

City of Mineola

WWTP Septic Receiving Improvements
Pre-Agreement Opinion of Probable Project Cost

Item No.	Description	Quantity	Unit	Unit Price	Total
BASE BID					
1.01	Mobilization, Insurance, and Bonds	1	LS	\$50,000.00	\$50,000.00
1.02	Care of Water During Construction	1	LS	\$5,000.00	\$5,000.00
1.03	Temporary Bypass Pumping	1	LS	\$15,000.00	\$15,000.00
1.04	Septic Receiving Station Equipment	1	LS	\$345,000.00	\$345,000.00
1.05	Concrete Pavement	370	SY	\$150.00	\$55,500.00
1.06	8-in DI Gravity Sewer	50	LF	\$50.00	\$2,500.00
1.07	48-in Manhole	2	EA	\$5,000.00	\$10,000.00
1.08	Connect to Gravity Sewer	1	EA	\$2,500.00	\$2,500.00
1.09	Hydromulch	0.25	AC	\$6,000.00	\$1,500.00
1.10	Electrical and Controls	1	LS	\$75,000.00	\$75,000.00
1.10	Miscellaneous Allowance	1	LS	\$25,000.00	\$25,000.00
Construction Subtotal:					\$587,000.00
Construction Contingences @ 15%:					\$88,100.00
Opinion of Probable Construction Cost:					\$675,100.00
Basic Services:					\$100,900.00
Additional Services:					\$121,200.00
Opinion of Probable Project Cost:					\$897,200.00

Assumptions:

Unit cost are in 2021 dollars.

Assumes 6 month construction contract.

**THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF
INTERIM REVIEW UNDER THE AUTHORITY OF JEREMY ORR,
P.E., 124911, ON NOVEMBER 18, 2021. IT IS NOT TO BE**



HONEY MONSTER®

Overview

The automated Honey Monster receiving and screening system quickly tracks and screens septage, grease or sludge to remove unwanted debris. Our model SRS-XE system uses an auger screw and perforated screening basket with 6mm circular openings to remove rocks, rags, plastics, silverware and other trash. It provides complete protection for downstream equipment and the treatment plant.

The unique combination of grinding, solids removal, washing and dewatering allows a typical septage truck to unload in 5 to 15 minutes. The system is completely enclosed to ensure safety, vector control and to capture foul odors.

The optional 'MonsterTrack' metering and control system uses a flow meter to track septage and provide accurate billing data for the facility and a receipt for the hauler.

Features & Benefits

Advanced Screening and Dewatering

- Auger Monster screen with 6mm perforations removes unwanted solids and trash
- Perf screen captures far more than bar screens
- Patented dual compartment compaction zone provides significant additional dewatering

Easy Access, Pivoted Auger

- The auger is mounted to a pivot support for easy inspections and removal
- A forklift or crane can lift and swivel the screening trough and auger out of the tank

Dual-Shafted Grinder

- Muffin Monster® grinder maximizes surface area of solids for better washing and compacting

Triple-manifold Wash Water System

- Washes soft organics off of captured debris
- Ensures optimal throughput while minimizing odors

High Level Ultrasonic Sensor

- Regulates plug valve for optimum performance
- Baffles prevent overflow conditions

Optional 'MonsterTrack' System

- Records driver information and measures flow data
- PIN or card access for security
- Printed transaction receipts
- Data stored on compact flash card
- Ethernet/SCADA connection capable

MonsterTrack



Exclusive Tilt and Swivel Auger



Track Loads with MonsterTrack!



Honey Monster®

Model: SRS-XE - Septage Receiving with Automated Solids Removal

Materials of Construction

Tank, piping & Support: 304 stainless steel

Auger Assembly: Casings and trough are 304ss; rotor is 480mm Ø alloy steel

Grinder Housing: Ductile iron housings
ASTM A536-77

Cutters: Hardened alloy steel

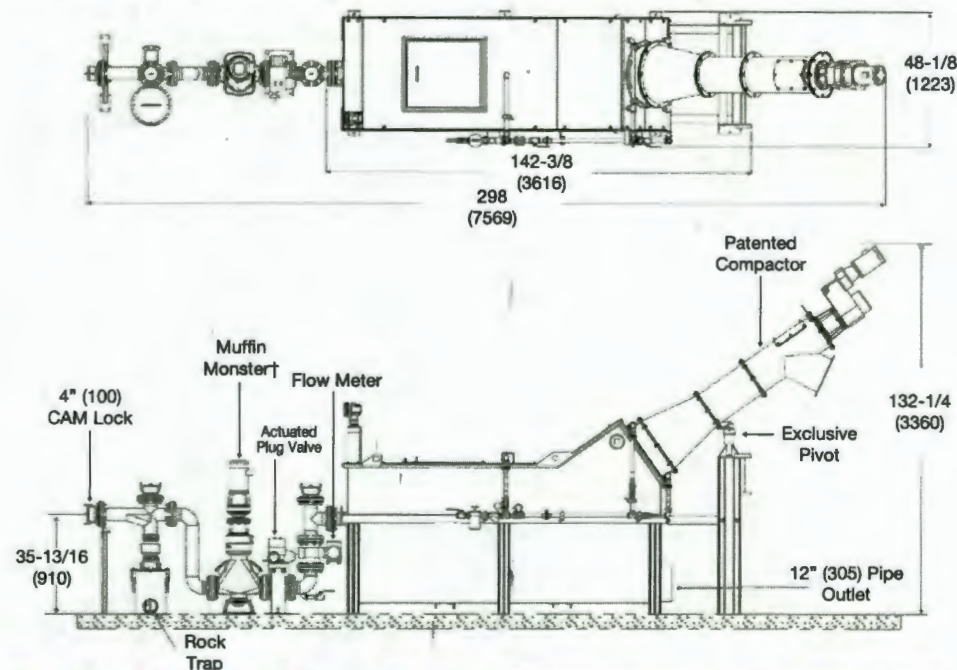
Mechanical Seal Faces: Tungsten carbide



Model	Screen Diameter	Auger Motor	Screenings Capacities	*Typical Septage Flow Capacity
SRS3235-XE	19" (480mm)	2 HP (1.5 kW)	90 ft ³ /h (2.55 m ³ /h)	400 gpm (25.2 l/s)

*Up to 63 l/s through tank screen (clean water)

*Recommended max 1 bar



Configurations

1. Septage Screening
2. Sludge Screening
3. Grease Screening

Options

- 40K Series Muffin Monster grinder for higher-flows
- 6" (150) mm inlet pipeline
- Cold weather protection system
- Discharge bagger
- pH and conductivity sensing loop
- 316 stainless steel pipe and tank
- MonsterTrack billing controller
- Skid mounted system



Rock Trap



Shredded Material Moving up the Auger Screw for Disposal



Cold Weather Protection and auto bagger



800.331.2277 | jwce.com | jwce@jwce.com

Grease Receiving

Model: GRS - Heavy Object Trap + Muffin Monster



Inside view of the >> perforated basket

MODEL	Pipe Size - (mm)	Basket Capacity
GRS0103-1804	4 (100mm)	1.1 ft ³ (0.03 m ³)
GRS0103-2004	4 (100mm)	1.5 ft ³ (0.04 m ³)
GRS0103-2404	4 (100mm)	*2.2 ft ³ (0.06 m ³)
GRS0103-1806	6 (150mm)	1.1 ft ³ (0.03 m ³)
GRS0103-2006	6 (150mm)	1.5 ft ³ (0.04 m ³)
GRS0103-2406	6 (150mm)	*2.2 ft ³ (0.06 m ³)

*Lifting station recommended to empty basket

Overview

This trap features adjustable bar screens to capture and direct heavy objects into the debris basket. As trucks unload grease, the silverware, rags, knives and other large debris are removed. The Muffin Monster then homogenizes the grease – breaking grease solids into an easy to pump slurry. Optional MonsterTrack billing controller, flow meter and modulating plug valve are also available.

Flow Capacity

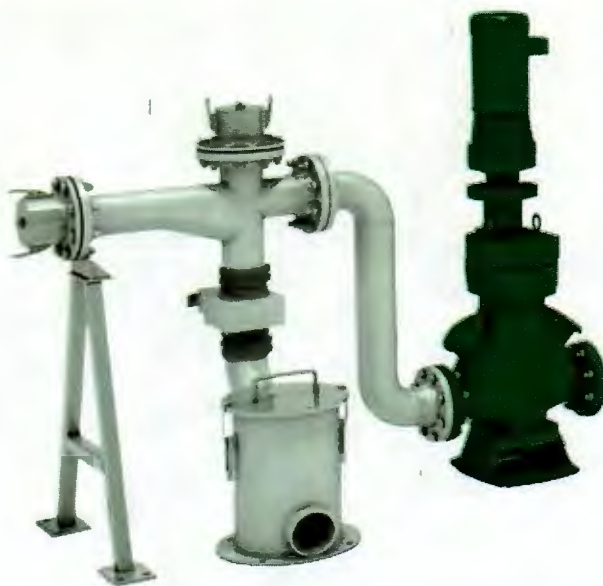
- 4" pipe - 400 GPM (25 l/s)
- 6" pipe - 600 GPM (38 l/s)
- Flow Rate - max. 15 psi

Features

- 5HP (3.7) kW Grinder Motor
- Hot Water Wash Down (supplied by others)
- Adjustable bar spacings 1/2" or 1" (12 or 25mm)

Septage Receiving

Model: SRS3000 - Rock Trap + Muffin Monster



MODEL	Pipe Size - (mm)	Basket Capacity
SRS3000-1204	4 (100mm)	0.18 ft ³ (0.005 m ³)
SRS3000-1206	6 (150mm)	0.24 ft ³ (0.007 m ³)

Overview

This small rock trap is a good choice for small sites receiving only a few thousand gallons per day. The perforated screening basket has 1/2" (12mm) circular openings and captures rocks and silverware.

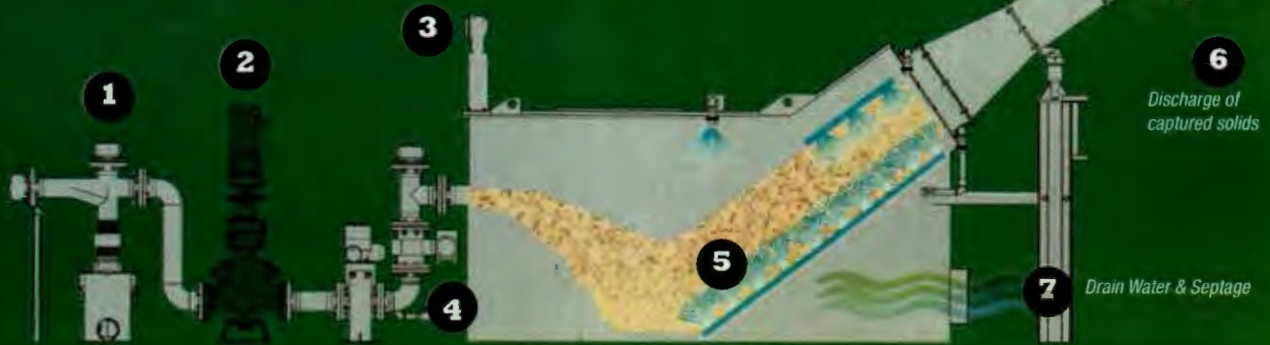
Flow Capacity

- 4" pipe - 400 GPM (25 l/s)
- 6" pipe - 600 GPM (38 l/s)
- Flow Rate - max. 15 psi

Features

- 5 HP (3.7 kW) Grinder Motor

Multiple piping configurations available to suit your location.
Contact the factory for more information.



Operation

- 1) Haulers connect to the cam lock inlet and start the flow of septage which first passes through the rock trap.
- 2) Muffin Monster grinds-up solids.
- 3) Ultrasonic level sensor and modulating plug valve regulate flow.
- 4) If the 'MonsterTrack' option is installed, the flow meter sends data to the controller.
- 5) Septage and solids now enter the perf screening trough. Spray wash cleans the solids and keeps the screen clear.
- 6) The unwanted solids are captured by the inclined auger screen and transported to the compaction zone for additional dewatering before being discharged.
- 7) The screened septage now safely flows into the wastewater treatment plant.



Skid Mounted System



Muffin Monster®



Optional Endless Bagger



MonsterTrack™ Billing Controller



Heat Tracing and Blanket

 **JWC**
Environmental®
Trust Monster Quality™

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