







"We believe the Muffin Monster" is one of the best products for this application, it is one of the best pieces of equipment in the industry." Septage receiving is a demanding process, so Integra Engineering specified powerful Muffin Monster® grinders to protect the pumps from solids, clothing and rags.

**Bob Bolton PE**Principal
Integra Engineering, Denver, Colorado

Photo: Muffin Monster® 30004T

# Who we are

INNOVATORS – JWC Environmental designs, manufactures, supplies and services innovative solids reduction, separation, removal and processing systems for municipal and industrial wastewater treatment to meet our customers' needs and protect our environment. We're the first manufacturer to

become a four-time winner of the Water Environment Federation's Innovative Technology of the Year award: Auger Monster® (1997); Screenings Washer Monster® (2001), Honey

Monster® (2003) and Monster Separation Systems® (2006).

BUILDERS – For over 35 years the wastewater industry has known the Muffin Monster® as the gold standard in grinding technology. Today we manufacture over 200 different types of grinders, screens and processing systems. We've built over 20,000 systems and take the time to make sure every piece of equipment we build meets the rigorous Muffin Monster standard for quality.

RESEARCHERS – We never settle. We are constantly striving to enhance our product lines and today we hold over 70 domestic and international technology patents.

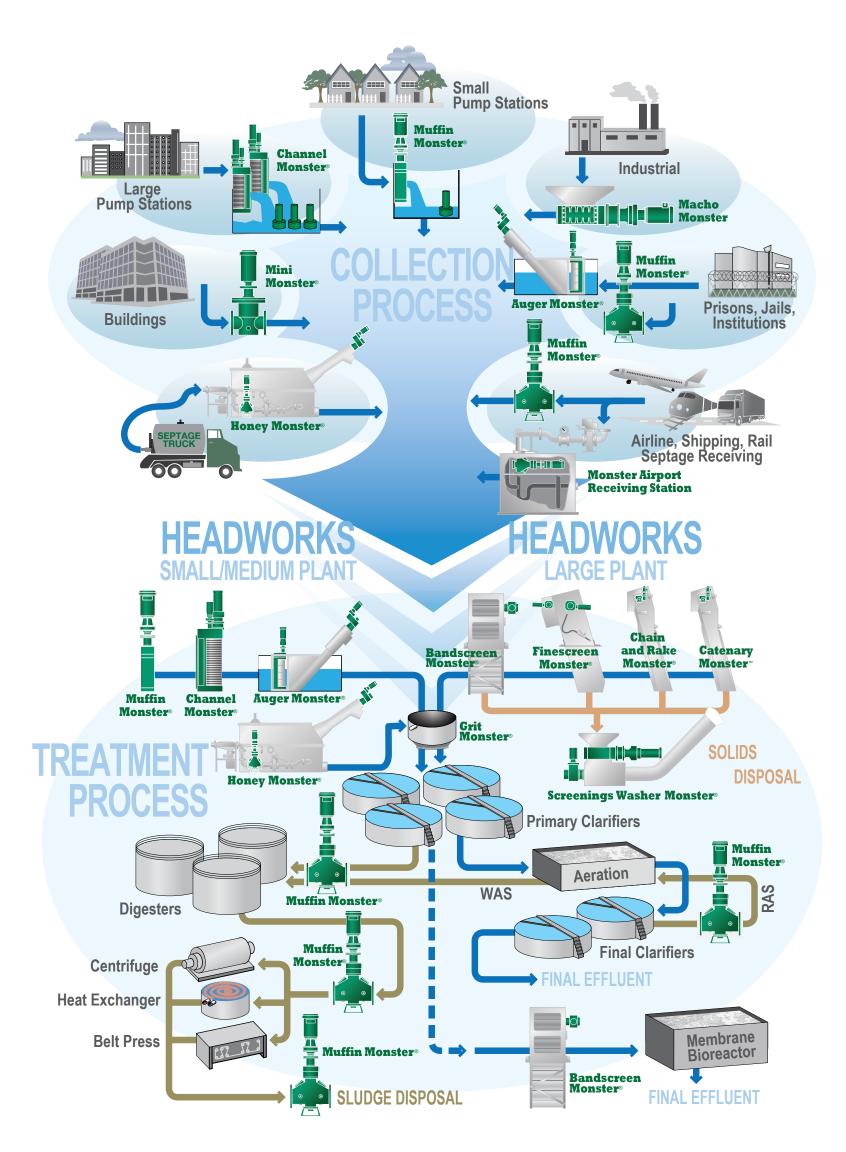
FAMILY – Our tradition of quality and caring for the customer goes back generations. In 1973 Joseph and Woodie Chambers founded the company in their garage. Today,

JWC employees around the world provide the know-how and energy to deliver exciting solids processing technologies with exceptional quality and the desire to exceed your expectations.









# Municipal

JWC Environmental screens, grinders and engineered solutions are used in big cities and small towns. From Barrow, Alaska to Key West, Florida, (even in Antarctica!) more cities rely on our products to grind up, screen out or cleanup solids so their collection system and treatment plants run more efficiently. Monsters are built to stand up to just about anything coming down the pipeline or channel and provide long-term protection for pumps and downstream processes.



# Pump Stations

Lift stations are uniquely vulnerable to wastewater solids. That's why many utilities install Muffin Monster or Channel Monster® grinders to protect pumps from damage and blockage. Muffin Monsters ensure pumps remain functioning.

### Headworks

Operate a cleaner, more efficient inlet works. From our affordable
Auger Monster screen for small and medium sized plants to our
larger Monster Separation System, which combines high-flow
fine screens with the amazing cleaning power of our Screenings
Washer Monster, we have a headworks solution for every size,
shape and type of wastewater treatment plant.





# Sludge

With three different sizes of in-line grinders, Mini Monster®, Muffin Monster and Macho Monster, we can ensure your sludge process works at maximum efficiency by shredding rags and large solids into particles that easily pass through sensitive equipment like sludge pumps, spiral heat exchangers, belt presses and centrifuges. Our grinders also homogenize sludge for efficient dewatering.

ADDITIONAL SOLUTIONS – Honey Monster: an automated, self-sufficient septage receiving system that screens flow entering the treatment plant. Bandscreen Monster®: approved and specified fine screen for Membrane Bioreactor (MBR) facilities.





"We haven't had to pull the pump once since the Muffin Monster" installation. It paid for itself in less than a year, and we are very pleased all around."

Don Milliken

Facilities Manager Woodland Hills Youth Development Center Nashville, TN 0

Photo: Channel Monster

# Institutional

Win the war against vandalism – protect your sewage system with the Muffin Monster or remove trash with the Auger Monster. Whatever your customers or inmates flush, the Muffin Monster will grind it into particles that flow harmlessly through pumps and pipes. Our slow-speed, high-torque grinder can power through the toughest institutional solids, such as rags, towels, plastics, trash and even blue jeans and blankets.



# Jails or Institutions

When people continually block-up the toilets and rain nasty sewage water everywhere – it's time to get an in-line Muffin Monster. Our Muffin Monster shreds material so it flows easily and complies with the local municipality's discharge requirements (most cities use Muffin Monsters too!). Put an end to clogged pumps, paying for pumper trucks or paying municipal fines – simply add a Muffin Monster or two to your sewage system.



## Correctional Facilities

Correctional sites can benefit from our 35 years of experience designing wastewater screens for challenging prison applications. The Auger Monster is perfect for institutions since it can handle long stringy material, such as towels and undergarments, as well as remove the trash that ends up in prison wastewater. The Auger Monster also cleans and compacts discharged screenings to reduce odor and waste handling costs. The Auger Monster is consistently specified by Federal, State and Local correctional agencies.



**ADDITIONAL SOLUTIONS** – Monster Airport Receiving Station: an automated blue water (airline sewage) receiving system that processes flow before it enters the municipal sewers. Monster Fish Cleaning Station: sturdy, clean and reliable, for piers, parks or lakes.





# Industrial

If solids are your problem – the Muffin Monster is your solution! We break up the waste solids that break down your plant. Our super tough dual shafted grinders take on industrial applications that macerators simply can't handle. Our Muffin Monster uses a unique low-speed, high-torque design to finely shred solids so they flow through pumps, pipes and other processes. We can also remove wastewater solids with the Auger Monster or Monster Separation System family of screens.



# We'll Liquidate Your Toughest Solids Nightmare

#### **Examples of industrial applications:**

**CHEMICAL PRODUCERS:** One of our largest and broadest markets, we help hundreds of chemical companies keep their dry and wet materials flowing smoothly. From hazardous waste grinding to sludge and wastewater grinding, we keep a wide variety of material flowing through their systems.

**FOOD PROCESSING:** We helped one of Alaska's largest fish processors grind waste material into a particle size that meets Federal discharge requirements. The efficiency and reliability of the Muffin Monster has helped food processing customers overcome major operational obstacles and made it the only grinder many clients specify.

**FUEL REFINING:** We worked with a large oil extraction company to develop an innovative way to efficiently pre-treat their feed material and protect their boilers. Several large Macho Monster 40000s grind up chunks of

organic material, petrified wood and tree branches before the material flows into the refinery. This helps eliminate downtime and increase output.

PULP & PAPER MILLS: The Muffin Monster is legendary in the pulp and paper industry, and is typically found in sludge and wastewater pipelines which tend to receive lots of wood chips and tar balls. The Muffin Monster and Macho Monster grinders easily reduce this material to manageable size and are known to continue running for years with little need for attention.

RENDERING PLANTS: An Auger Monster screen handles solids removal at a wastewater treatment plant of one of the nation's largest beef processing facilities. This global meat processing company consistently specifies the Auger Monster for their wastewater treatment plants, so they can protect their treatment process and meet tough discharge requirements.

**OTHER INDUSTRIES SERVED:** ships; vacuum sewer systems; bio gas; nuclear power; apparel manufacturers; retail stores; breweries; waste-to-energy plants; obsolete inventory destruction; and agriculture.

# Products

#### Mini Monster<sup>®</sup> 20000

In-line grinder
Applications:
sludge grinding



#### Mini Monster<sup>®</sup> 20002

Channel grinder
Applications:
building sewers



#### Muffin Monster<sup>®</sup> 30004T

In-line grinder
Applications:
sludge, industrial, jails



#### Muffin Monster<sup>®</sup> 30005

Channel grinder
Applications:
pump stations,
headworks,
prisons, industrial



#### Macho Monster 40000

In-line grinder
Applications:
sludge, industrial,
prisons



#### Macho Monster 40000

Channel grinder
Applications:
headworks, prisons,
industrial



#### Channel Monster®

Double drum High-flow channel grinder

Applications: pump stations, headworks



#### Channel Monster<sup>®</sup>

Single drum channel grinder

Applications: pump stations, headworks



#### Auger Monster®

Modular screen system

Applications: pump stations, headworks, prison



#### Screenings Washer Monster®

Washer compactor

Applications: headworks



#### Bandscreen Monster<sup>®</sup>

Center flow fine screen Applications: headworks, MBR, industrial



#### Finescreen Monster®

High-flow fine screen
Applications:
headworks,
industrial



## **Honey Monster**®

Septage receiving system

Applications: receiving, sludge screening



#### Chain & Rake Monster°

Bar screen

Applications: headworks, industrial, pump stations



#### Grit Monster

Grit removal

Applications: headworks



### Catenary Monster

Heavy duty, raked screen

Applications: headworks, pump stations or CSO duty



#### Drumscreen Monster

Simple and robust design allows fine screening of large volumes of wastewater

Applications: MBR, industrial, wastewater



#### Storm Monster®

Overflow screen

Applications: CSO



#### Monster Airport Receiving Station

Applications: airports, RV parks, truck stops, train stations



#### Monster Fish Cleaning Station

Applications: parks, piers, harbors



# Options



Custom Wall frames



Custom Channel Frame



Pre-fab Muffin Monster Manhole

### **Custom Wall Frames**

- Stainless steel guide frames attach to pump station to make installation easier.
- Frame is customized to fit each site and includes: guide rails; grinder support base; overflow bar racks and more.

# Custom Channel Frames

- Adapt grinders to fit any channel.
- Guide rails for easy installation and maintenance.
- · Stainless Steel construction.

# Muffin Monster Manhole

- Pre-fabricated fiberglass reinforced manhole with grinder.
- · Custom Depth.
- Hinged cover or H-20 traffic rated top.



Scrapers (optional)

## Scrapers

- Integrated steel scrapers increase throughput and help cutters cleanout faster.
- Improves performance of hopper fed applications.



Extended motor shaft



Custom Hoppers

## Hoppers

- · Custom made to fit application.
- 304 or 316 Stainless Steel.

# **Extended Motor Shaft**

 Places motor above highest water level. Available in 305 mm increments. Maximum: 4570 mm.





