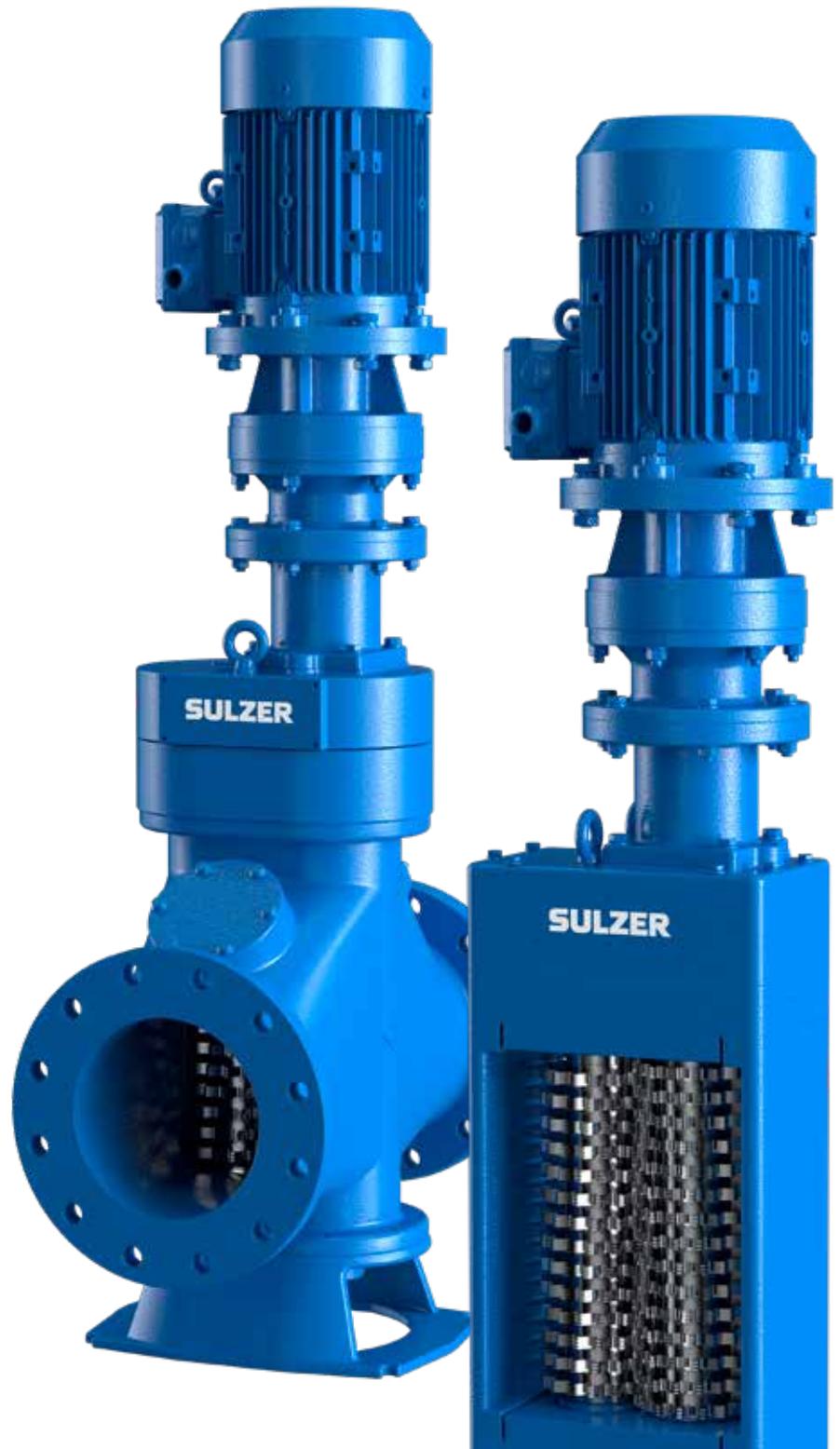


# Muffin Monster™ Inline/open channel grinders



# Main applications

The Muffin Monster™ sewage grinders are designed to protect pumps and other equipment by grinding down the toughest wastewater solids. Available in three different models each with two different configurations, they are suitable for applications such as:

- Pump stations
- Sludge processing
- Correctional facilities
- Headworks – primary treatment
- Septage/grease receiving
- Airports

## 10K series - Small volume applications

Wastewater pre-treatment

Small pump stations

Hotels and resorts

Parks and recreation

Marinas and cruise-ships

Schools, colleges and universities

Residential complexes

## 30K and 40K series - Municipal and sewage grinding

Protects pumps

Digester recirculation systems

Sludge transfer lines from clarifiers

Sludge grinding before land application

Headworks

Prior to and after sludge dewatering

Prior to and after incineration



# Features and benefits

## Dual-shafted grinder

- Dual-shafted, slow-speed, high-torque grinder easily shreds the toughest debris, including rocks, wood, wipes, hair, clothing, plastic and other debris
- Capable of grinding a wider variety of solids than single-shafted machines, macerators, or chopper pumps

## Automated monitoring and controls

- Protect pumps and other critical equipment from costly clogs and damage from tough solids
- Auto load sensing and reversals reduce interrupts and optimize performance

## Wipes Ready™ technology

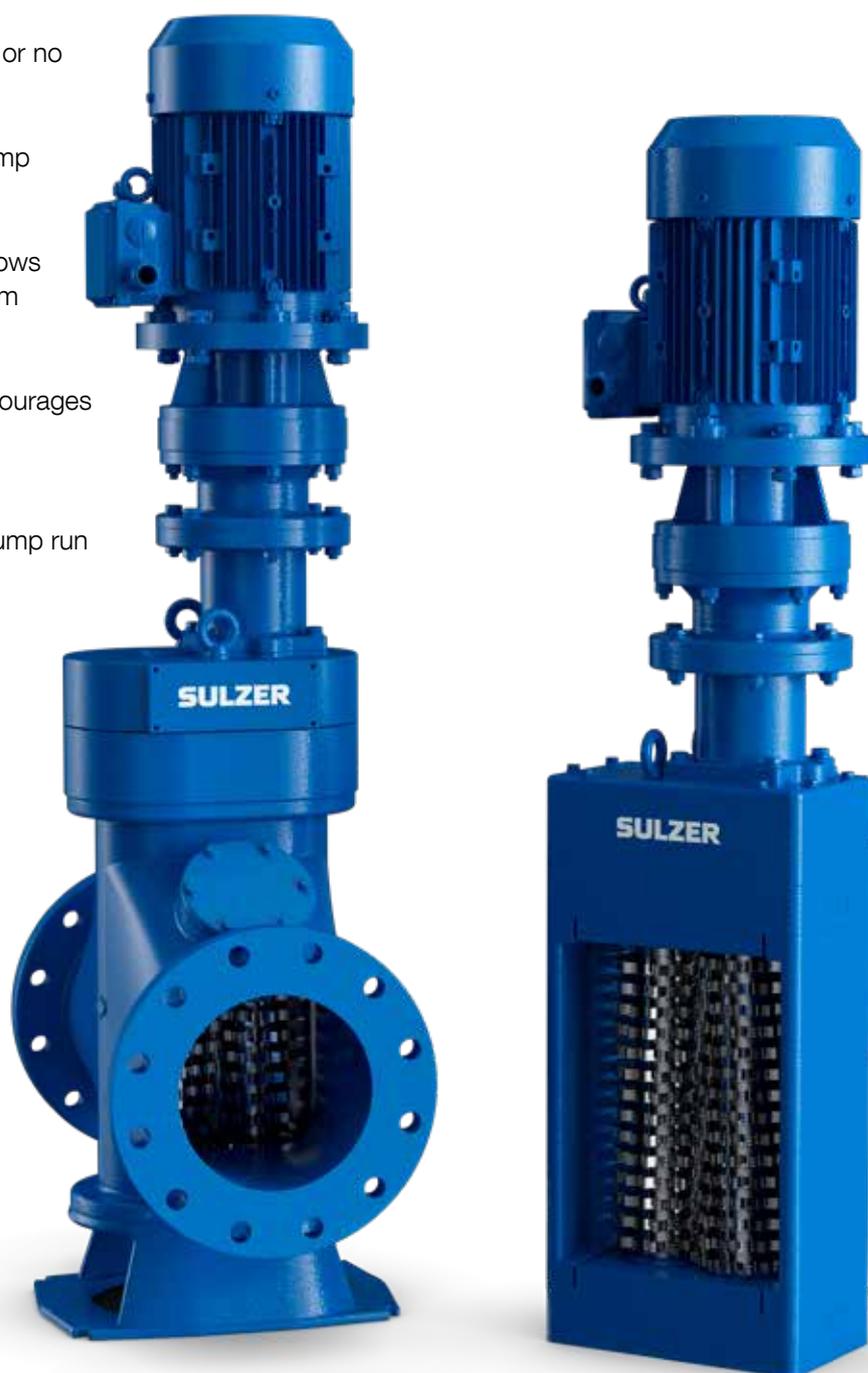
- Wipes Ready technology available which prevents materials from forming long strips and reweaving in the waste stream

## 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
- Inline 30K Muffin Monster offers easy removable cartridge maintenance that allows for overhaul without removing the unit from the pipeline
- Individual helical cutter stack improves shredding, reduces particle size, and encourages solids movement in chamber

## Lower operating cost

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



# The Muffin Monster™ range



Muffin Monster sewage grinders represent the best-in-class technology for wastewater solids reduction. With over 35'000 installations, the proven capabilities of the Muffin Monster is legendary in providing solutions for the ever more stringent operational needs arriving throughout the industry.

## 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. It 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. The 30K Muffin Monster is available as both inline and open channel configurations.

## 40K series Muffin Monster

The 40K series Muffin Monster excels in wet and dry grinding applications. It is a powerful shredder for large processing systems. It also serves in many industrial applications including fish and beef processing, petroleum, pulp and paper mills, chemical plants, and recycling plants.



# Product comparison

## Muffin Monster 10K series

Hex shafts: 50 mm

Motor: standard 1.5 kW; 25:1 reducer

Cutter size: 120 mm diameter

Seal max working pressure: 6 bar

Inline model	Flow rate*, m <sup>3</sup> /h	Pipeline size mm	Pressure drop, bar
10000-B100-DI	62	100	0.03
10000-B150-DI	125	150	0.09

\* 0-2% solids

Open channel model	Flow rate* m <sup>3</sup> /h	Head drop mm
10002-0008-DI	41.4	146

\* Flow based on optimum channel conditions

## Muffin Monster 30K series

Hex shafts: 50 mm

Motor: standard 2.2 kW; 25:1 reducer

Cutter size: 120 mm diameter

Seal max working pressure: 10.3 bar

Inline model	Flow rate m <sup>3</sup> /h	Pipeline size mm	Pressure drop, bar
30004T-B100	102	100	0.04
30004T-B150	159	150	0.08
30004T-B200	250	200	0.21
30004T-B250	386	250	0.20
30004T-B300	556	300	0.40

Open channel model	Flow rate* m <sup>3</sup> /h	Head drop mm
30005-0012	141	290
30005-0018	223	405
30005-0024	311	405
30005-0032	477	445
30005-0040	686	495
30005-0060	1277	760

\* Flow based on optimum channel conditions

## Muffin Monster 40K series

Hex shafts: 64 mm

Motor: standard 7.5 kW; 35:1 reducer

Cutter size: 190 mm diameter

Seal max working pressure: 10.3 bar

Inline model	Flow rate m <sup>3</sup> /h	Pipeline size mm	Pressure drop, bar
40002-18B300	612	300	0.24
40002-24B400	999	400	0.15
40002-24B450	1249	450	0.23
40002-32B500	1558	500	0.29

Open channel model	Flow rate* m <sup>3</sup> /h	Head drop mm
40002-0018	207	203
40002-0024	327	406
40002-0032	477	457

\* Flow based on optimum channel conditions

# Options

To extend the performance of your Muffin Monster, we offer several options. For information about which options are available for each of our Muffin Monster sewage grinders, please visit [www.sulzer.com](http://www.sulzer.com).

## Cutters

- 7, 11, 13 and 17\* tooth options

\* Wipes Ready™ serrated cutters



## Motors

- IP55 TEFC motor, standard
- IP55 TEFC motor for ATEX: (Ex d IIC T4), optional
- IP68 immersible motor ATEX: (Ex de IIB T4), optional
- IP55 integrated drive, 10K only



## Smart controller

- Load-sensing control system automatically reverses to clear jams

## Custom frames

- Stainless steel frames for easy installation



Muffin Monster sewage grinders are available with the unique Wipes Ready suite of technologies. It is designed to capture all wipes in the waste stream and shred them into small pieces that will not reweave into a ragball in sewage systems.

The Wipes Ready technologies applied in Muffin 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 life of the grinder.

## Wipes Ready feature availability

	10K in-line Muffin Monster	10K open channel Muffin Monster	30004T in-line Muffin Monster	30005 open channel Muffin Monster
17 tooth Wipes Ready cutters*	Optional	Optional	Optional	Optional
Delta P side rails*				✓
Optimized cut control*	✓	✓	✓	✓

\* Patent pending

