



# CHANNEL MONSTER®



www.jwce.com



Channel Monster® sewage grinders are designed to capture and grind down 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 Monster<sup>®</sup> are the best in class technology for waste water solids reduction. The patented Channel Monster utilizes rotating drums to capture solids and directs them with the proven Muffin Monster<sup>®</sup> dual shafted grinders. The result is a high flow capacity systems that will shred rags, rocks, wood and other trash in to 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 wipe 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 in pump stations. This eliminates the need to handle screening in dispersed locations along with the associated odors, rodent problems and disposal challenges

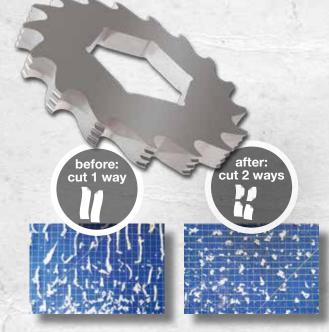
### **Headworks Solutions**

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

### Screen Protection & First Flush Loading

Channel Monsters are also an excellent option to protect fine screens from damage 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 2-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 2 directions
- Smaller particle size
- No reweaving

\* Wipes Ready Technology available 2.0 units only.

\*\* Patent Pending



### Features

### **Dual Shafted Grinder**

- Extreme power that handles a wide variety of solids.
- Grinds debris smaller than single shafted machines.
- Cleaner and more efficient than pump station bar screens.

### **High-flow Screening Drums**

- Patented design allows higher flow capacities.
- Captures solids and directs them into the grinder.
- Standard stainless steel 12.7 mm perforated drums or optional 12.7 mm coil drums.

### **Automated Controller**

- Auto load sensing reduces interrupts and protects the Channel Monster.
- Adaptive to custom requirements and plant SCADA systems.
- Stores operational data.

# 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 treatment process and screening are cleaner.

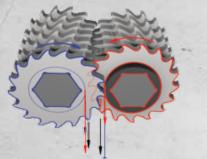
### **Lower Operating Cost**

• 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 to achieve 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**

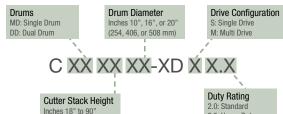
- 2.0 Standard Duty: For most common sanitary sewer flows. Handles typical solids loading as well as tougher solids like wood and occasional rocks.
- **2.5 Heavy Duty:** For higher flows as well as combined sewer applications where first flush storm loading is possible.
- **3.0 Extreme Duty:** Combined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

# Materials of Construction

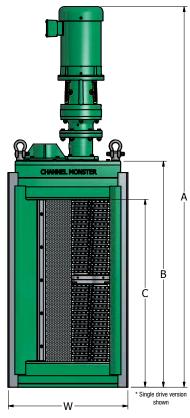
Rotating Drum Screen: Stainless steel Cutters and Spacers: Hardened alloy steel Shafts: Hardened hexagonal steel End Housings, Covers and Side Rails: Ductile iron Seal Faces: Tungsten carbide

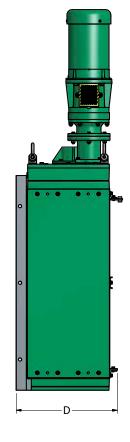
Channel Frame: Stainless steel

(457-2290 mm)









SINGLE DRUM Model	A* - mm	B - mm	C - mm	D – Min. - mm	W – Min. Channel Width** - mm	Max Flow - m³/hr	Approximate Net Weight - kg
CMD1205-AD 2.0	1330	622	433	448	356	160	297
CMD1810-XD2.0	1538	775	578	552	533	420	576
CMD2410-XD2.0	1681	918	733	552	533	584	633
CMD3210-XD2.0	1881	1118	933	552	533	820	655
CMD4010-XD2.0	2081	1318	1130	552	533	1057	712
CMD5010-XD2.0	2318	1572	1384	552	533	1370	703
CMD6010-XD2.0	2581	1835	1648	552	533	1590	775

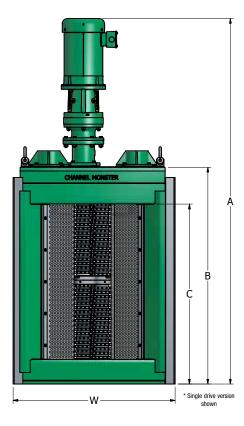
\* Based on use of TEFC motor. \*\* For ideal channel construction width please add 50 mm.

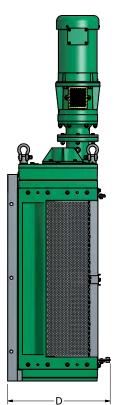












DutyDutyDuty7 Tooth Cutters••11 Tooth Cutters••13 Tooth Wipes Ready Cutter••Single Drum••Dual Drum••10" Drums••10" Drums••16" Drums••20" Drums••Single Drive••Multi-Drive••Alternate Voltage & HP Motors••SS & NEMA 7 Control Enclosures••Explosion Proof Motors••Immersible Motors••Hydraulic Power Pack1••Extended Motor Shafts••	OPTIONS AVAILABLE					
11 Tooth CuttersImage: Constraint of the sector		Standard	Heavy	Extreme		
13 Tooth CuttersImage: Control Pack113 Tooth Wipes Ready CutterImage: Control Pack117 Tooth Wipes Ready CutterImage: Control Pack1Single DrumImage: Control Pack110" DrumsImage: Control Pack111 DrumsImage: Control Pack112 DrumsImage: Control Pack113 DrumsImage: Control Pack114 DrumsImage: Control Pack115 DrumsImage: Control Pack115 DrumsImage: Control Pack116 DrumsImage: Control Pack117 DrumsImage: Control Pack118 DrumsImage: Control Pack119 DrumsImage: Control Pack1 <t< td=""><td>7 Tooth Cutters</td><td></td><td></td><td></td></t<>	7 Tooth Cutters					
17 Tooth Wipes Ready CutterImage: Constraint of the second se	11 Tooth Cutters					
Single DrumImage: Constraint of the second seco	13 Tooth Cutters					
Dual DrumImage: Constraint of the second	17 Tooth Wipes Ready Cutter					
10" Drums10" drums10" Drums10" drums16" Drums10" drums20" Drums10" drumsSingle Drive10" drumsMulti-Drive10" drumsAlternate Voltage & HP Motors10" drumsSS & NEMA 7 Control Enclosures10" drumsExplosion Proof Motors10" drumsImmersible Motors10" drumsHydraulic Power Pack110" drumsExtended Motor Shafts10" drums	Single Drum					
16" DrumsImage: Constraint of the second	Dual Drum					
20" DrumsImage: Constraint of the second	10" Drums					
Single Drive       Image: Constraint of the second se	16" Drums		•			
Multi-Drive     Image: Constraint of the second secon	20" Drums					
Alternate Voltage & HP Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         SS & NEMA 7 Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Explosion Proof Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures       Image: Control Enclosures         Immersible Motors       Image: Control Enclosures       Image: Control Enclosures       Image: C	Single Drive					
SS & NEMA 7 Control Enclosures     Image: Control Enclosures       Explosion Proof Motors     Image: Control Enclosures       Immersible Motors     Image: Control Enclosures       Hydraulic Power Pack <sup>1</sup> Image: Control Enclosures       Extended Motor Shafts     Image: Control Enclosures	Multi-Drive					
Explosion Proof Motors     Immersible Motors       Immersible Motors     Immersible Motors       Hydraulic Power Pack <sup>1</sup> Immersible Motor Shafts	Alternate Voltage & HP Motors					
Immersible Motors     Image: Constraint of the second	SS & NEMA 7 Control Enclosures					
Hydraulic Power Pack <sup>1</sup> Image: Comparison of the second	Explosion Proof Motors					
Extended Motor Shafts	Immersible Motors					
	Hydraulic Power Pack <sup>1</sup>					
Custom Mounting Framon	Extended Motor Shafts					
	Custom Mounting Frames					
Overflow Bar Screens	Overflow Bar Screens	•		•		

1 Only available on single drive 2.0 models.

CDD1810-XD2.01538775578552762591671CDD2410-XD2.01681918733552762852712CDD3210-XD2.0188111189335527621243746CDD4010-XD2.02081131811305327621650780CDD4010-XD2.520811318116857876216501814CDD5010-XD2.526911695141657876221951905CDD6010-XD2.529611965166657876227752018CDD2416-XD2.0188191873366010671126939CDD3216-XD2.018811118933660106722461064CDD4016-XD2.5269116951416832106722462155CDD5016-XD2.5269116951416832106730302268CDD5016-XD2.5296119651686832106738752443CDD5016-XD2.5269116951416832106738752404CDD5016-XD2.5296119651686832106738752404CDD3220-XD2.018811118933705137226121052CDD4020-XD2.0208113181130705137234421086	DUAL DRUM Model	A* - mm	B - mm	C - mm	D – Min. - mm	W – Min. Channel Width** - mm	Max Flow - m³/hr	Approximate Net Weight - kg
CDD3210-XD2.0188111189335527621243746CDD4010-XD2.02081131811305327621650780CDD4010-XD2.524431449116857876216501814CDD5010-XD2.526911695141657876221951905CDD6010-XD2.529611965168657876227752018CDD2416-XD2.0168191873366010671126939CDD3216-XD2.018811118933660106722461068CDD4016-XD2.5269116951416832106722462155CDD5016-XD2.5269116951416832106730302268CDD5016-XD2.5296119651686832106738752404CDD5016-XD2.5296119651686832106738752404CDD5016-XD2.518811118933705137226121052	CDD1810-XD2.0	1538	775	578	552	762	591	671
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CDD6016-XD2.5         2961         1965         1686         832         1067         3875         2404           CDD3220-XD2.0         1881         1118         933         705         1372         2612         1052	CDD4016-XD2.5	2443	1449	1168	832	1067	2246	2155
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	CDD4020-XD2.0	2081	1318	1130	705	1372	3442	1086
<b>CDD4020-XD2.5</b> 2443 1449 1168 851 1372 3442 2449	CDD4020-XD2.5	2443	1449	1168	851	1372	3442	2449
<b>CDD5020-XD2.5</b> 2691 1695 1416 851 1372 4551 2574	CDD5020-XD2.5	2691	1695	1416	851	1372	4551	2574
CDD6020-XD2.5         2961         1965         1686         851         1372         5730         2722	CDD6020-XD2.5	2961	1965	1686	851	1372	5730	2722
<b>CDD9020-XD3.0</b> 3972 2875 2486 1066 1372 9306 4600	CDD9020-XD3.0	3972	2875	2486	1066	1372	9306	4600

\* Based on use of TEFC motor. \*\* For ideal channel construction width please add 50 mm.

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Model Comparisons	Model	Design Characteristics
	AD2.0	<ul> <li>Single drive motor 2.2 kW motor.</li> <li>12.7 mm perforated drums or optional coil drums.</li> </ul>
	XDS2.0	<ul> <li>Single drive motor: 3.7 kW.</li> <li>51 mm hex shafts.</li> <li>12.7 mm perforated drums or optional coil drums.</li> </ul>
3.0 Extreme Duty	XDM2.0	<ul> <li>Multiple motors: 3.7 kW grinder; 0.75 kW drums.</li> <li>51 mm hex shafts.</li> <li>12.7 mm perforated drums or optional coil drums.</li> </ul>
2.5 Heavy Duty	XDS2.5	<ul> <li>Single drive motor: 7.5 kW.</li> <li>64mm hex shafts.</li> <li>12.7 mm perforated drums or optional coil drums.</li> </ul>
2.0 Standard Duty	XDM2.5	<ul> <li>Multiple motors: 7.5 kW grinder; 0.75 kW drums.</li> <li>64 mm hex shafts.</li> <li>12.7 mm perforated drums or optional coil drums.</li> </ul>
Three different cutter sizes to accommodate your application.	XDM3.0	<ul> <li>Multiple motors: 11 kW grinder; 0.75 kW drums.</li> <li>76 mm hex shafts.</li> <li>12.7 mm perforated drums or optional coil drums.</li> </ul>



Electric Motor



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



Hydraulic Single Drive Power Pack

### Motors

- Single or Multi-drive.
- Electric: 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 3.7, 7.5 kW (Only available on single drive 2.0 models).



7-Tooth: Heavy Solids



13-Tooth: Fine Cutting



11-Tooth: Typical Solids Loading



17-Tooth\*: Rags & Stringy Materials

### Cutters

- 7, 11 13, and 17 tooth variations.
- Optional: stainless steel cutters.
- 17-Tooth Serrated
   Wipes Ready Cutter.







Model PC2200 Standard Enclosure



Standard Perforated Screening Drums



Custom Control Configurations



Optional Coil Screening Drums

### Smart Controller

- Load sensing control system automatically reverse 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: 12.7 mm perforated drums.
- Optional: 6 mm perforated drums.
- Optional: 12.7 mm coil drums.
- Materials: 304 Stainless steel (Standard)
   316 Stainless steel (Optional)



Custom Wet Well Frames



Overflow Bar Screens

# Custom Wet Well Frames

**Overflow Bar Screens** 

**Extended Motor Shaft** 

- 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.

 Stainless steel bars are attached to a frame or subchannel and provide additional overflow capacity.

 Places motor above highest water level. Available in 150 mm increments. Maximum: 6096 mm depending



Extended Motor Shaft

### **Aftermarket Service**

Preventative Maintenance Program: Multi-point inspection and service to keep your Monster operating efficiently.
Grinder Exchanges: 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.

### Costa Mesa, CA. USA | 800.331.2277 | jwce.com | jwce@jwce.com

e2015 NW Environmental .WEE's Santa Ana and Costa Masa California facilities are registered by UL to IS0900112008 #10001313 0M8 JWC International Completion. UK is registered by OAS to IS0900112008 File #A13066 U.S. patents apply: 4.919.346; 5.060.872; 5.302.866; 5.333.8011; 5.354.044; 5.478.020; 5.505.388; 5.593.100; 6.176,443; 6.332.984; 7.708,567; 7.081,171; 7.086,405; 7.383.842; 7.771,589; RE37,5502; RE37,3492; RE40,422; RE39,448E Additional patents pending and international tactoms take apply. All rights reserved .WC Environmental is not liable for damages that may result from an information provided in or mitted from this publication, under any circumstances. JWC Environmental reserves the right to make adjustments to this publication at any time, without notices or obligation. Please check the JWC Environmental weekel (www.jwc.com) for the most up-odd te information or speak to your local rep.

model









Since its founding in 1973, JWC Environmental has become a world leader in solids reduction and removal for the wastewater industry with its Muffin Monster grinders and Monster Separation Systems for screening, compaction and washing. JWC also solves challenging size reduction and processing problems in commercial and industrial applications through its Monster Industrial division. JWC Environmental is headquartered in Costa Mesa, California, and has a global network of representatives, distributors and regional service centers to provide customer support.

For more information, visit JWC Environmental at www.jwce.com.



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5,320,286; 5,333,801; 5,354,004; 5,478,020; 5,505,388; 5,593,100; 6,176,443; 6,332,984; 7,073,433; 7,080,650; 7,081,1770,986,405; 7,383,842; 7,771,589; RE37,550E; RE37,349E; RE40,422; RE39,948E. Additional patents pending and internationalbatent
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