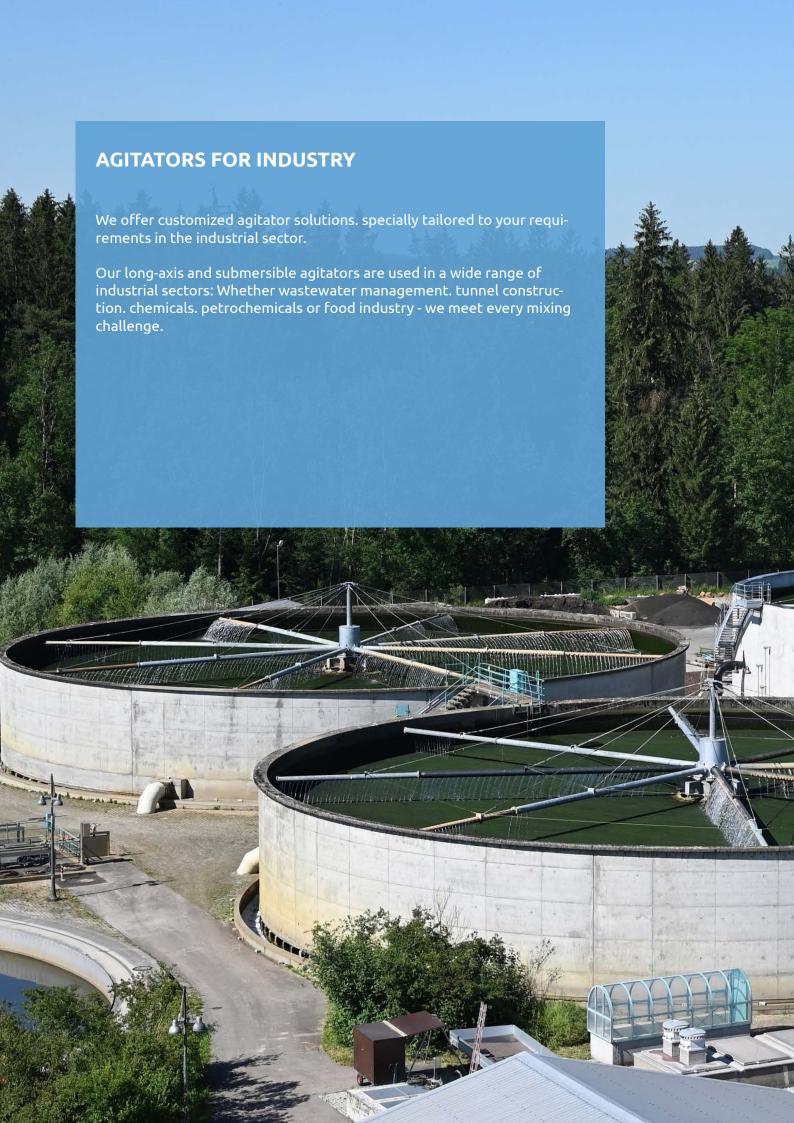


# Agitators for industry

Our service range







### Our propellers

Efficient stirring is a decisive factor for the success of our processes. The agitator blade takes a central role in this. The blade influences the efficiency and the result of agitation like no other component of the agitator. However, depending on the tank, the agitator location and the substrate properties, the requirements on the agitator blade vary significantly.

As an experienced partner for industrial agitators. we offer you a wide range of agitator blade variants to optimize your processes. We develop and manufacture suction and push propeller. as well as aerodynamicaly optimized high-performance blades (HD+). Diameters from 250 to 2.600 and speeds from 1.450 rpm to 35 rpm allow specific configurations for maximum energy efficiency.

The material of the propeller must be suitable for the pH value of the substrate. Depending on the aggressiveness of the medium. either steel. galvanised. painted. hardened. or stainless steel is suitable.

With the possibility of uncomplicated retrofitting with a new agitator blade, even on older models, you always have all options open to meet your requirements and maintain the optimum performance of your agitator.



Propeller LD



High performance propeller HD / HD+



Propeller LT



Propeller XT



Steel hardened



Stainless steel ss304 / ss31



Polymer coated



Sprayed armored

#### TANK TYPES













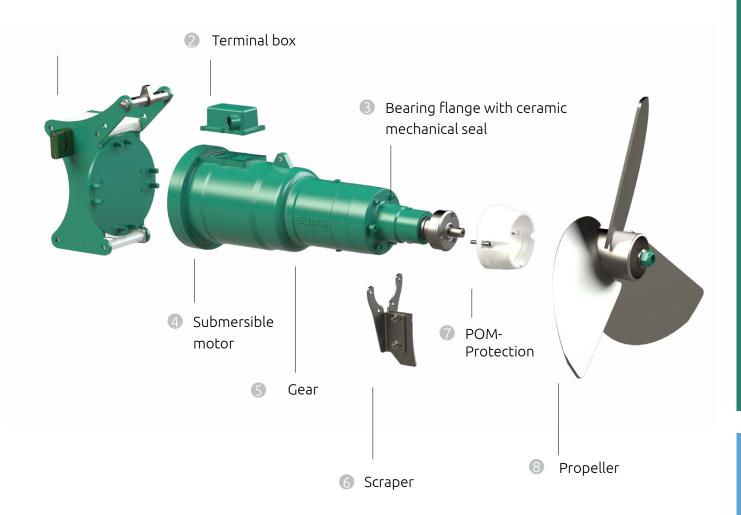
## **Submersible agitator OPTIMIX**

Thanks to our modular design, our submersible mixers can be individually combined in regard to motor power, gear, propeller and mast size. This enables us to offer an agitator that is optimally matched to your needs.

All our submersible mixers are suitable for substrate temperatures of up to 55°C and have separated oil chambers for motor, gear and bearing housing. Our special SUMA mechanical seal SiC/SiC seals the rotating shaft to the bearing flange and prevents substrate from entering the agitator blade bearing.

Microbe-resistant cable includes as standard in the delivery.

4-roller guide unit



## Submersible mixers for the industrial sector



**OPTIMIX 2A 15-720** 



**OPTIMIX 2G 90-75** 



OPTIMIX 2A 3 | 4 kW



OPTIMIX 2G 3 | 4 kW



OPTIMIX 2A



**OPTIMIX 2G** 



OPTIMIX 3A



**OPTIMIX 3G** 



**OPTIMIX 4G** 



Suspension mounting frame EV



MGD



GDD



## **OPTIMIX 2A 15-720**



Type	Power	Ø Propeller	Speed	Axial force	Pumping rate
2A	0,8 kW	250 mm	738 rpm	0,24 kN	7 m³/min
2A	1,5 kW	320 mm	728 rpm	0,43 kN	13 m³/min
2A	2,2 kW	340 mm	714 rpm	0,50 kN	16 m³/min

- Fast running agitator for low pH-values
- Specially designed for use in the industrial sector in particular for water and waste water management
- For dry matter content up to 4 % and pH-values from 5.5 8.2
- Completely made of stainless steel
- Self-cleaning stainless steel propeller





## **OPTIMIX 2G 90-75**



Type	Power	Ø Propeller	Speed	Axial force	Pumping rate
2G	5,5 kW	1.400 mm	75 rpm	2,6 kN	180 m³/min
2G	9,0 kW	1.400 mm	75 rpm	2,95 kN	162 m³/min

- Mainly for flow preservation in combination with other agitators
- For dry matter content up to 12 %
- 3-bladed LT 1400 propeller galvanized, stainless steel or hardened steel



2G - Closed Tank



2G - Open lagoon





Type	Power	Ø Propeller	Speed	Axial force	Pumping rate
2G 20-35	2,0 kW	2.200 mm	35 rpm	2,1 kN	251 m³/min
2G 30-35	3,0 kW	2.600 mm	35 rpm	3,45 kN	409 m³/min

- Submersible agitator for use in municipal and industrial wastewater
- For circulation of large water volumes, flow generation and maintenance, prevention of sedimentation, prevention of flocculationa and oxidation and denitrification processes
- For dry matter content up to 4 %
- Approved in explosion protection zone 2



2G - Open tank



## **OPTIMIX 2G | 2A 3 / 4 kW**





Cast iron housing

Stainless steel housing

Туре	Power	Ø Propeller	Speed	Axial force	Pumping rate
2G   2A	3,0 kW	380 mm	710 rpm	0,7 kN	24 m³/min
2G   2A	4,0 kW	310 mm	950 rpm	0,7 kN	13 m³/min

- Especially for smaller tanks
- For dry matter content up to 8 %
- OPTIMIX 2A completely made of stainless steel for aggressive media with low pH values



2A 3 / 4 kW - Closed Tank



## OPTIMIX 2G | 2A





Stainless steel housing

Туре	Power	Ø Propeller	Speed	Axial force	Pumping rate
2G   2A	4,0 kW	700   620 mm	180   250 rpm	0,85   0,95 kN	45   38 m³/min
2G   2A	9,0 kW	800   580 mm	280   380 rpm	2,8   1,9 kN	94   51 m³/min
2G	11,0 kW	820   620 mm	280   380 rpm	3,6   2,55 kN	128   64 m³/min
2G	15,0 kW	660 mm	380 rpm	3,1 kN	81 m³/min
2A	15,0 kW	850   660 mm	280   380 rpm	4,1   3,1 kN	120   81 m³/min
2A	13,5 kW	800   620 mm	280   380 rpm	2,9   2,55 kN	94   64 m³/min

#### **OPTIMIX 2G**

- For dry matter content up to 12 %
- Optional available as direct rotor without gear

#### OPTIMIX 2A

- For aggressive media with low pH values
- For dry matter content up to 12 %
- OPTIMIX 2A 13.5 kW authorized for Ex-Zone



2G with EV - Concrete tank



2A with EV - Open tank



## OPTIMIX 3G | 3A





Туре	Power	Ø Propeller	Speed	Axial force	Pumping rate
3G   3A	25,0 kW	900 mm	270 rpm	4,5 kN	135 m³/min

#### **OPTIMIX 3G**

- High performance agitator for large tank dimensions
- For dry matter content up to 12 %

#### **OPTIMIX 3A**

- High performance agitator for aggressive media with low pH values
- For dry matter content up to 12 %
- Completely made in stainless steel



3G - Concrete tank



3A - Steel tank





## **OPTIMIX 4G 150-135**

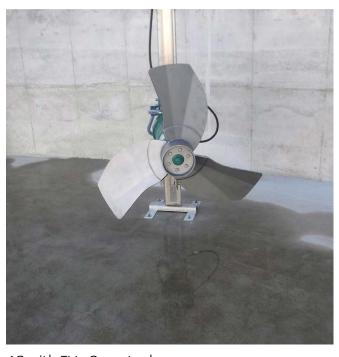


Туре	Power	Ø Propeller	Speed	Axial force	Pumping rate
4G	15,0 kW	1.200 mm	135 rpm	6,5 kN	223 m³/min

- Submersible agitator especially for viscous substrate
- For dry matter content up to 14 %
- IE4 motor with efficiency of 93.3%
- Approved for Ex-zone 2



4G with EV - Closed tank



4G with EV - Open tank

## Suspension mounting frame EV







Туре	Doweling	Tank height	Cable guidance	Tank types
EV3	Wandhalterung innen	4 - 12 m	am Seil / Mast	
EV4	Deckenhalterung außen	4 - 12 m	am Seil	
EV5	Wandhalterung innen	4 - 12 m	am Mast / Seil	

- For a 4-12 m container height
- Lateral rotation ± 60°
- SUMA cable guidance and strain relief behind the guide mast
- Easy maintenance of the agitator without draining off the substrate or decending into the tank
- The whole OPTIMIX series are suitable
- Optional height indication to determine the exact height of the agitator within the tank







EV3 EV4 EV5

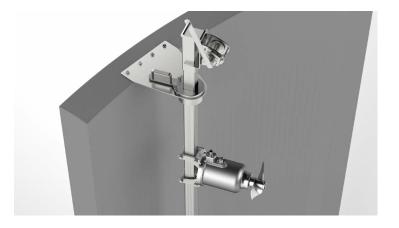
## INDUSTRY

## Suspension mounting frame EV3 light



- For open concrete tanks (not gastight).
- For tanks with up to 7 m height
- Lateral rotation ± 60°
- Suitable for OPTIMIX 2A 15-720
- Base frame and wall support in ss304

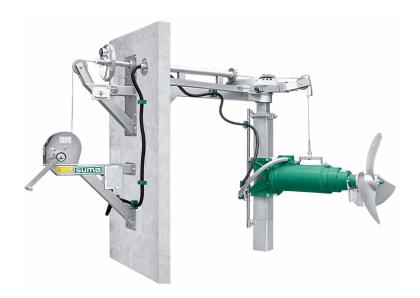




EV3 light



## Mast gastight wall lead through MGD



- Guide mast with base frame for tanks with a depth up to 14 m
- External vertically rotation 210°
- Adjustable in height through cable winch
- Optional SUMA height indication to determine the exact agitator height in the tank
- Optional angle display to determine the exact angle position of the agitator
- Optional other hights on request



MGD - Betonbehälter mit 2G



MGD - Betonbehälter mit 2G



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SUMA Rührtechnik GmbH Martinszeller Str. 21 87477 Sulzberg Germany

Tel: +49 8376 92131-0 Fax: +49 8376 92 131-19 E-Mail: info@suma.de

www.suma.de/en