

# MUFFIN MONSTER®

In-line/Open-channel Grinders





*Muffin Monster sewage grinders are designed to protect pumps and other equipment by grinding down the toughest wastewater solids.*

*Applications include:  
lift stations, sludge lines,  
septage receiving stations,  
headworks screenings reduction,  
prisons and more.*

## 10K Series Muffin Monster®

The 10K Series Muffin Monster is a compact grinder, tough on solids in sludge and sewage applications. It fits into areas with limited space requirements while still providing the necessary power for downstream protection. The 10K Series is an ideal, low-cost solution that goes beyond sludge grinding at resource recovery facilities and fits perfectly into office buildings, apartment complexes, resorts, retail centers and package treatment plants.

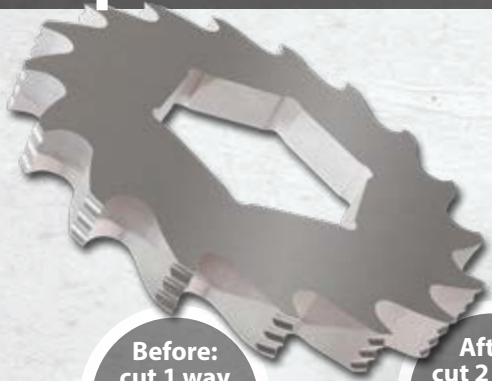
## 30K Series Muffin Monster®

Troublesome solids are now easier than ever to reduce with the Muffin Monster dual-shafted grinder. Its slow-speed, high-torque design shreds tough solids that typically cause sewer problems. With over 40,000 installations, the Muffin Monster is legendary for providing solutions that meet the increasingly demanding needs of wastewater operations.

## 40K Series Muffin Monster®

The 40K Series Muffin Monster excels in wet and dry grinding applications. It's a powerful shredder for large sludge processing systems. It also serves in many industrial applications including fish and beef processing, petroleum, pulp and paper mills, chemical plants and recycling plants. The 40K is designed to handle the highest solids loading environments.

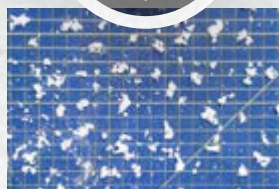
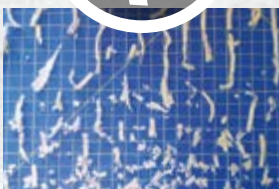
# Wipes Ready® Technology



Before:  
cut 1 way



After:  
cut 2 ways



## Wipes Ready® cutters\*

Achieve the desired two-dimensional cutting capabilities to control both the width and length of output, preventing materials from forming long strips and rewaving in the waste stream.

- Cut wipes in two directions
- Smaller particle size = No rewaving

\* patent pending





# Features

## Dual-shafted grinder

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

## Compact and efficient design

- Adapts to pipelines or channels with little or no modification
- Custom stainless steel frames allow easy installation in channels, wet wells and pump stations
- In-line 30K Muffin Monster incorporates an easy-to-remove cutter cartridge

## Automated monitoring and controls

- Load-sensing and reversal mechanism to optimize grinder's performance



# Benefits

## Equipment protection

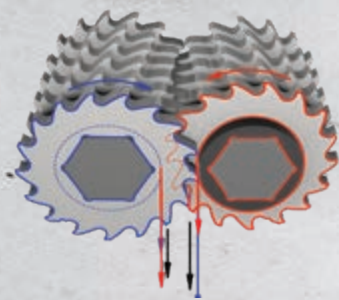
- Protect pumps and other critical equipment from costly clogs and damage from tough solids

## Efficient treatment operations

- Grinding separates organic from inorganic materials in the waste stream
- Organics stay in the treatment process and screens are cleaner

## Lower Operating Cost

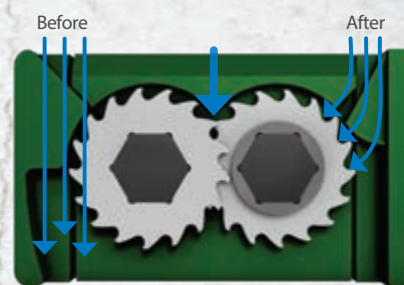
- Clear pipes and pumps means shorter pump run cycles and lower electrical costs



## Optimized cut control

Improve cutting by tailoring the speed of the new Wipes Ready cutter rotation with patented optimized cut control.

- **Cutters stay clean**
- **Prevents long strips**



## Patented Delta P side rails

Ensure the capture of all items in the waste stream and drive debris into the cutter stack with patented side rail design.

- **Drive debris into cutters**
- **Prevent buildup**
- **Enhance high flow**



# 10K Muffin series Monster

## Materials of construction

**Housings:** Ductile iron

**Cutters:** Hardened alloy steel

**Shafts:** Hardened alloy steel

**Mechanical Seals:** Tungsten carbide faces

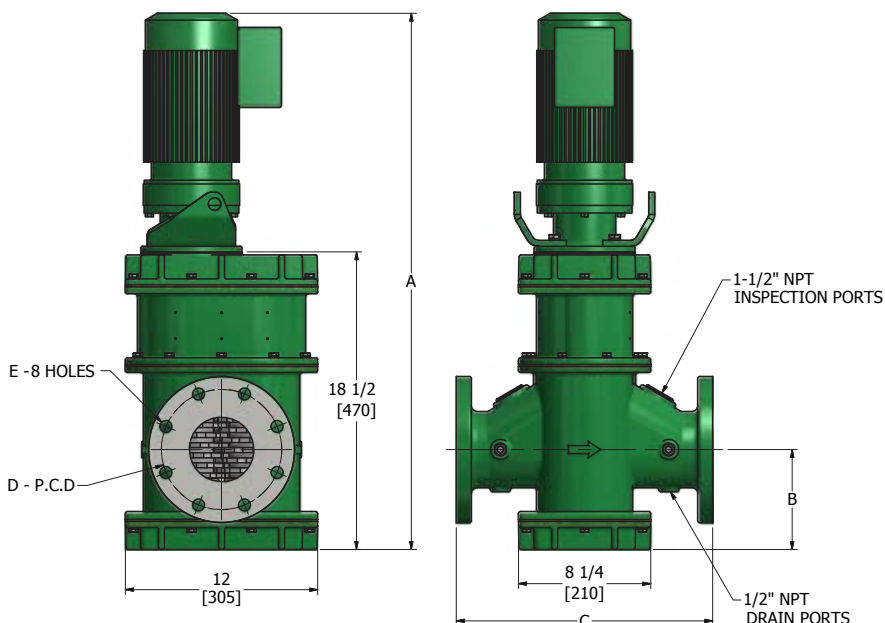
## Specifications

2" (50 mm) hex shafts;

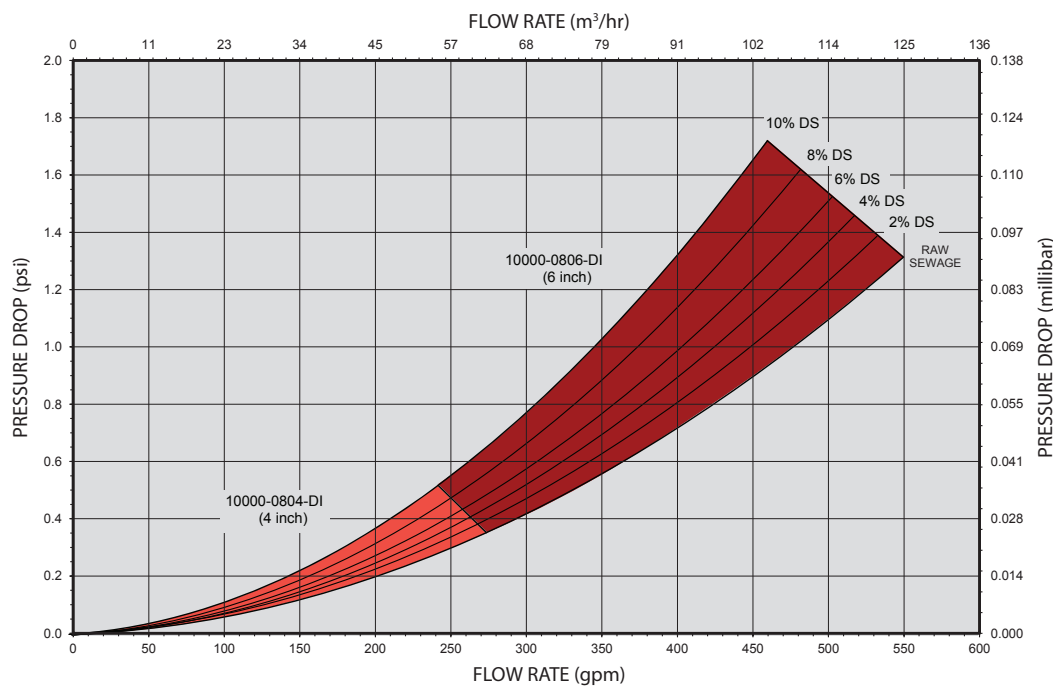
Standard 2 hp (1.5 kW) gear motor

**Cutter Size:** 4-3/4" (120 mm) diameter cutters

**Seal Max Working Pressure:** 90 psi (6 bar)



## MODEL 10000

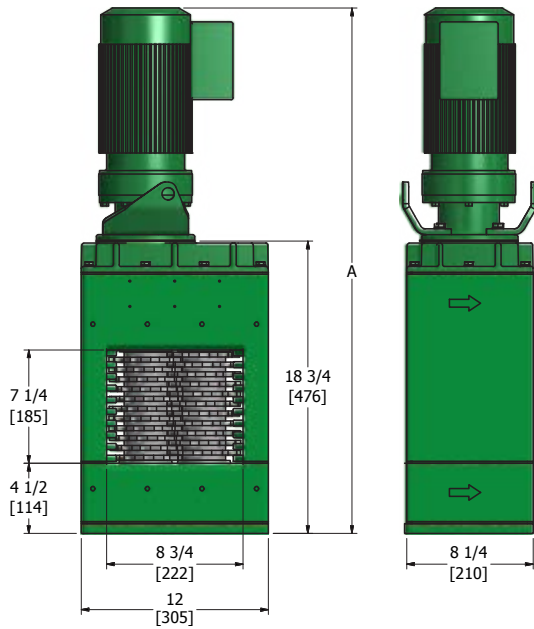


In-line Model	Flow Rate* - gpm (m³/hr)	Pipeline Size - inches (mm)	Pressure Drop - psi (bar)	Standard Dimensions - inches (mm)				Flange Dimensions - inches (mm)		Approximate Net Weight - lbs (kg)
				A - 2 hp (1.5 kW)	A - 3 hp (2.2 kW)	B	C	D	E	
10000-0804-DI	275 (62)	4 (100)	0.36 (0.03)	33-7/16 (850)	35-7/16 (900)	6-1/4 (158)	16 (406)	7-1/2 (180)	3/4 (19)	303 (137)
10000-0806-DI	550 (125)	6 (150)	1.33 (0.09)	33-7/16 (850)	35-7/16 (900)	7-1/4 (184)	19 (483)	9-1/2 (240)	7/8 (23)	323 (147)

\* 0-2% solids • In-line unit typically installed upstream of the pump • Consult factory for analysis of application • Drive dimensions are based on a unit with gear motor.



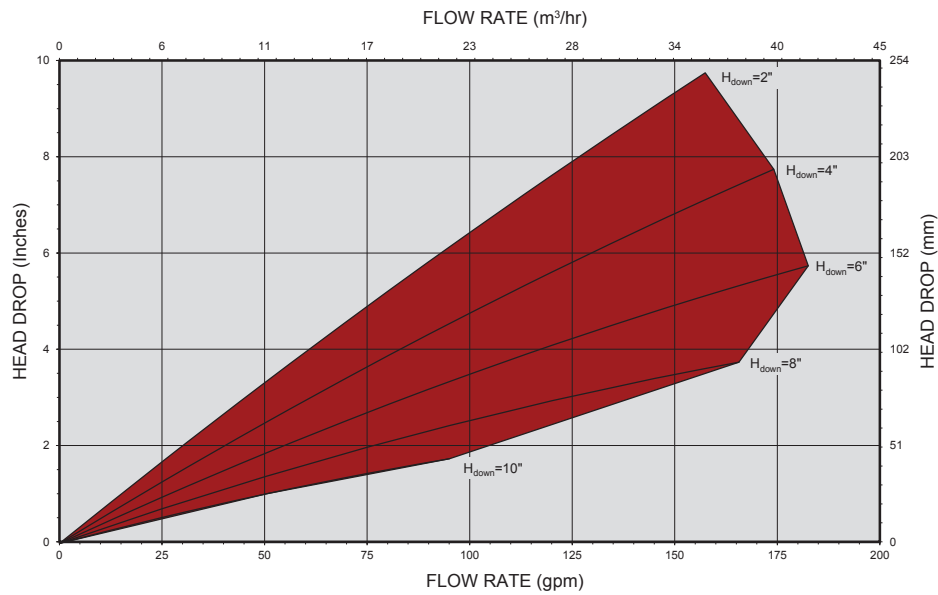
# 10K Muffin series Monster



## OPTIONS AVAILABLE

	In-line	Open-channel
3 hp (2.2 kW) Gear Motor	■	■
2 hp (1.5 kW), 3 hp (2.2 kW) and 5 hp (4 kW) Electric Motor, 29:1 Reducer	■	■
7, 11 and 13-tooth Cutters	■	■
17-tooth Wipes Ready® Cutter	■	■
Custom Mounting Frames		■
SS & NEMA 7 Control Enclosures	■	■
Alternate Voltage & HP Motors	■	■
Explosion-proof Motors	■	■
Immersible Motors	■	■
Extended Motor Shafts	■	■
ANSI, JIS, JWA, BS & AS Flanges	■	

## MODEL 10002



Open-channel Model	Flow Rate* - gpm (m³/hr)	Head Drop - inches (mm)	Standard Dimensions - inches (mm)		Approximate Net Weight - lbs (kg)
			A - 2 hp (1.5 kW)	A - 3 hp (2.2 kW)	
10002-0008-DI	180 (41.4)	5-3/4 (146)	33-11/16 (856)	35-11/16 (906)	338 (153)

\* Flow based on optimum channel conditions. • Consult factory for analysis of application

• Drive dimensions are based on a unit with gear motor.

# 30K Muffin series Monster

## Materials of construction

**Housings:** Ductile iron

**Cutters:** Hardened alloy steel

**Shafts:** Hardened alloy steel

**Mechanical Seals:** Tungsten carbide faces

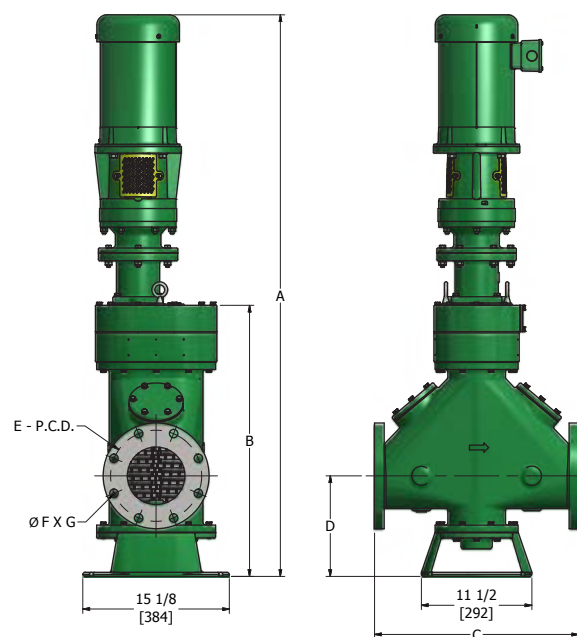
## Specifications

2" (50 mm) hex shafts;

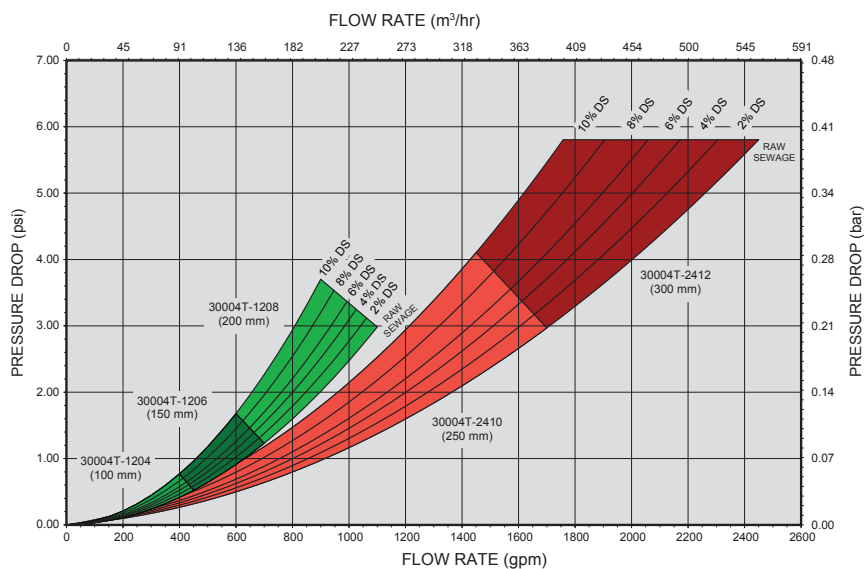
Standard 3 hp (2.2 kW) motor; 29:1 reducer

**Cutter Size:** 4-3/4" (120 mm) diameter cutters

**Seal Max Working Pressure:** 90 psi (6 bar)



### MODEL 30004T



In-line Model	Flow Rate - gpm (m³/hr)	Pipeline Size - inches (mm)	Pressure Drop - psi (bar)	Standard Dimensions - inches (mm)				Flange Dimensions - inches (mm)			Approximate Net Weight - lbs (kg)
				A	B	C	D	E	F	G	
30004T-1204	450 (102)	4 (100)	0.52 (0.04)	60-1/8 (1527)	28-1/4 (718)	19-1/4 (483)	9-3/8 (238)	7-1/2 (191)	3/4 (19)	8	562 (255)
30004T-1206	700 (159)	6 (150)	1.23 (0.08)	60-1/8 (1527)	28-1/4 (718)	21-1/4 (540)	10-3/8 (264)	9-1/2 (241)	7/8 (22)	8	559 (254)
30004T-1208	1100 (250)	8 (200)	3.00 (0.21)	60-1/8 (1527)	28-1/4 (718)	23-1/4 (591)	11-1/4 (286)	11-3/4 (286)	7/8 (22)	8	568 (258)
30004T-2410	1700 (386)	10 (250)	2.97 (0.20)	71-5/8 (1819)	39-3/4 (1010)	27-1/4 (692)	12-5/16 (313)	14-1/4 (362)	1 (25)	12	789 (358)
30004T-2412	2450 (556)	12 (300)	5.80 (0.40)	71-5/8 (1819)	39-3/4 (1010)	31-1/4 (794)	13-1/4 (337)	17 (431)	1 (25)	12	809 (367)

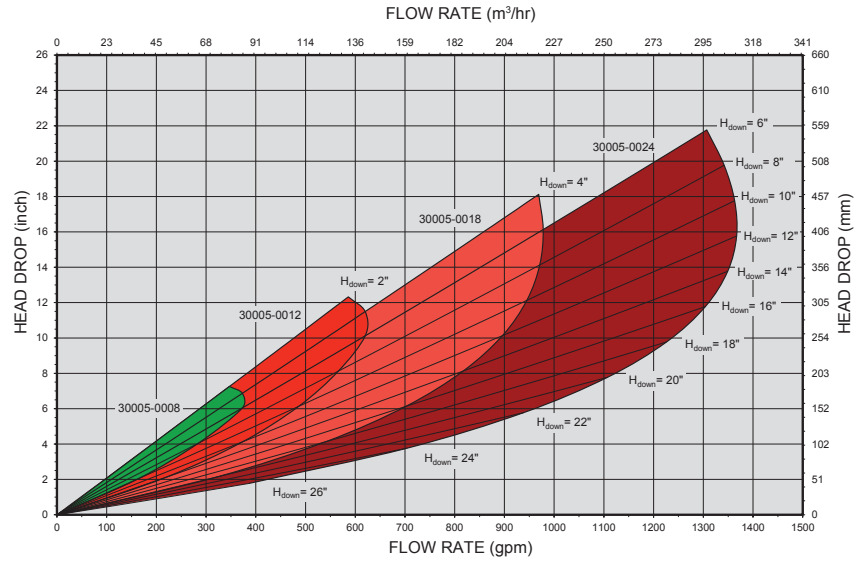
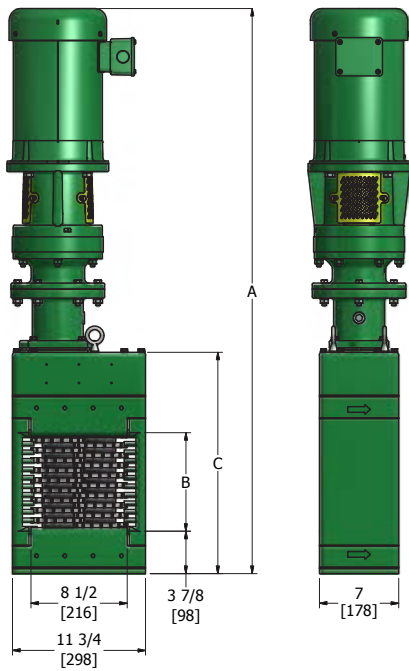
In-line unit typically installed upstream of the pump. • Consult factory for analysis of application.

• Drive dimensions are a maximum based on a unit with a 3 hp (2.2 kW) drive.

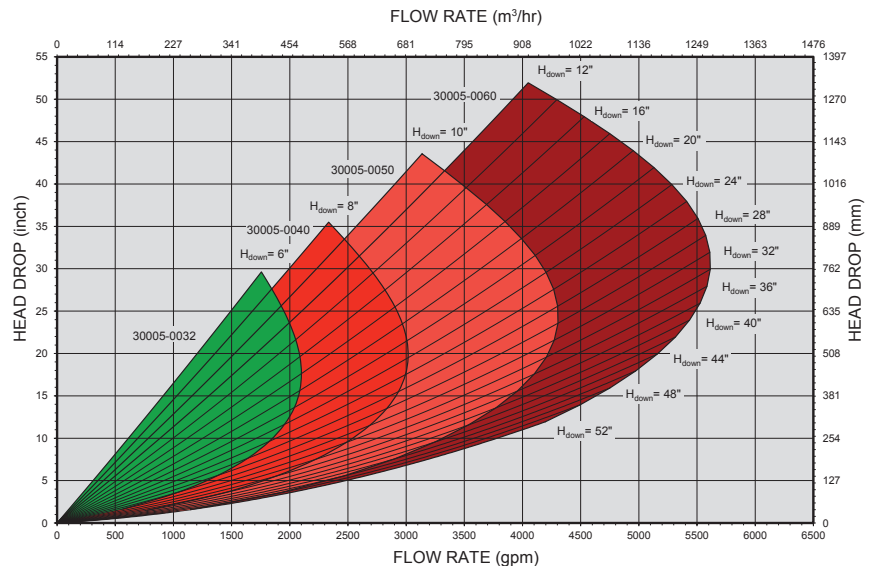


# 30K Muffin series Monster

## MODEL 30005



## MODEL 30005



Open-channel Model	Flow Rate - gpm (m³/hr)	Head Drop - inches (mm)	Standard Dimensions - inches (mm)			Approximate Net Weight - lbs (kg)
			A	B	C	
30005-0008	370 (84)	7 (178)	49-1/2 (1257)	8 (203)	19-1/2 (495)	370 (168)
30005-0012	620 (141)	11-1/2 (290)	53-5/8 (1362)	12 (305)	23-5/8 (600)	410 (186)
30005-0018	980 (223)	16 (405)	59-1/2 (1511)	18 (457)	29-1/2 (749)	465 (211)
30005-0024	1370 (311)	16 (405)	65-1/4 (1657)	24 (609)	35-1/4 (895)	520 (236)
30005-0032	2100 (477)	17-1/2 (445)	73 (1854)	32 (813)	43 (1092)	580 (263)
30005-0040	3020 (686)	19-1/2 (495)	81 (2057)	40 (1016)	51 (1295)	650 (295)
30005-0050	4310 (979)	23-1/2 (595)	90-7/8 (2308)	50 (1270)	60-7/8 (1546)	740 (336)
30005-0060	5620 (1277)	30 (760)	101-3/8 (2575)	60 (1524)	71-3/8 (1813)	845 (383)

\* Flow based on optimum channel conditions. • Consult factory for analysis of application.

• Drive dimensions are a maximum based on a unit with a 182T motor frame. • Extended drive shafts are available on request.



# 40K Muffin series Monster

## Materials of construction

**Housings:** Ductile iron

**Cutters:** Hardened alloy steel

**Shafts:** Hardened alloy steel

**Mechanical Seals:** Tungsten carbide faces

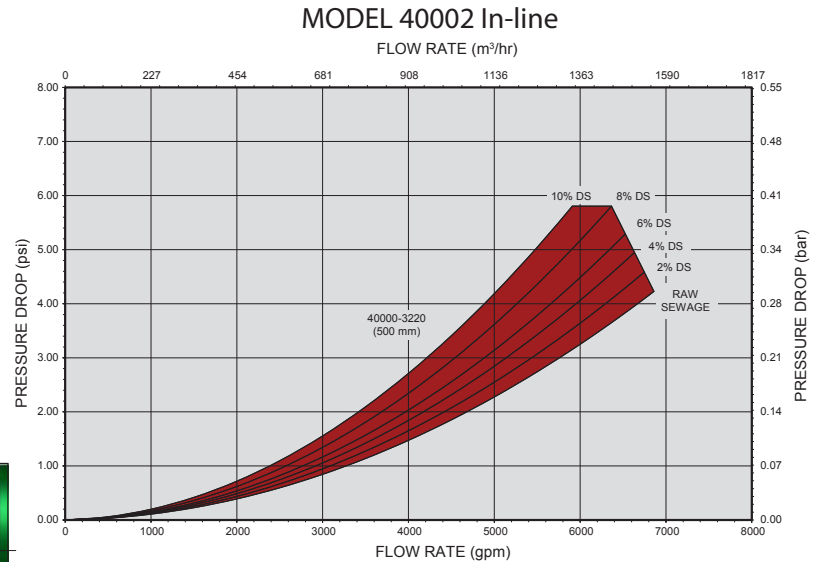
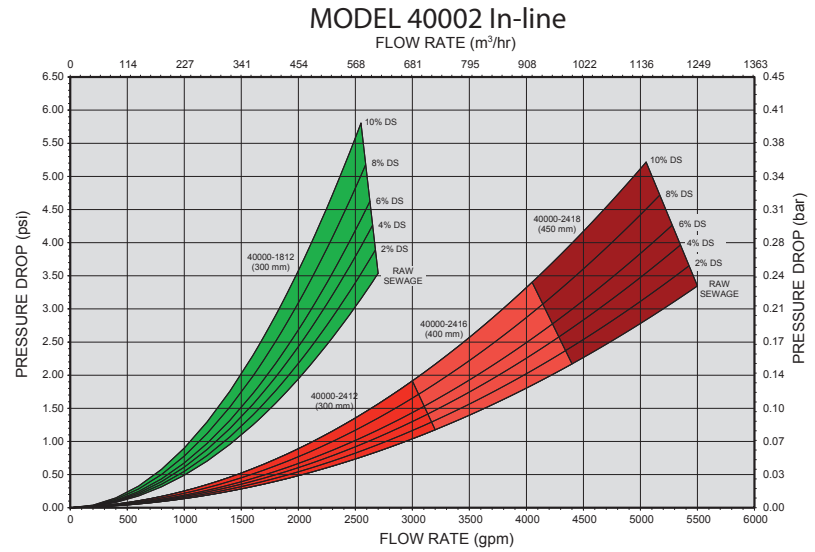
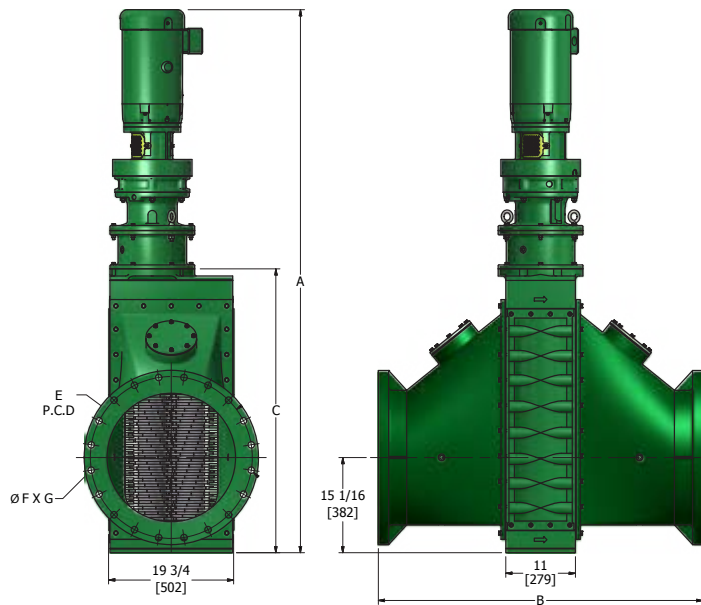
## Specifications

2-1/2" (64 mm) hex shafts;

Standard 10 hp (7.5 kW) motor; 43:1 reducer

**Cutter Size:** 7-1/2" (191 mm) diameter cutters

**Seal Max Working Pressure:** 150 psi (10.3 bar)



In-line Model	Flow Rate - gpm (m <sup>3</sup> /hr)	Pipeline Size - inches (mm)	Pressure Drop - psi (bar)	Standard Dimensions - inches (mm)			Flange Dimensions - inches (mm)			Approximate Net Weight - lbs (kg)
				A	B	C	E	F	G	
40002-1812	2700 (612)	12 (300)	3.5 (0.24)	69-5/8 (1768)	35-1/4 (895)	30-1/4 (768)	17 (254)	1 (25)	12	1520 (690)
40002-2412	3200 (727)	12 (300)	1.2 (0.08)	76-5/8 (1946)	35-1/4 (895)	37-1/4 (946)	17 (254)	1 (25)	12	1775 (805)
40002-2416	4400 (999)	16 (400)	2.2 (0.15)	76-5/8 (1946)	43-1/4 (1099)	37-1/4 (946)	21-1/4 (539)	1-1/8 (29)	16	1895 (860)
40002-2418	5500 (1249)	18 (450)	3.4 (0.23)	76-5/8 (1946)	47-1/4 (1200)	37-1/4 (946)	22-3/4 (578)	1-1/4 (32)	20	2095 (950)
40002-3220	6860 (1558)	20 (500)	4.2 (0.29)	83-1/4 (2115)	51-1/4 (1301)	43-7/8 (1114)	25 (635)	1-1/4 (32)	20	2610 (1184)

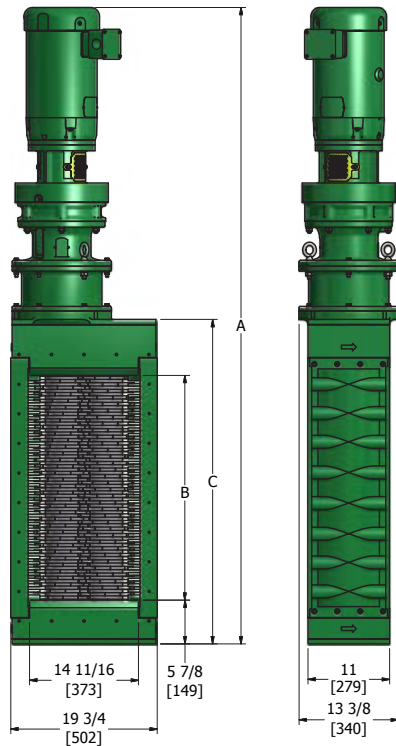
In-line unit typically installed upstream of the pump. • Consult factory for analysis of application.

• Drive dimensions are a maximum based on a unit with a 10 hp (7.5 kW) drive.





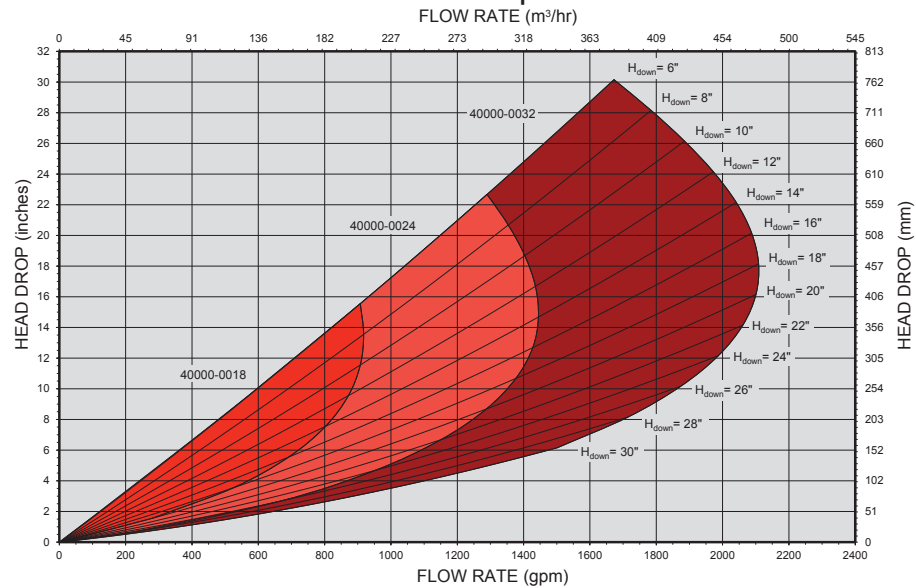
# 40K Muffin series Monster



## OPTIONS AVAILABLE

	In-line	Open-channel
7, 11 and 23-tooth Cutters	■	■
Stainless Steel Cutters	■	■
Custom Mounting Frames		■
SS & NEMA 7 Control Enclosures	■	■
Solids Scrapers		■
Nickel-plated Housing		■
Stainless Steel Feed Hopper		■
Alternate Voltage & HP Motors	■	■
Explosion-proof Motors	■	■
Immersible Motors	■	■
Hydraulic Power Pack	■	■
Extended Motor Shafts	■	■
ANSI, JIS, JWA, BS & AS Flanges	■	

## MODEL 40002 Open-channel



Open-channel Model	Flow Rate - gpm (m³/hr)	Head Drop - inches (mm)	Standard Dimensions - inches (mm)			Approximate Net Weight - lbs (kg)
			A	B	C	
40002-0018	915 (207)	8 (203)	69-5/8 (1768)	18 (457)	30-1/4 (768)	1175 (533)
40002-0024	1440 (327)	16 (406)	76-5/8 (1946)	24 (610)	37-1/4 (946)	1365 (619)
40002-0032	2100 (477)	18 (457)	83-1/4 (2115)	32 (813)	43-7/8 (1114)	1560 (708)

\* Flow based on optimum channel conditions. • Consult factory for analysis of application.

• Drive dimensions are a maximum based on a unit with a 10 hp (7.5 kW) drive. • Extended drive shafts are available on request.

# Muffin Monster Options



7-tooth:  
Pump Stations or Prisons



11-tooth:  
Wastewater, Sludge  
or Scum



13-tooth:  
Heat-exchanger or Centrifuge  
Protection



17-tooth: \*  
Rags, Stringy Materials

## Cutters

- 7, 11, 13, 17 and 23-tooth options
- Special cutter designs for unique needs
- Optional stainless steel cutters
- \* 17-tooth serrated Wipes Ready® cutter



Electric Motor



Exclusive: JWC Designed  
Immersible Motor  
(NEMA-6P)



Hydraulic Drive

## Motors

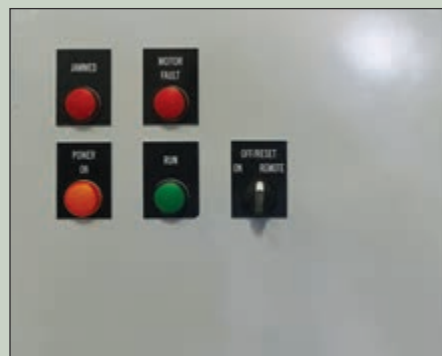
- TEFC: Totally enclosed fan-cooled electric
- XPFC: Explosion-proof fan-cooled electric
- XPNV: Exclusive electric immersible
- Hydraulic drives available in: 2, 3, 5 and 10 hp (2.2, 3.7 and 7.5 kW)

## Hydraulic power packs

- Available in: 5, 10 and 15 hp (3.7, 7.5 and 11 kW)



Custom Control Configurations



Model PC2200 Standard Enclosure

## Smart controller

- Load-sensing control system automatically reverses to clear jams
- Standard: NEMA 4X FRP enclosure with 3-position switch and status indicators
- Optional: NEMA 4X stainless steel or NEMA 7 enclosures
- Customized control configurations for any installation
- UL registered



# Muffin Monster Options



*Custom Wall Frames*

## 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 Frame*

## Custom channel frames

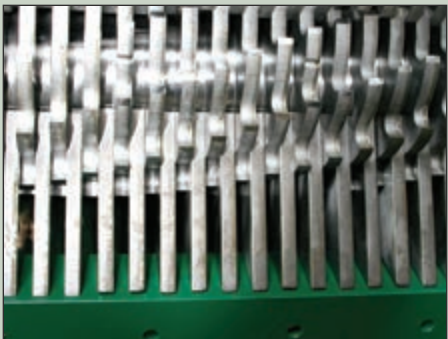
- Adapt grinders to fit any channel
- Guide rails for easy installation and maintenance
- Stainless steel construction



*Pre-fab Muffin Monster Manhole*

## Muffin Monster Manhole

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



*Scrapers*

## Scrapers

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

## Extended motor shaft

- Places motor above highest water level. Available in 1' (305 mm) increments  
Maximum: 15' (4570 mm).



*Extended Motor Shaft*



*Custom Hoppers*

## Hoppers

- Custom made to fit application
- 304 or 316 stainless steel







JWC Environmental is a world leader in solids reduction and removal systems for municipal wastewater collections, headworks and bio-solids operations. We offer our legendary Muffin Monster grinders, Monster Separation Screening systems, and IPEC industrial screens to solve unique wastewater processing situations.

JWC Environmental also services commercial and industrial applications with our Monster Industrial and IPEC products. We are ready to take on challenging size reduction problems in industrial processes as well as help customers run efficient and compliant industrial wastewater treatment operations.

JWC Environmental is headquartered in Santa Ana, California, and has a global network of representatives, distributors and regional service centers to provide customer support. For more information, visit us at [www.jwce.com](http://www.jwce.com).



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