

Compact-Mixer type CM 150



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Features and advantages

- Compact and rugged design
- Few wear parts, low maintenance effort
- Stainless steel mixing chamber with flange connections
- Mixer housing and mixing shaft made of stainless steel
- Motor without forced ventilator (low-maintenance)
- Numerous options make it possible to adapt it in your process
- **Lower polymer consumption from 5...25% possible**
- **Reduction of water consumption**
- Higher content of TR in the filter cake up to 5 % possible
- Low costs because of high concentration of polymer
- Cost-saving because of smaller dosing pump and possibly elimination of subsequent dilution

Technical description and process

The dynamic compact-mixer CM 150 optimizes the entry of flocculants in the mud and can be easily integrated in to existing sludge dewatering equipment and process control systems. It is suitable for a lot of different slurry and polymers.

The to conditioned sludge is exposed with polymer just before reaching of compact-mixer. The stock and process solution comes directly from the flocculant dissolving and dosing system.

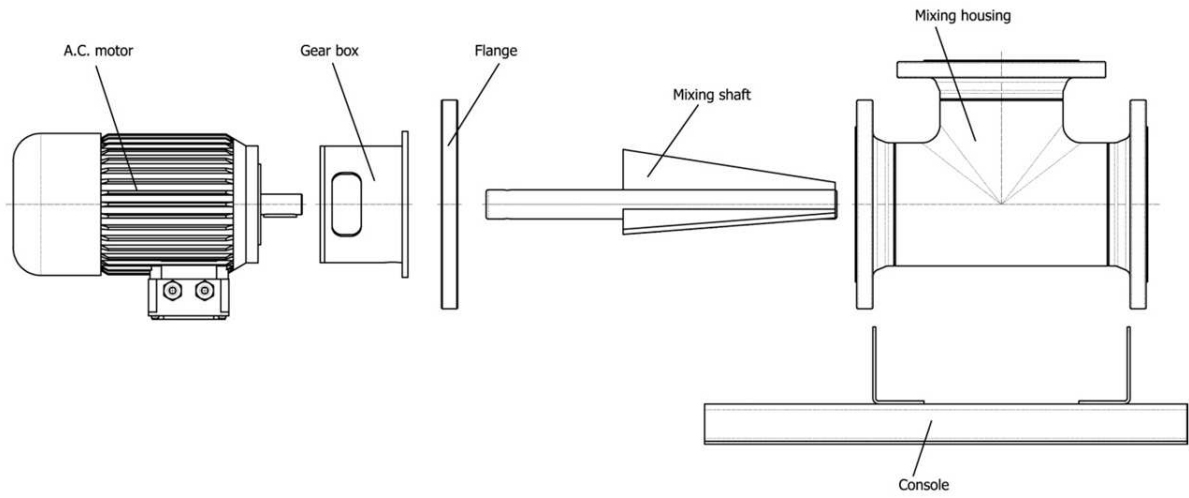
Because of the innovative geometry of mixer blades is the structure of the sludge destabilized and at the same time with polymer wetted and mixed. The resulting slurry/polymer mixture is transported axially by the mixing housing and leaves the mixer again at an angle of 90°. The sludge flows then as far as possible free of turbulence in your thickening or dewatering system. During this time the desired floc structure can optimally develop.

Because of the sophisticated and innovative design of the **compact-mixer CM 150** results the robust construction and low maintenance. Ideally the compact-mixer is equipped with optional polymer supplying, a activation with frequency converter and the control for mass proportional polymer dosing.

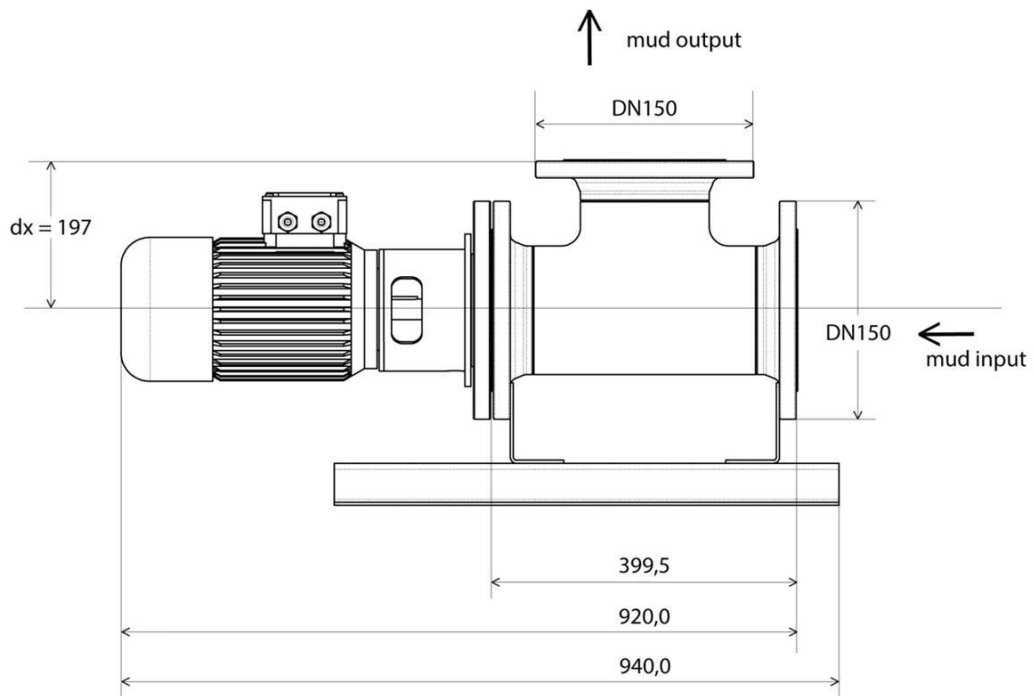
Numerous options are available.



Schematic representation



Dimensions of Compact-Mixer Typ CM 150



Options

For an optimal adaptation and integration into your process are numerous options available:

- Polymer feed with check valve
- Reduction of the ingress and egress flange DN150 to your process
- Stainless steel machine frame for compact-mixer and the control cabinet



Application areas

The **waterprocesstec Compact-Mixer CM 150** is used in the treatment of municipal and industrial wastewater in sewage plants, the recycling of process and circuit water as well as the clarification of raw and surface water for the production of industrial and drinking water. Other applications are possible without doubts.

If you have any further questions, please do not hesitate to contact us.

Technical data

Electric motor

Design	3-phase motor
Protection class	IP55
Effect class	IE3 High Efficiency
Cooling	self cooling without filter Cooling with optional fan by using FU
Temperature range	-20°C...+40°C
Material housing	gray iron
Colour	RAL 5010 enzianblue painted
Power	2,2KW
Voltage	230/400VAC, 500 VAC on request
Rotation Speed	1500 U/min or 3000 U/min
Min. frequency for FU	20Hz

Mixer module

Design	compact
Material housing	stainless steel 1.4571
Material agitator	stainless steel 1.4301
Material shaft	stainless steel 1.4301
Material flange	stainless steel 1.4571
Process connection	flange DN150 entry/exit (see also options)
Max. pressure	PN16

Compact Mixer

Weight	ca. 70Kg
Dimension	see on technical drawing

Order-Code CM 150-...

Material Mixer

-A Stainless steel 1.4571, 1.4301, (see on technical Data)

Design Electrical Motor

-1 400 VAC Motor, Power 2,2 kW, Flange DN150, Rotation Speed 1500 U/min

Design Fan

-A without Fan

-B with Fan

Options

-000 Design standard