



# Submersible Mixers

Type EBAMIX

Submersible mixers used for removal of sedimentary deposits, for homogenisation of heavy sludge or liquids with high solids contents and to avoid ice formation.

## **TECHNICAL DATA**

- Maximum temperature of the liquid: 40°C
- Asynchronous heavy duty used motor
- Insulation class H
- Protection degree IP 68
- 400/690V±10%, 50Hz three phase voltage

#### **FEATURES**

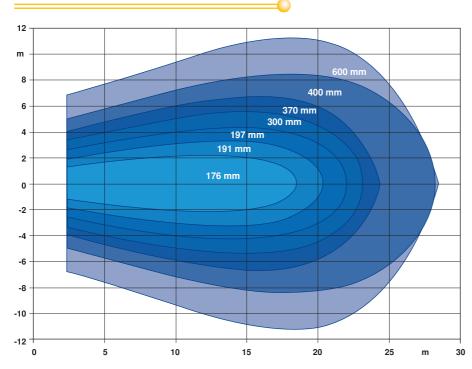
- Pump body available in cast iron and steel
- Propeller in AISI 316
- Shaft in AISI 420



Submersible Mixers EBAMIX

EBARA Submersible mixer can be installed in tanks of any size and geometry. Depending on the required mixing or turbulence intensity, one or more mixers can be installed in a tank. Mixer are usually installed using a directional guidance system suitable for tanks of various depths. This enables the mixers to be dropped or lifted out very easily for any inspection or maintenance, even with a full tank.

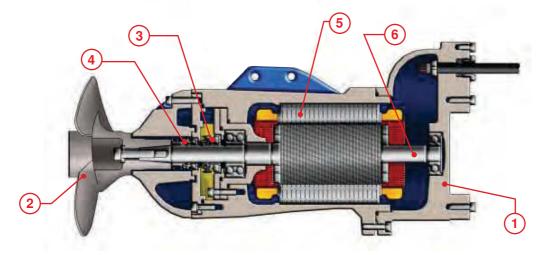
### MIXER WORKING RANGE



TYPICAL APPLICATIONS	W/m <sup>3</sup>
Homogenization of primary sludges 4%	8
Homogenization of secondary sludges 5%	10
Homogenization of digested sludges 6%	10
Homogenization of slush	10
Civil wastewater pumping stations	10
Denitrification	8
Oxidation	8
Nitrification	8
Dephosphatizing	5
Prevention of surface encrustation	15
Prevention of ice formation	5
Fish farms	5
Cooling tanks	5
Pulp 4%	40
Milk of lime 40%	30
Mineral sludge at 40%	30
Painting equipment (coagulation)	8
Mixing chemicals	10
Bio-reactors	20
Rainwater harvesting tanks	10
Mixing viscous liquids <500cp	30
Zootechnical waste slurry	20

#### MATERIAL OF CONSTRUCTION

EBARA Submersible mixers, rugged in construction, watertight electric motors accommodate in compartment, connect, by shafts of reduced lengths, to the impellers situated by the interposition of oil chamber between the hydraulic side and the electric motor. Asynchronous, three phase electric motors, squirrel cage type IP 68 protection, class H insulation. EBARA mixer are designed for S1 (continuous) service, with a max overloading up to 10% environmental cooling at temperature <40°C. Motors cooling comes through thermic exchange with surrounding fluid.



1 Housing: Cast iron EN-GJL-250

Propeller : Stainless steel AISI316

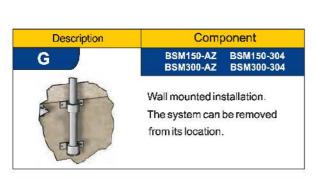
Upper seal : Ceramic/graphite

(4) Lower seal: Silicon carbide/silicon carbide

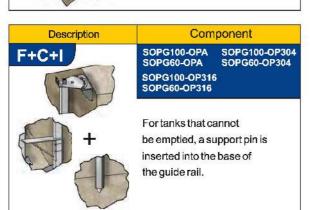
(5) Motor: Asynchronous three-phase 4 poles, insulation class H (180°C)

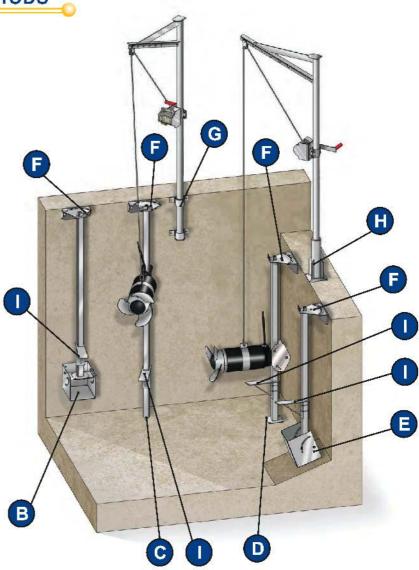
(6) Shaft: Stainless steel AISI 420

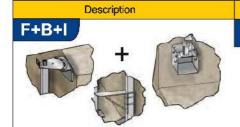
### TYPICAL INSTALLATION METHODS











Component

SOPG100-OMAZ SOPG60-OMAZ SOPG100-OM304 SOPG60-OM304 SOPG100-OM316 SOPG60-OM316

For tanks having a depth exceeding 6 metres, where it is not possible to secure the base to the tank floor.

Description

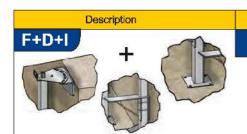
F+E+I

+

Component

SOPG100-OMAZ SOPG100-OM304 SOPG60-OMAZ SOPG60-OM304 SOPG100-OM316 SOPG60-OM316

Standard fitting used where it is possible to locate the guide rail support in the sloping floor of the tank.



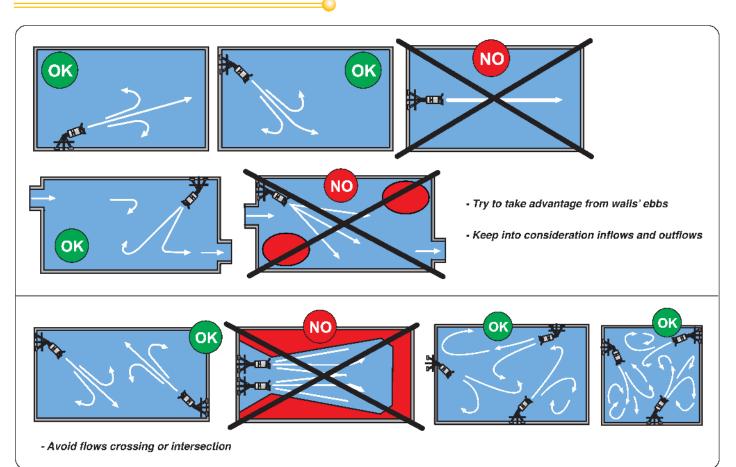
Component

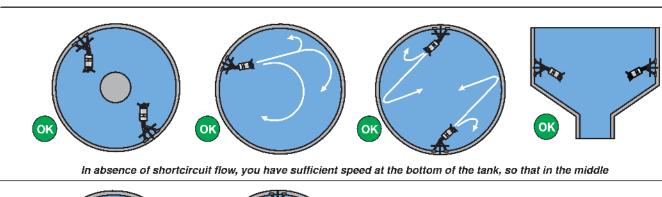
 SOPG100-OFAZ
 SOPG100-OF304
 SOPG100-OF316

 SOPG60-OFAZ
 SOPG60-OF304
 SOPG60-OF316

Standard fitting used where it is possible to locate the guide rail support in the flat floor of the tank.

# TYPICAL INSTALLATION TIPS

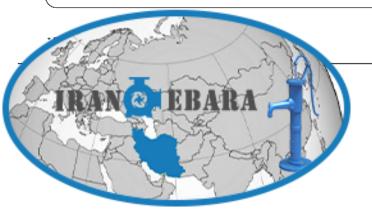








Avoid Shortcircuit flows !



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