



Channel Monster®



Overview

For pump stations and headworks the industry leading Channel Monster XD surpasses all existing technologies in terms of performance, durability, reduced costs and ease of installation. The patented Channel Monster integrates rotating screening drums with proven Muffin Monster® grinder technology. The system accommodates high-flows while shredding solids (such as rags, trash, rocks and wood) into particles that flow harmlessly through pumps, pipes and processes.

Screening drums direct solids into the cutters and are made of 12mm stainless steel coil. JWC offers optional perforated screening drums with 6mm circular openings for higher capture efficiency.

Channel Monster XD comes in three sizes – 2.0, 2.5 and 3.0. Our higher capacity grinders use larger cutters and shafts for extreme duty sites, such as grinding first flush storm loading. They easily replace bar screens and ineffective comminutors – helping you reduce operating costs.



Wastewater entering a Channel Monster grinder.

Channel Monsters are a proven technology – clean, powerful, reliable and cost effective. It's the industry's high-flow grinder of choice!

Features & Benefits

Dual Shafted Grinder

- More powerful and handles a wider 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 coil drums
- Optional perforated drums with 6mm openings

Automated Controller

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

Stainless Steel Guide Frames

- Allows grinder installation in open channels, wet wells and other hard to reach locations
- Little or no civil work is needed
- Custom made to meet installation requirements

Low Profile Bottom End Housing

- More of the cutting chamber is utilized during low flow
- Bushing deflector diverts solids and rags into cutters





Channel Monster

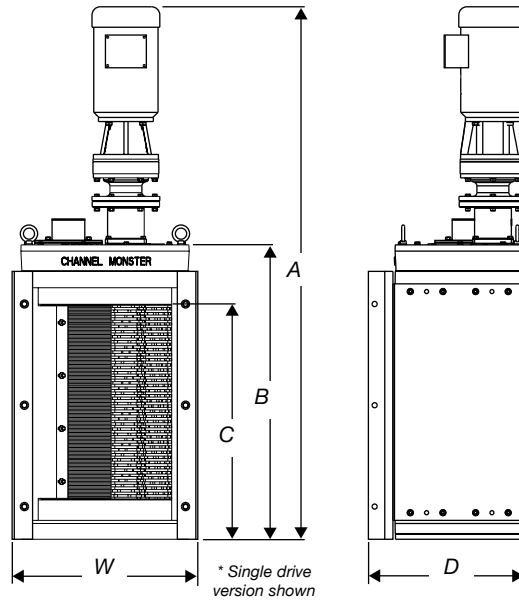
Model CMD • Single Drum



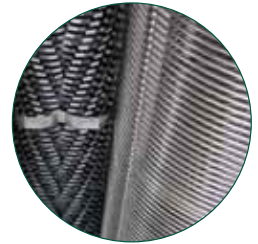
CMD3210-XDS2.0



CMD1205-XD2.0



**Standard:
Multi-drive improves
responsiveness**



**Standard Coil
screening drum**

| Model | A** (mm) | B (mm) | C (mm) | D – Min. (mm) | W – Min. Channel Width* (mm) | Max Flow Coil Drum (m ³ /h) | Max Flow Perf Drum (m ³ /h) | Weight (kg) |
|----------------------|----------|--------|--------|---------------|------------------------------|--|--|-------------|
| CMD1205-AD2.0 | 1330 | 622 | 433 | 448 | 356 | 160 | 142 | 297 |
| CMD1810-XD2.0 | 1538 | 775 | 578 | 552 | 533 | 420 | 376 | 576 |
| CMD2410-XD2.0 | 1681 | 918 | 733 | 552 | 533 | 584 | 528 | 633 |
| CMD3210-XD2.0 | 1881 | 1118 | 933 | 552 | 533 | 820 | 749 | 655 |
| CMD4010-XD2.0 | 2081 | 1318 | 1130 | 552 | 533 | 1057 | 975 | 712 |

* For ideal channel construction width please add 2" (50mm). **Based on use of TECF motor.



A model CMD-1205 installed in a pump station.



This model CMD replaced an old comminutor without reconstructing the channel.



Channel Monster model CMD with an extended motor shaft.



Channel Monster in a pump station with custom guide frames.



The CMD1205 uses 33% fewer cutters for maximum efficiency.



A model CDD4020-XDS2.0 with optional perf drums.



Model CDD-XDM2.5 with standard 12mm coil drums.



Channel Monster model CMD with overflow bar rack.



Channel Monster

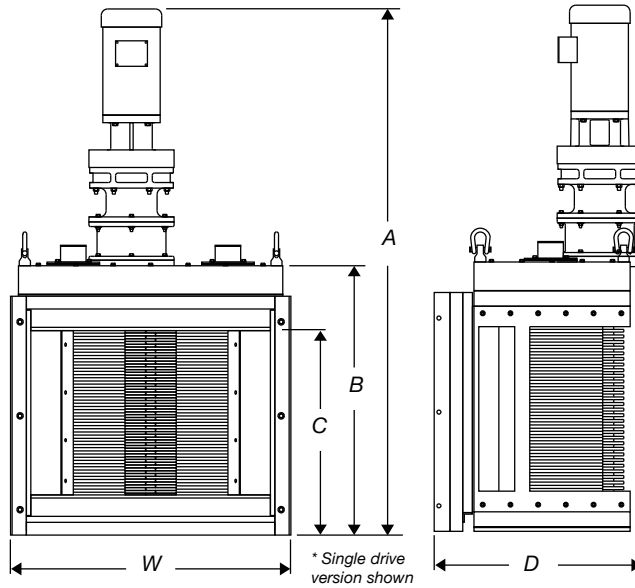
Model CDD • Double Drums



Standard:
Multi-drive improves
responsiveness



Option: Perforated
screening drum



CDD4020-XDS2.0

| Model | A** (mm) | B (mm) | C (mm) | D – Min. (mm) | W – Min. Channel Width* (mm) | Max Flow Coil Drum (m ³ /h) | Max Flow Perf Drum (m ³ /h) | Weight (kg) |
|---------------|----------|--------|--------|---------------|------------------------------|--|--|-------------|
| CDD1810-XD2.0 | 1538 | 775 | 578 | 552 | 762 | 591 | 524 | 671 |
| CDD2410-XD2.0 | 1681 | 918 | 733 | 552 | 762 | 852 | 760 | 712 |
| CDD3210-XD2.0 | 1881 | 1118 | 933 | 552 | 762 | 1243 | 1113 | 746 |
| CDD4010-XD2.0 | 2081 | 1318 | 1130 | 532 | 762 | 1650 | 1481 | 780 |
| CDD4010-XD2.5 | 2443 | 1449 | 1168 | 578 | 762 | 1650 | 1481 | 1814 |
| CDD5010-XD2.5 | 2691 | 1695 | 1416 | 578 | 762 | 2195 | 1978 | 1905 |
| CDD6010-XD2.5 | 2961 | 1965 | 1686 | 578 | 762 | 2775 | 2510 | 2018 |
| CDD2416-XD2.0 | 1681 | 918 | 733 | 660 | 1067 | 1126 | 935 | 939 |
| CDD3216-XD2.0 | 1881 | 1118 | 933 | 660 | 1067 | 1670 | 1403 | 1041 |
| CDD4016-XD2.0 | 2081 | 1318 | 1130 | 660 | 1067 | 2246 | 1907 | 1086 |
| CDD4016-XD2.5 | 2443 | 1449 | 1168 | 832 | 1067 | 2246 | 1907 | 2155 |
| CDD5016-XD2.5 | 2691 | 1695 | 1416 | 832 | 1067 | 3030 | 2600 | 2268 |
| CDD6016-XD2.5 | 2961 | 1965 | 1686 | 832 | 1067 | 3875 | 3345 | 2404 |
| CDD3220-XD2.0 | 1881 | 1118 | 933 | 705 | 1372 | 2612 | 2603 | 1052 |
| CDD4020-XD2.0 | 2081 | 1318 | 1130 | 705 | 1372 | 3442 | 2803 | 1086 |
| CDD4020-XD2.5 | 2443 | 1449 | 1168 | 851 | 1372 | 3442 | 2803 | 2449 |
| CDD5020-XD2.5 | 2691 | 1695 | 1416 | 851 | 1372 | 4551 | 3815 | 2574 |
| CDD6020-XD2.5 | 2961 | 1965 | 1686 | 851 | 1372 | 5730 | 4920 | 2722 |
| CDD9020-XD3.0 | 3972 | 2875 | 2486 | 1066 | 1372 | 9306 | n/a | 4600 |

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

Materials of Construction

Rotating Drum Screen: stainless steel

Cutters and Spacers: hardened alloy steel, heat treated 60-65 Rockwell "C".

Shafts: heat treated hexagonal steel

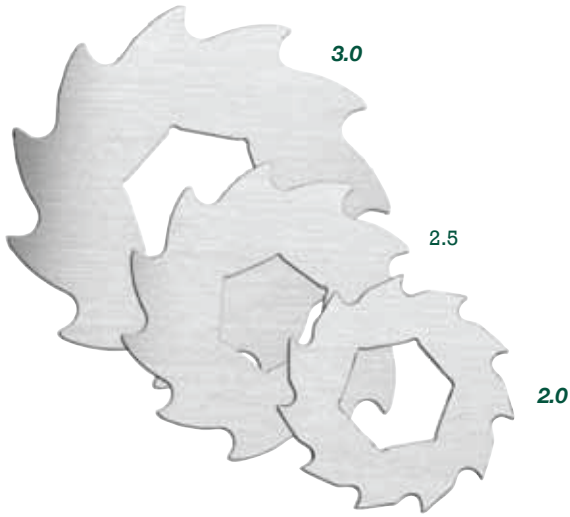
End Housings, Covers and Side Rails: ASTM Ductile Iron

Seal Faces: Tungsten Carbide

Channel Frame: stainless steel standard



Model Comparisons



Three different cutter sizes to accommodate your application.

| Model | Design Characteristics |
|--------|--|
| AD2.0 | <ul style="list-style-type: none"> • 2.2 kW motor; 6mm coil drum; single drive |
| XDS2.0 | <ul style="list-style-type: none"> • Single drive motor: 3.7 kW • 51mm hex shafts • 6 or 12mm coil drums or optional perforated drums |
| XDM2.0 | <ul style="list-style-type: none"> • Multiple motors: 3.7 kW grinder; 0.75 kW drums • 51mm hex shafts • 6 or 12mm coil drums or optional perforated drums |
| XDS2.5 | <ul style="list-style-type: none"> • Single drive motor: 7.5 kW • 64mm hex shafts • 12mm coil drums or optional perforated drums |
| XDM2.5 | <ul style="list-style-type: none"> • Multiple motors: 7.5 kW grinder; 0.75 kW drums • 64mm hex shafts • 12mm coil drums or optional perforated drums |
| XDM3.0 | <ul style="list-style-type: none"> • Multiple motors: 11 kW grinder; 0.75 kW drums • 76mm hex shafts • 12mm coil drums |

Channel Monster Options



Perforated screening drums



Coil screening drums

Screening Drums

- Standard: coil made of 304 stainless steel
- Optional: perforated, stainless steel drum with 6mm openings and up.

Motors

- Single or Multi-drive
- Electric: 0.75, 2.2, 3.7, 7.5, 11 kW
- Immersible (NEMA-6P): 0.75, 2.2, 3.7, 7.5, 11 kW
- Hydraulic Power Pack: 3.7, 11 kW (available for 2.0 models only)



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

Extended Motor Shaft

- Drive shaft extension puts motor above the highest water overflow level. Available in 150mm increments. Maximum: 6096mm.

Overflow Bar Screens

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



Stainless steel frame with overflow bars

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

Dual Shafted Grinder

- Various cutter stack heights to fit site channel & flow requirements
- 7 or 11 tooth cutter configurations to maximize grinding efficiency



Alloy steel cutters

High-tech Controllers

- Auto-sensing and reversing feature
- Enclosure options: fiberglass; NEMA4 stainless steel; NEMA4 stainless; NEMA7 explosion proof



Controller



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