



Innovation in Wastewater Treatment





“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.

BUILDERS - For over 30 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 we 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.

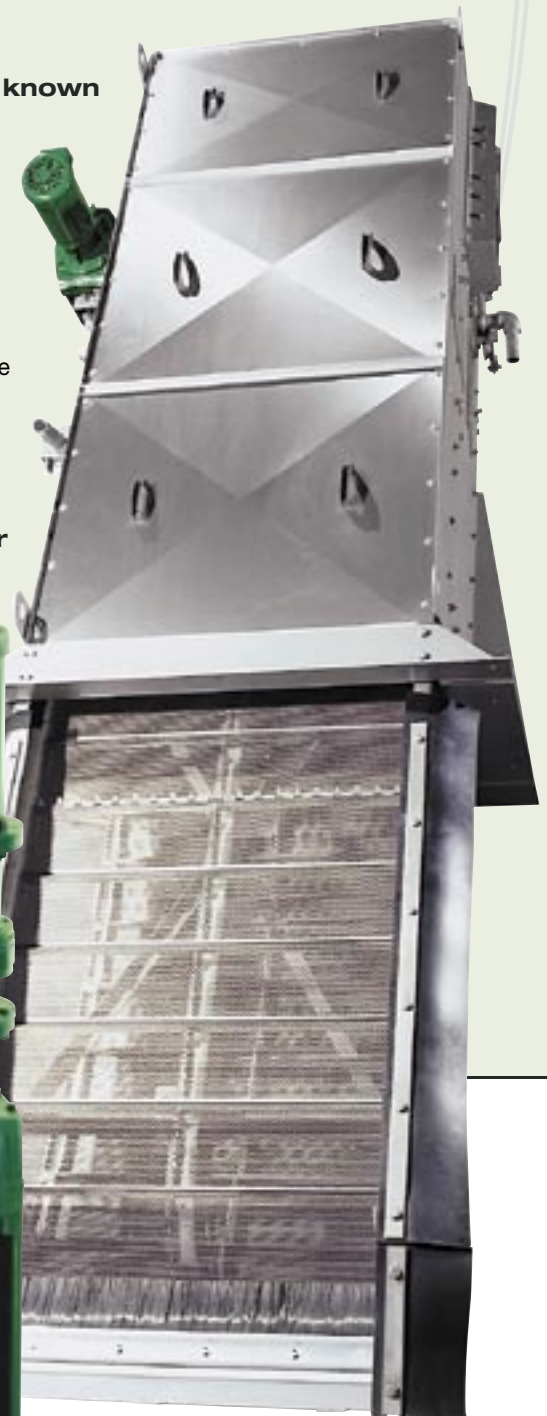
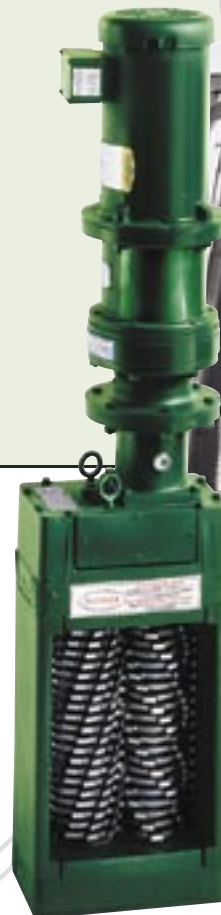
FAMILY - Our tradition of quality and caring for the customer

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.



Founders Woodie and Joseph Chambers with one of the first Muffin Monsters®.

*Muffin Monster®
Model 30005*



Finescreen Monster™





“We’ve been able to reduce the weight of our bar screenings from 16,000 lbs per month to 660 lbs per month. In addition to eliminating the cost for the out-of-state dumping, wheelbarrows and the dumpster, we no longer need the bar screen at our pump station. I would highly recommend the Screenings Washer Monster® to other operators.”

Robert T. Mercaldi
*Assistant Director,
Water Pollution Control Division, Meriden, CT*

Photo: Screenings Washer Monster®

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 clean-up solids so their collection system and treatment plants run better. Monsters are built to stand up to just about anything coming down the pipeline or channel and provide protection for pumps and downstream processes. We are a three-time winner of the Water Environment Federation's Innovative Technology of the Year award: Auger Monster® (1997); Screenings Washer Monster® (2001) and Honey Monster™ (2003).



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 that 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

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 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

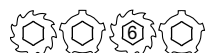
When people continually block-up the toilets and rain nasty sewage water everywhere – it's time to get an in-line Muffin Monster®. Our Muffin Monster® shreds material so it flows easily and complies with the local municipality's discharge requirements (most cities use Muffin Monsters® too!). Put an end 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 30 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.





“We had plenty of problems with large-sized debris plugging piping, pumps, and other equipment prior to the installation of the Muffin Monsters. One unit has been in-line for over nine years, a second for more than seven. They do exactly what they are supposed to do, without breakdowns, needing only semiannual cutter replacements as preventive maintenance. It’s a very durable piece of equipment, and cutter replacement can be performed within a single shift.”

Chris Hazen
Manager of Operations
Bayer

Photo: Macho Monster

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: nuclear power; apparel manufacturers; retail stores; breweries; waste-to-energy plants; obsolete inventory destruction; and agriculture.



Products

Mini Monster[®] 20000

In-line grinder
Applications: sludge grinding



Mini Monster[®] 20002

Channel grinder
Applications: building sewers



Muffin Monster[®] 30004T

In-line grinder
Applications: sludge, industrial, jails



Muffin Monster[®] 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[®]

High-flow channel grinder
Applications: pump stations, headworks



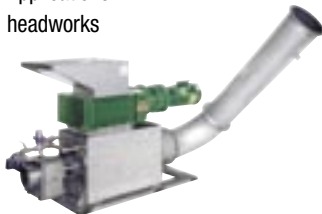
Auger Monster[®]

Modular screen system
Applications: pump stations, headworks



Screenings Washer Monster[®]

Washer compactor
Applications: headworks



Honey Monster[™]

Septage receiving system
Applications: receiving, sludge



Bandscreen Monster[™]

Center flow fine screen
Applications: headworks, MBR, industrial



Finescreen Monster[™]

High-flow fine screen
Applications: headworks, MBR, industrial



Chain & Rake Monster[™]

Bar screen
Applications: headworks, industrial, pump stations



Storm Monster[™]

Overflow screen
Applications: CSO



Monster Airport Receiving Station

Applications: airports, RV parks, truck stops



Monster Fish Cleaning Station

Applications: parks, piers, harbors



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