Mini Monster®

For lower flows, buildings, condos and resorts the Mini Monster is a powerful grinder in a compact package. It shreds rags and trash into tiny pieces in wastewater or sludge to protect pumps and eliminate costly breakdowns and back-ups.

Muffin Monster

The workhorse of wastewater since 1973 the Muffin Monster easily reduces troublesome solids. The dual-shaft design uses low speed, high-torque power to shred tough solids in sewage and sludge. With over 30,000 installations the Muffin Monster is the proven solution for protecting pumps and systems.

Macho Monster

For bigger solids reduction projects the Macho Monster has the power to keep up with the flow. The 40000 model uses 190mm cutters and the 70000 model uses massive 254mm cutters to slice through difficult solids. Ideal for sludge lines, prisons, waste-to-energy and food processing.



Dual shafted grinder



Easy pump station installation with custom frames.

Features & Benefits

Dual Shafted Grinder

- Low-speed, high torque grinders handle rags, rocks, wood, clothing, plastics and other debris
- Capable of grinding a wider variety of solids than single shafted machines and macerators

Compact and Efficient Design

- Adapts to pipelines & channels with little or no modification
- Custom stainless steel frames allow easy installation in channels, wet wells and pump stations
- In-line Mini and Muffin Monster incorporate easy to remove cutter cartridge

Cartridge Seal Assembly

- High pressure capability up to 6 bar
- Runs submerged or dry with no seal flush required

Patented High-Flow Side Rails

- Increases flow capacity and decreases head loss
- Deflects solids into the cutting chamber

Automated Monitoring and Controls

· Auto load sensing and reversals reduce interrupts and optimize the grinder's performance



















Applications

	Mini Monster	Muffin Monster	Macho Monster	Characteristics
Buildings, Resorts and Condos		(0)		Grinds up rags, cotton products and other trash frequently flushed down the toilet. Grinders are more powerful than grinder pumps and eliminate sewage pumping problems.
Pump Stations		(Ď)	(<u>0</u>)	Channel grinders can be installed on the wall of a wet well. In-line units are installed in dry pumping stations. Grinds solids to keep pumps running reliably and efficiently.
Septage / Grease		(Å)	(0)	Grinds up rags, silverware, solids and trash as septage/grease are unloaded.
Sludge / Scum		(Å)	(<u>^</u>)	Grinds up rag balls, rocks and plastics to protect sludge pumps.
Belt Press / Centrifuge		(<u>0</u>)	(j)	Grinds a variety of solids to protect dewatering systems from damage and makes them more efficient by homogenizing sludge prior to dewatering.
Jails / Prisons		(0)	(<u>(</u>)	Prevents clogs and spills. Installed in over 2,000 prisons, jails and institutional facilities.
Hospitals / Nursing Homes		(0)	(<u>^</u>)	Grinds up rags, pads, clothing, needles and dangerous waste to protect pumps & systems.
Food / Fish Processing		(Ď)	(Ö)	Grinds up material such as fish guts, slaughterhouse scraps, rendering material, food scraps and more. Frequently used in biogas applications to turn waste into energy.
Pulp / Paper		(D)	(<u>0</u>)	Installed in sludge lines, pulp systems and wastewater plants to protect pumps & pipelines.
Industrial			(<u>(</u>)	Used in refineries, hazardous waste processing, obsolete inventory destruction & recycling.

^{*} Consult factory for additional application assistance and approval.

Photo Gallery



Muffin Monster in-line septage grinders.



Muffin Monster in-line sludge grinder.



Macho Monster in-line sewage grinder in a jail.



Macho Monster in-line sludge grinders.



Muffin Monster grinder in a fish processing plant.



Muffin Monster channel grinder in a prison.



Muffin Monster pump station grinder and installation frame.



Muffin Monster pump station grinder and installation frame.



Mini Monster

Model 20000

Standard Specifications

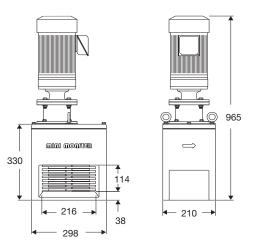
Model	Motor kW	Hex Size mm	Reducer	Cutter Size mm	Max Force at Cutter Tip kN	
20000	2.2	50	29:1	120	27.4	



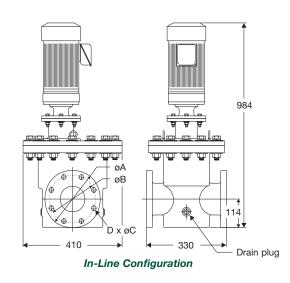
In-Line Unit



Open Channel Unit



Open Channel Configuration



Performance Capability

Model	Configuration	Head Drop mm	Pressure Drop bar	Max Pressure bar	Flow Rate m³/h	Approximate Net Weight kg
20002	Open channel	97	n/a	6	18	102
20000	In-line	n/a	0.07	6	60	125

^{*} Notes: In-Line unit typically installed prior to suction side of pump. Flow based on optimum channel conditions. Consult factory for final analysis of application.

Exclusive Features





Removable Mini Monster cartridge Removable Muffin Monster cartridge



Patented high-flow side rails (open channel configurations)



Exclusive hex driven, tungsten face seal cartridges





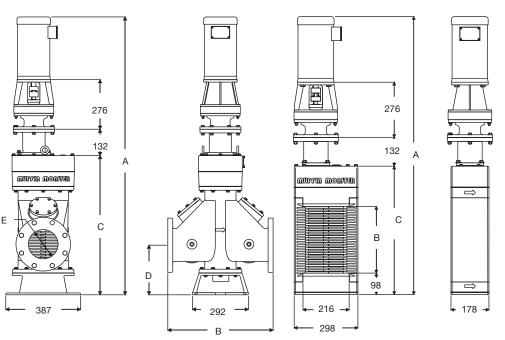
In-Line Unit

Muffin Monster

Model 30000

Standard Specifications

Models	Motor kW	Hex Size mm	Reducer	Cutter Size mm	Max Force at Cutter Tip kN	
30004T / 30005	2.2	50	29:1	120	27.4	
30004T / 30005	3.7	50	29:1	120	40.7	



In-Line Configuration

Open Channel Configuration

Performance Capability - Open Channel Configuration

Open Channel Unit

Model	Flow Rate	Head Drop	Approximate Net Weight	Dimensions - mm		
	m³/h	mm	kg	Α	В	С
30005-0008	76	241	168	1219	203	482
30005-0012	111	343	186	1320	305	584
30005-0018	168	444	211	1473	457	736
30005-0024	227	495	236	1600	609	889
30005-0032	334	546	263	1803	813	1092
30005-0040	454	597	295	2006	1016	1295

Flow based on optimum channel conditions • Consult factory for final analysis of application • Dimensions based on 2.2kW electrical motor drive

Performance Capability - In-Line Configuration

Model	Flow Rate	Pipeline Size	Pressure Drop	Approx. Net Wt.	Dimensions - mm						
	m³/h	mm	bars	kg	Α	В	С	D	E		
30004T-1204	91	102	0.03	250	1423	483	711	206	102		
30004T-1206	136	152	0.06	254	1423	534	711	232	152		
30004T-1208	182	203	0.11	258	1423	584	711	254	203		
30004T-2410	227	254	0.08	356	1727	686	1010	283	254		
30004T-2412	273	305	0.11	367	1727	787	1010	305	305		

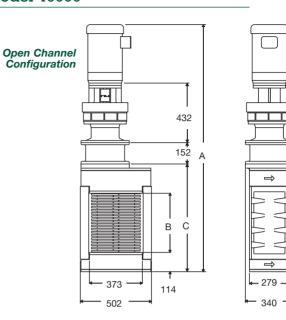
In-Line unit typically installed prior to suction side of pump.

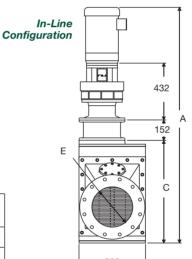


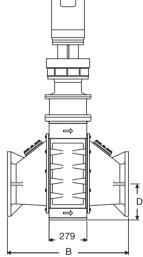


Macho Monster

Model 40000







In-Line Unit

Open Channel Unit

Standard Specifications

Model	Motor kW	Hex Size mm	Reducer	Cutter Size mm	Max Force at Cutter Tip kN
40002	7.5	64	43:1	191	72
70000	37.5	102	43:1	254	183

Performance Capability - Open Channel Configuration

Model	Flow Rate	Head Drop	Approximate	Dimensions mm		
	m³/h	mm	kg	Α	В	С
40002-0018	204	203	533	1754	457	768
40002-0024	341	404	619	1905	609	946
40002-0032	477	457	708	1937	812	1444
70000-0040†	throughput 22 m³/h		1900	3124	1041	1499

[†] Typically used in material shredding applications.

Performance Capability - In-Line Configuration

Model	Flow Rate	Pressure	Max	Approx.	Dimension mm				
	m³/h	Drop bar	Pressure bar	Net Weight kg	Α	В	С	D	E
40002-1812	500	.207	6	690	1759	895	768	273	305
40002-2412	681	.077	6	805	1937	895	946	273	305
40002-2416	795	.103	6	860	1937	1099	946	321	406
40002-2418	908	.152	6	950	1937	1200	946	346	457
40002-3220	1136	.207	6	1184	2102	1301	1114	381	508

^{*} Notes: In-Line unit typically installed prior to suction side of pump. Flow based on optimum channel conditions. Consult factory for final analysis of application.

Muffin Monster Options









Exclusive: JWC designed immersible motor



Hydraulic motor

Cutters

- 7, 11 and 13 tooth variations
- Special: 3-tooth fish grinding cutters
- Optional: extra-hard carburized cutters; stainless steel

Custom Frames

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

High-tech Controllers

- Model PC2200 standard
- Standard enclosure: NEMA-4x fiberglass, 3 position switch and indicators
- Optional enclosures: NEMA-4x 304 stainless steel; NEMA-4x 316 stainless; NEMA-7 explosion proof



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



High-tech Controllers

Motors

- TEFC IP55 Totally enclosed fan cooled electric
- XPFC IP68 Explosion proof fan cooled electric
- XPNV Exclusive electric immersible
- Available in: 2.2, 3.7, 7.5 kW

Hydraulic Power Packs

Available in 3.7, 7.5, 11 kW

Extended Motor Shaft

 Places motor above highest water level. Available in 150mm increments.
 Maximum: 3600mm

Corrosion Resistant Grinder

- Model 30001 grinder available with 304 or 316-stainless steel housing for harsh environments.
- 17-4PH stainless steel cutters, spacers and shafts optional.
- Stainless steel flanges and/or hoppers also available.



Extended motor shaft



Custom stainless steel frames



Scrapers (optional)



Optional 304 or 316 stainless steel housing and flanges.



Ask your Distributor for genuine Monster replacement parts.



Headquarters

290 Paularino Ave. Costa Mesa, CA 92626 USA Phone: +949-833-3888 Fax: +949-833-8858 jwce@jwce.com



www.jwce.com