **Filtration Performance**
- **Waste Generation**
- **Media Selection**

AquaPyr
SIMPLE. RELIABLE. FI
gainey's

AquaPyr What's Cool April 2022

- **Scottish Water Trial Completed. 90 Days of Operation on Renewable Energy.**
- **10 AquaPyr ULWF's In Assembly for April and May 2022 Delivery**

AquaPyr
SIMPLE. RELIABLE. FILTRATION.

gainey's

Charlie, the original AquaPyr.

AquaPyr.com