

SULZER

Water and wastewater solutions

Channel Monster™ Open channel grinders





The Channel Monster™ range

Channel Monster sewage grinders represent the best-in-class technology for wastewater solids reduction. The Channel Monster uses rotating screening drums to capture solids and direct them into our proven, dual-shafted grinder. The result is a high-flow capacity system that can handle typical wastewater solids loading, as well as tougher solids like wood and occasional rocks.

Channel Monster grinders are available in a single or dual drum model.



CMD single drum model

CDD dual drum model

Main applications

The Channel Monster sewage grinders are designed to reduce the size of problem solids and wipes in high-flow sewage environments. Conditioning the flow so that the solids can be pumped, the Channel Monster solution is for:

- Pump stations where solids and wipes are causing pump problems
- Treatment plant inlets where heavy solids can cause issues with screens and downstream processes

Features and benefits

Dual-shafted grinder

- Proven slow-speed, high-torque grinding shreds the toughest solids, including rags, rocks, wood, wipes, clothing, plastics and other debris
- Grinds debris to a size where it can be pumped, then later screened and removed at the treatment plant inlet
- Protects pumps and other critical equipment from costly clogs and damage from tough solids

High-flow screening drums

- Promote high solids capture without compromising flow
- Stainless steel 12.7 mm perforated drums prevent the bypass of full wipes or buildup on the grinders
- Available multidrive system independently powers cutter stack and drums to maximize grinder efficiency for high solids applications

Smart controller with load-sensing control system

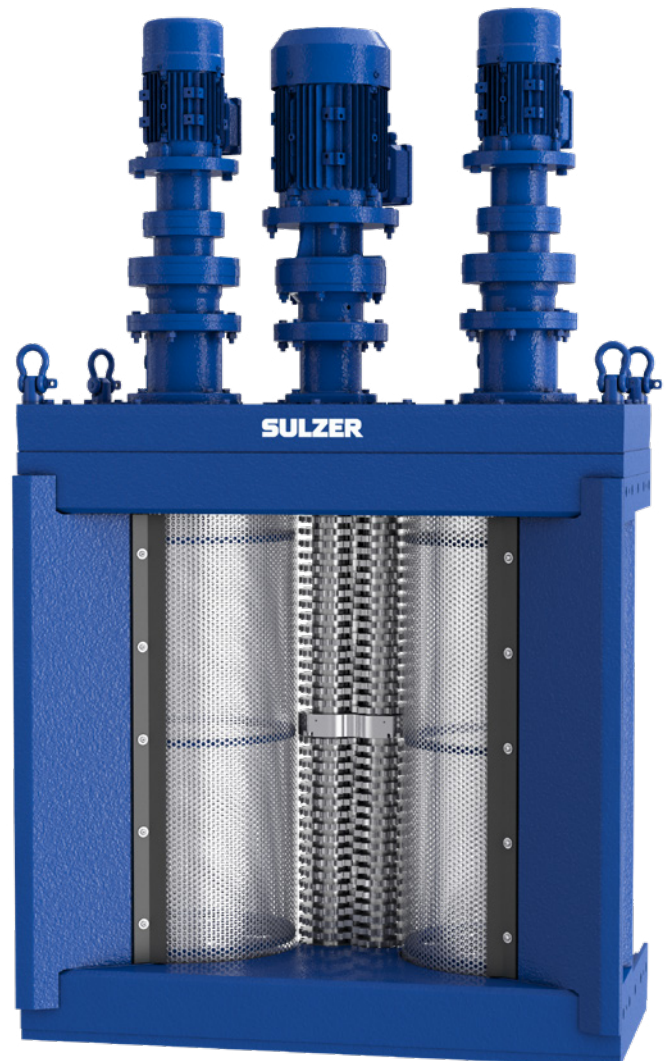
- Automatically reverses grinder to clear jams and protect it from damage
- Adaptive to custom requirements and plant SCADA systems
- Stores operational data

Wipes Ready™ cutter technology

- Cutters create two-dimensional cutting capabilities to control width and length of output
- Prevents materials from forming long strips and reweaving in the waste stream

Compact, efficient design with custom stainless steel frames

- Allows for easy installation in channels, wet wells and pump stations



CDD dual drum
multidrive model

Operational data

Single drum models

- Flow rates from 421 m³/h to 1'992 m³/h
- Grinder cutter stack heights from 450 mm to 1'500 mm
- Stainless steel drum with 12.7 mm perforations and with a diameter of 250 mm

Dual drum models

- Flow rates from 591 m³/h to 9'305 m³/h
- Grinder cutter stack heights from 450 mm to 2'250 mm
- Stainless steel drums with 12.7 mm perforations available in 250 mm, 400 mm or 500 mm diameters

Complete operational data for all models is available at www.sulzer.com



Materials of construction

Part	Material
Rotating drum screen	Stainless steel
Cutters and spacers	Hardened alloy steel
Shafts	Hardened steel
End housings, covers and side rails	Ductile iron
Seal faces	Tungsten carbide
Channel frame	Stainless steel

Wipes Ready™ technology

Channel Monster sewage grinders are available with unique, Wipes Ready technology. It is designed to capture all wipes in the waste stream and shred them into small pieces that will not reweave to form ropes and ragballs in sewage systems.

The Wipes Ready technologies applied in Channel Monster sewage grinders are:

- Wipes Ready cutters – A combination of serrated cutters and knurled spacers cuts wipes in two directions. The result is smaller particles that cannot reweave downstream.
- Delta P side rails – Direct solids into the cutters without sacrificing flow rate and prevent debris build-up in the grinder.
- Optimized cut control (OCC) – The OCC gear ratio optimizes shaft speeds to enhance the cutting action and cleaning of the cutters, which in turn improves the performance and extends the life of the grinder.
- Perforated drums – Prevent the bypass of wipes, while maintaining a high flow rate.

Wipes Ready feature availability

	CMD-XD 2.0 single drum Channel Monster	CDD-XD 2.0 double drum Channel Monster
17 tooth Wipes Ready cutters	Optional	Optional
Delta P side rails	●	
Optimized cut control	●	●
12.7 mm perforated drums	●	●



Options

To extend the performance of your Channel Monster, we offer a wide range of options. For information about which options are available for each of our Channel Monster sewage grinders, please visit www.sulzer.com.

Cutters

- 7, 11 and 17* tooth options (* Wipes Ready™ serrated cutters)
- Cutter stack can be tailored to meet operational requirements



Motor options

- Single-drive or multidrive system
- IP55 TEFC motor
- IP55 TEFC motor for ATEX: (Ex d IIC T4)
- IP68 immersible motor ATEX: (Ex de IIB T4)



Smart controller

- Load-sensing control system automatically reverses to clear jams
- Powder-coated mild steel or stainless steel IP65 enclosures

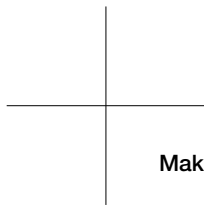
Custom wet well frames

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

Overflow bar screens

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





Making water go around. Water and wastewater solutions by Sulzer.

Sulzer offers a broad range of pumps and related equipment for water production and transportation as well as wastewater collection and treatment for municipalities and industries. Our expertise also includes separation technologies, and services on rotating equipment.

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