



# Muffin Monster

PRE-ASSEMBLED IN A GRP CHAMBER



## Product Overview

The Muffin Monster sewage grinder is designed to protect pumps and other equipment by grinding down the toughest wastewater solids. Its dual-shafted, slow speed, high-torque design shreds tough solids that typically cause problems in the wastewater treatment process system.

Its compact design fits into areas with limited space while providing the necessary power for downstream protection

### Construction

- ▶ Open channel configuration
- ▶ Cutter chamber opening height of 185 mm
- ▶ Hardened alloy steel cutters (standard), 120 mm diameter
- ▶ Ductile iron housings
- ▶ Hardened alloy steel shafts, 50 mm hex
- ▶ Mechanical seals with tungsten carbide faces, 6 bar working pressure
- ▶ Available with channel or wall mounted frame for easy installation

### Performance

- ▶ Flow rates up to 41,4 m<sup>3</sup>/hr

### Applications

- ▶ Pump stations
- ▶ Collection systems
- ▶ Headworks at wastewater treatment
- ▶ Private facility discharge to municipal sewer system
- ▶ Industrial wet waste grinding and maceration

## Features and Benefits

- ▶ 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
- ▶ Grinding separates organic from inorganic materials in the waste stream

### 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

### Lower operating cost

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



## Monster Renew Grinder

In place of repairing a worn grinder, choose a Monster Renew unit. Sulzer provides a new, factory-built grinder cartridge to replace the worn grinder cartridge.

Remove the motor and reducer from the worn unit, install the motor and reducer on the Monster Renew unit, and install the new assembly in place of the worn unit. Benefits include:

- ▶ Minimizes operational downtime • Quick turnaround
- ▶ All new parts
- ▶ Great time to upgrade unit
- ▶ Full factory warranty on the Monster Renew grinder cartridge

## Muffin Monster Motor Assembly

- ▶ 1,5 kW gear motor standard, 2,2 kW gear motor optional
- ▶ Optional explosion proof (1,5 kW, 2,2 kW and 4,0 kW) and immersible electric motors (1,5 kW, 2,2 kW and 3,7 kW) available
- ▶ 25:1 reducer, cycloidal design

## Muffin Monster Grinder Cutters

Tooth count	Thickness	Material
7-tooth	11 mm	Hardened alloy steel
11-tooth	8 mm	Hardened alloy steel
17-tooth Wipes Ready™	11 mm	Hardened alloy steel

## Frame Options

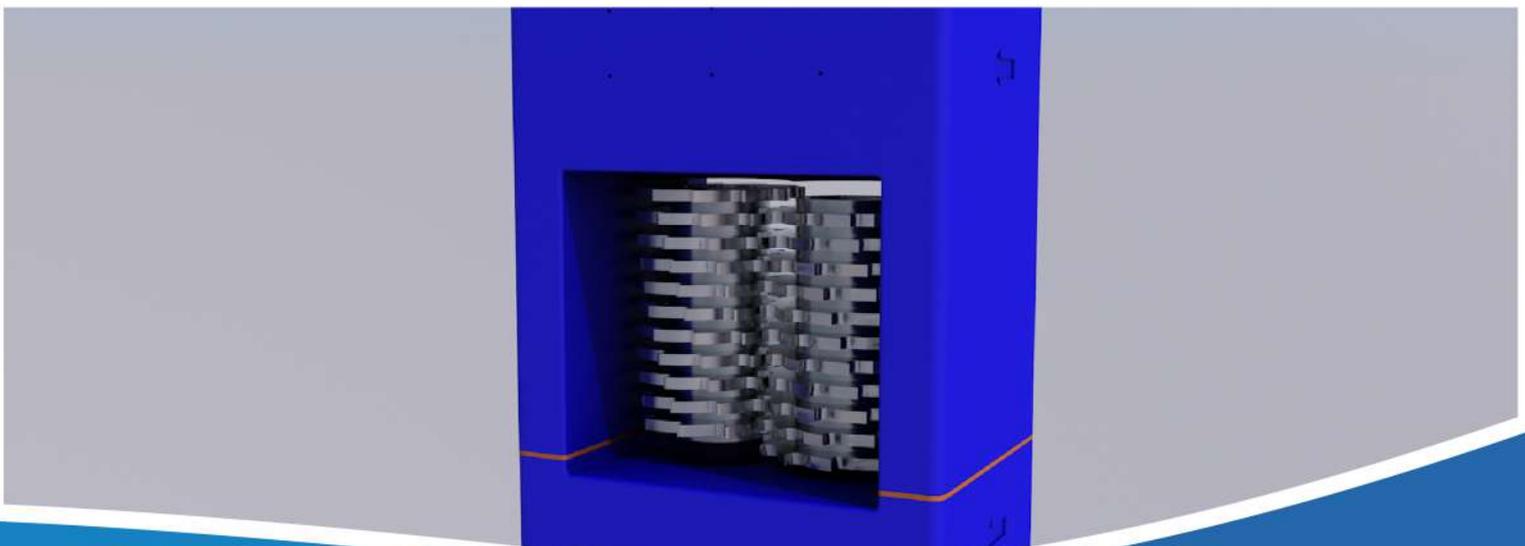
- ▶ Adapt grinders for easy installations
- ▶ Channel frames to fit most channel types
- ▶ Wall frames to mount on flat or round walls
- ▶ Type 304 or 316 stainless steel construction
- ▶ Guide rails for easy installation and maintenance

## Muffin Monster Controller

- ▶ Ensures maximum grinding ability with minimum stoppage
- ▶ Designed and programmed for specified motor

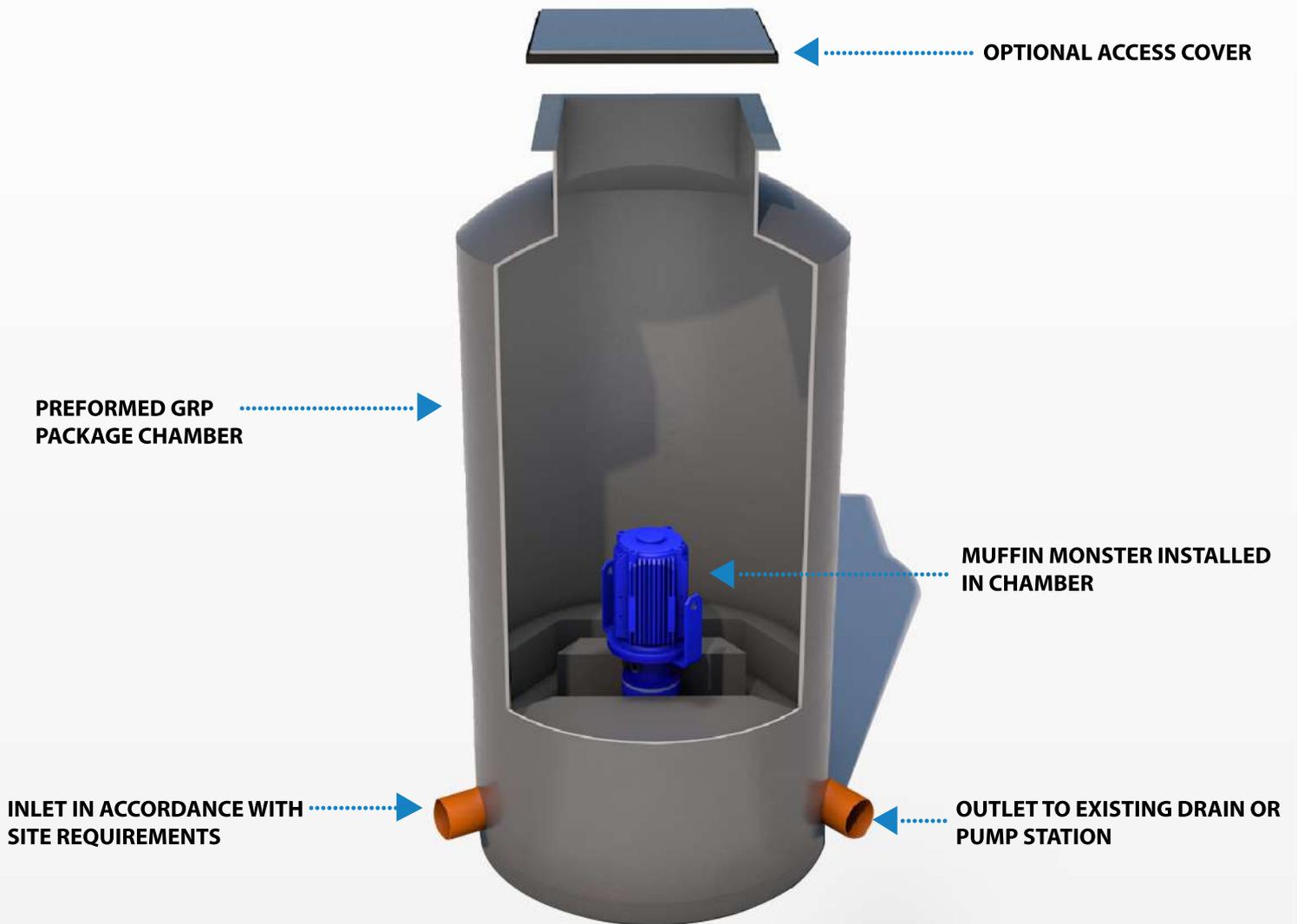
## Muffin Monster Grinder Materials

Part	Standard
Housings	Ductile iron
Cutters	Hardened alloy steel
Shafts	Hardened alloy steel
Mechanical seals	Tungsten carbide faces
Gaskets	Cork and rubber





# Muffin Monster Features at a Glance





## Muffin Monster Motor Assembly

Power	Voltage	Protection type	Motor model code
1,5 kW gear motor	400V, 3-phase, 50 Hz	IP55	QA1435BXM
2,2 kW gear motor	400V, 3-phase, 50 Hz	IP55	QB1435BXM
1,5 kW TEFC	400V, 3-phase, 50 Hz	IP55 for ATEX (Ex d IIC T4)	QC2435B2M
1,5 kW Immersible	400V, 3-phase, 50 Hz	IP68 for ATEX (Ex de IIB T4)	QC3435B1M
2,2 kW TEFC	400V, 3-phase, 50 Hz	IP55 for ATEX (Ex d IIC T4)	QD2435B2M
2,2 kW Immersible	400V, 3-phase, 50 Hz	IP68 for ATEX (Ex de IIB T4)	QD3435B1M
4,0 kW TEFC	400V, 3-phase, 50 Hz	IP55 for ATEX (Ex d IIC T4)	QE2435B2M
3,7 kW Immersible	400V, 3-phase, 50 Hz	IP68 for ATEX (Ex de IIB T4)	QE3435B1M

## Muffin Monster Controller

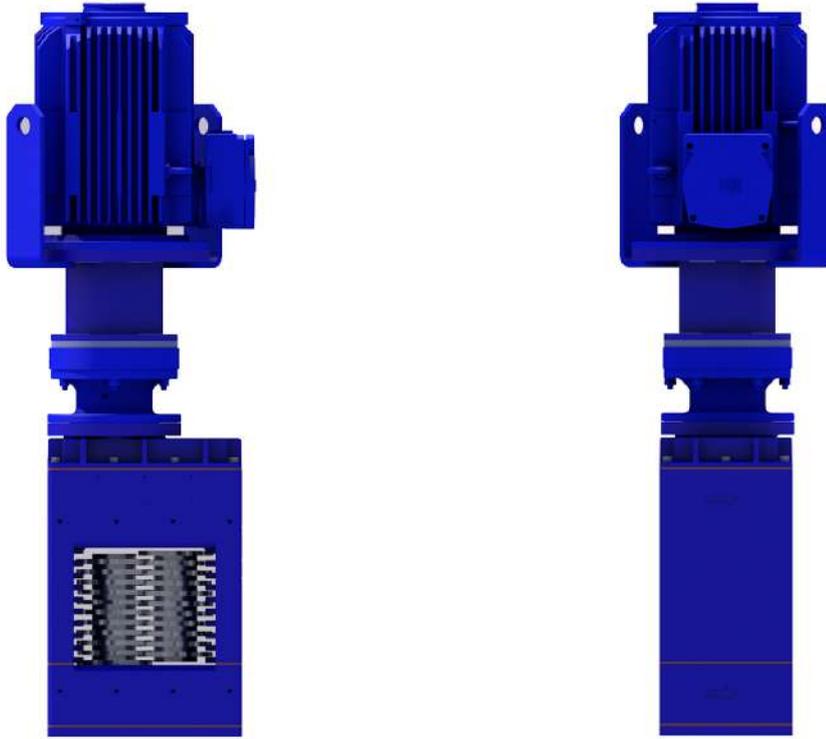
Grinder motor type	Model code for IP65 control panel enclosure	
	Powder coated mild steel material	Stainless steel material
1,5 kW IP55	QK1P45XXX	QK1S45XXX
1,5 kW IP68	QK2P45XXX	QK2S45XXX
2,2 kW IP55	QL1P45XXX	QL1S45XXX
2,2 kW IP68	QL2P45XXX	QL2N45XXX
4,0 kW IP55	QM1P45XXX	QM1S45XXX
3,7 kW IP68	QM2P45XXX	QM2N45XXX







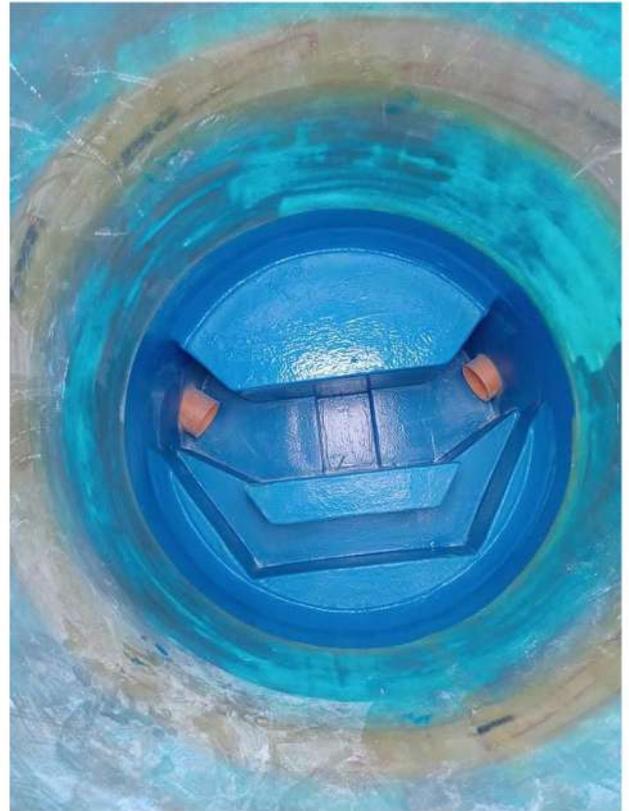
## Dimensions (mm)



Open channel model	Flow rate <sup>1</sup> - m <sup>3</sup> /hr	Head drop - mm	Standard dimensions <sup>2</sup> - mm		Approximate net weight - kg
			A (IP55)	A (IP68)	
10002-0008-DI	41.4	146	1016	1166	153



## Photographs





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