

CHANNEL MONSTER®





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Channel Monster® sewage grinders are designed to capture and grind the toughest wastewater solids in high-flow systems. Common applications include protecting pumps in lift stations and grinding up solids at the plant's headworks.

Channel Monsters are the best-in-class technology for wastewater solids reduction. The patented Channel Monster utilizes rotating drums to capture solids and directs them to the proven Muffin Monster® dual-shafted grinder. The result is a high-flow capacity system that will shred rags, rocks, wood and other trash into small pieces that can pass harmlessly through pumps, pipes, and process systems.

Pump Station Protection

Channel Monsters are a perfect fit for pump stations where solids need to be ground up. They are proven to handle the toughest solids such as disposable wipes balls and first flush loading that can overwhelm even the best pump. Channel Monsters are designed for installations in channels or for wall mounting in front of influent pipes.

Channel Monsters are an excellent alternative to screening solids out of pump stations. This eliminates the need to handle screening in dispersed locations along with the associated odors, rodent problems and disposal challenges.

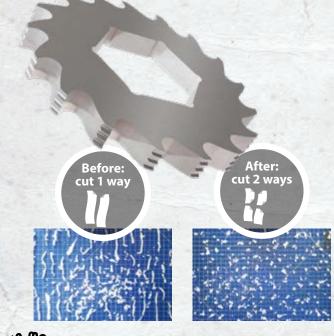
Headworks Solutions

Channel Monsters can handle the high flows at the headworks and still grind debris and rags before they enter the treatment facility.

Screen Protection and First Flush Loading

Channel Monsters are also an excellent option to protect fine screens by grinding heavy solids down to a size that will not damage the screens. These units can also handle first flush loading prior to headworks screens.

Wipes Ready® Technology





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 reweaving in the waste stream.

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



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

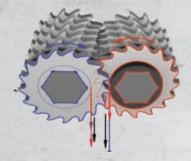
Lower operating cost

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





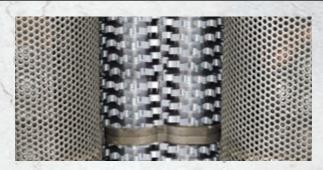




Optimized cut control

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

- · Cutters stay clean
- · Prevents long strips



Perforated drums

Prevent the bypass of full wipes or build-up on the grinders while maintaining the required high flow rate.

- No wipes bypass
- Maintains high-flow



Channel Monster duty ratings

- 2.0 Standard Duty: For most common sanitary sewer flows. Handles typical solids loading, as well as tougher solids like wood and occasional rocks
- 2.5 Heavy Duty: For higher flows, as well as combined sewer applications where first flush storm loading is possible
- **3.0 Extreme Duty:** Combined sewer applications with the highest flows

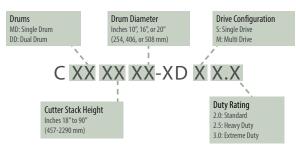
Materials of construction

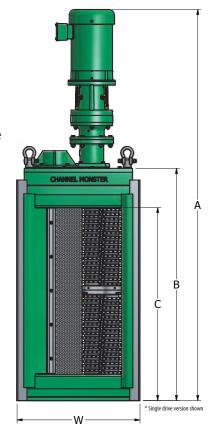
Rotating Drum Screen: Stainless steel
Cutters and Spacers: Hardened alloy steel

Shafts: Hardened hexagonal steel

End Housings, Covers and Side Rails: Ductile iron

Seal Faces: Tungsten carbide **Channel Frame:** Stainless steel







SINGLE DRUM Model	A* - inches (mm)	B - inches (mm)	C - inches (mm)	D - inches (mm)	W – Min. Channel Width** - inches (mm)	Max Flow - mgd (m³/hr)	Approximate Net Weight - Ibs (kg)
CMD1810-XD2.0	60-5/16 (1538)	30-1/2 (775)	23-1/8 (578)	21-3/4 (552)	21 (533)	2.7 (421)	1270 (576)
CMD2410-XD2.0	66-3/16 (1681)	36-1/8 (918)	28-7/8 (733)	21-3/4 (552)	21 (533)	3.8 (603)	1395 (633)
CMD3210-XD2.0	74-1/16 (1881)	44 (1118)	36-3/4 (933)	21-3/4 (552)	21 (533)	5.5 (873)	1445 (655)
CMD4010-XD2.0	81-15/16 (2081)	51-7/8 (1318)	44-1/2 (1130)	21-3/4 (552)	21 (533)	7.3 (1152)	1570 (712)
CMD5010-XD2.0	91-1/4 (2318)	61-7/8 (1572)	54-1/2 (1384)	21-3/4 (552)	21 (533)	9.7 (1525)	1550 (703)
CMD6010-XD2.0	101 (2581)	72-1/4 (1835)	64-7/8 (1648)	21-3/4 (552)	21 (533)	12.2 (1922)	1710 (775)

^{*} Based on use of TEFC motor

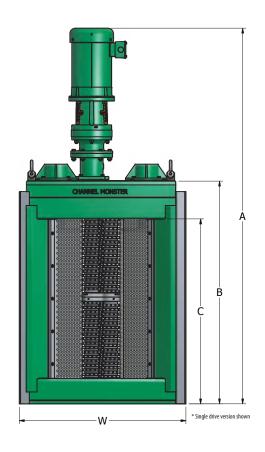
^{**} For ideal channel construction width, please add 2" (50 mm).













OPTIONS AVAILABLE						
	2.0 Standard Duty	2.5 Heavy Duty	3.0 Extreme Duty			
7-tooth Cutters	•		•			
11-tooth Cutters	•	•	•			
13-tooth Cutters	•					
17-tooth Wipes Ready® Cutters	•					
Single Drum	•					
Dual Drum	•	•	•			
10"Drums	•	-				
16"Drums	•	•				
20"Drums	•	•	•			
Single-drive	•	-				
Multi-drive	•					
Alternate Voltage & HP Motors	•	•	•			
SS & NEMA 7 Control Enclosures	•	•	•			
Explosion-proof Motors	•	•	•			
Immersible Motors	•	•	•			
Hydraulic Power Pack ¹	•					
Extended Motor Shafts	•		•			
Custom Mounting Frames	•	•	•			
Overflow Bar Screens		•				

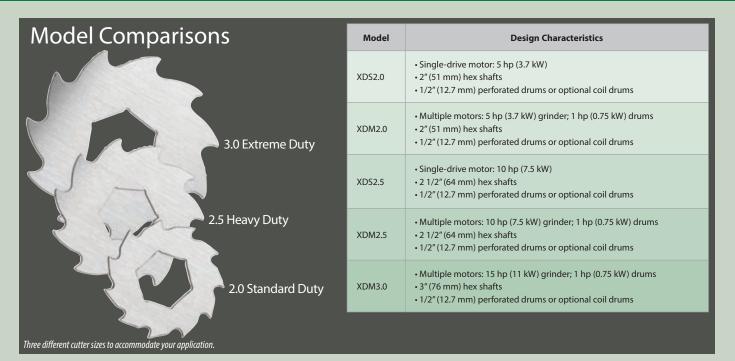
^{1.} Only available on single drive 2.0 models.

DUAL DRUM Model	A* - inches (mm)	B - inches (mm)	C - inches (mm)	D - inches (mm)	W – Min. Channel Width** - inches (mm)	Max Flow - mgd (m³/hr)	Approximate Net Weight - Ibs (kg)
CDD1810-XD2.0	60-5/16 (1538)	30-1/2 (775)	23-1/8 (578)	21-3/4 (552)	30 (762)	3.7 (591)	1480 (671)
CDD2410-XD2.0	66-3/16 (1681)	36-1/8 (918)	28-7/8 (733)	21-3/4 (552)	30 (762)	5.4 (852)	1570 (712)
CDD3210-XD2.0	74-1/16 (1881)	44 (1118)	36-3/4 (933)	21-3/4 (552)	30 (762)	7.9 (1243)	1645 (746)
CDD4010-XD2.0	81-15/16 (2081)	51-7/8 (1318)	44-1/2 (1130)	21-3/4 (532)	30 (762)	10.5 (1650)	1720 (780)
CDD4010-XD2.5	96-3/16 (2443)	57 (1449)	46 (1168)	22-3/4 (578)	30 (762)	10.5 (1650)	4000 (1814)
CDD5010-XD2.5	105-15/16 (2691)	66-3/4 (1695)	55-3/4 (1416)	22-3/4 (578)	30 (762)	13.9 (2195)	4200 (1905)
CDD6010-XD2.5	116-9/16 (2961)	77-3/8 (1965)	66-3/8 (1686)	22-3/4 (578)	30 (762)	17.6 (2775)	4450 (2018)
CDD2416-XD2.0	66-3/16 (1681)	36-1/8 (918)	28-7/8 (733)	26 (660)	42 (1067)	7.1 (1126)	2070 (939)
CDD3216-XD2.0	74-1/16 (1881)	44 (1118)	36-3/4 (933)	26 (660)	42 (1067)	10.6 (1670)	2295 (1041)
CDD4016-XD2.0	81-15/16 (2081)	51-7/8 (1318)	44-1/2 (1130)	26 (660)	42 (1067)	14.2 (2246)	2395 (1086)
CDD4016-XD2.5	96-3/16 (2443)	57 (1449)	46 (1168)	32-3/4 (832)	42 (1067)	14.2 (2246)	4750 (2155)
CDD5016-XD2.5	105-15/16 (2691)	66-3/4 (1695)	55-3/4 (1416)	32-3/4 (832)	42 (1067)	19.2 (3030)	5000 (2268)
CDD6016-XD2.5	116-9/16 (2961)	77-3/8 (1965)	66-3/8 (1686)	32-3/4 (832)	42 (1067)	24.6 (3875)	5300 (2404)
CDD3220-XD2.0	74-1/16 (1881)	44 (1118)	36-3/4 (933)	27-3/4 (705)	54 (1372)	16.6 (2612)	2320 (1052)
CDD4020-XD2.0	81-15/16 (2081)	51-7/8 (1318)	44-1/2 (1130)	27-3/4 (705)	54 (1372)	21.8 (3442)	2395 (1086)
CDD4020-XD2.5	96-3/16 (2443)	57 (1449)	46 (1168)	33-1/2 (851)	54 (1372)	21.8 (3442)	5400 (2449)
CDD5020-XD2.5	105-15/16 (2691)	66-3/4 (1695)	55-3/4 (1416)	33-1/2 (851)	54 (1372)	28.9 (4551)	5675 (2574)
CDD6020-XD2.5	116-9/16 (2961)	77-3/8 (1965)	66-3/8 (1686)	33-1/2 (851)	54 (1372)	36.3 (5730)	6000 (2722)
CDD9020-XD3.0	156-3/8 (3972)	113-3/16 (2875)	97-7/8 (2486)	42 (1066)	54 (1372)	59 (9306)	10,300 (4600)

^{*} Based on use of TEFC motor.



^{**} For ideal channel construction width, please add 2'' (50 mm).





Electric motor



Exclusive: JWC designed immersible motor (NEMA-6P)



Hydraulic single drive power pack

Motors

- Single or Multi-drive
- Electric: 1, 3, 5,10, 15 hp (0.75, 2.2, 3.7, 7.5, 11 kW)
 - TEFC: Totally enclosed fan-cooled electric
 - XPFC: Explosion-proof fan-cooled electric
 - XPNV: JWC exclusive electric immersible
- Hydraulic Drive with Power Pack available in 5, 10 hp (3.7, 7.5 kW) (Only available on single drive 2.0 models)



Heavy Solids



11-Tooth: Typical Solids Loading



13-Tooth: 17-Tooth*: Rags & Stringy Materials Fine Cutting

Cutters

- 7, 11 13, and 17-tooth options
- Optional: stainless steel cutters
- **★** 17-Ttooth serrated Wipes Ready® cutter





Model PC2200 standard enclosure

Standard perforated screening drums





Optional coil screening drums

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

Screening drums

- Standard: 1/2" (12.7 mm) perforated drums
- Optional: 1/4" (6 mm) perforated drums
- Optional: 1/2" (12.7 mm) coil drums
- Materials: 304 Stainless steel (Standard)
 316 Stainless steel (Optional)



Custom wet well frames

Custom wet well frames

- Stainless steel guide rails make Channel Monster installation and retrieval simple and quick, even in deep or narrow pump stations
- Frames include choice of 304 or 316 stainless steel



Overflow bar screens

Overflow bar screens

 Stainless steel bars are attached to a frame or sub-channel and provide additional overflow capacity

Extended motor shaft

Places motor above highest water level. Available in 6" (150 mm) increments. Maximum: 20' (6096 mm) depending model.



Extended motor shaft

Aftermarket Service

Preventative Maintenance Program: Multi-point inspection and service to keep your Monster operating efficiently **Grinder Renew:** Minimizes downtime and comes with 1 year warranty

Grinder Rebuilds: Performed by factory trained professional and comes with 1 year warranty **Upgrade Options:** Renew your grinder to the latest Monster technology like Wipes Ready®









Since its founding in 1973, JWC Environmental has become 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 and Monster Separation Screening systems to solve unique processing situations.

JWC Environmental also supports 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.



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