



川源(中国)机械有限公司  
GSD (China) Co., Ltd.



**MH**

**MH hyperboloid mixer**

# MH 双曲 搅拌机

## MH hyperboloid mixer



### Applications

MH

Hyperboloid mixers are widely applied in environmental protection, chemistry, energy and light industry where the solid, liquid and gas are interflowing, especially in the sewage treatment process of coagulative precipitation tank, equalization pond, anaerobic pond, nitrification pond, and denitrification pond. The motor of the mixer is installed beyond the liquid level, that is especially suitable for the environment with high temperature, high concentration and corrosive liquid.

### Features

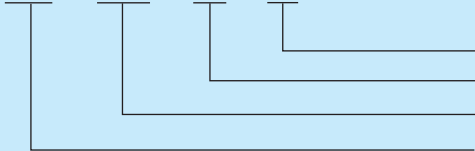
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- In comparison with traditional blade paddle mixer, MH has the feature of mixing equality, high efficiency, low energy consumption and no 'dead zones'.
- Simple structure and easy for installation and maintenance.
- Used especially for the water treatment such as mixing of waste water and chemical agents.
- Big surface area impeller, equipped with small power, saving energy.

### Conditions of usage

- : 1150 kg/m<sup>3</sup>
- : 10
- The density of the media shall not exceed 1150 kg/m<sup>3</sup>.
- The installation depth should not exceed 10m.

### Type description

MH - 500 - 76 - 1.1



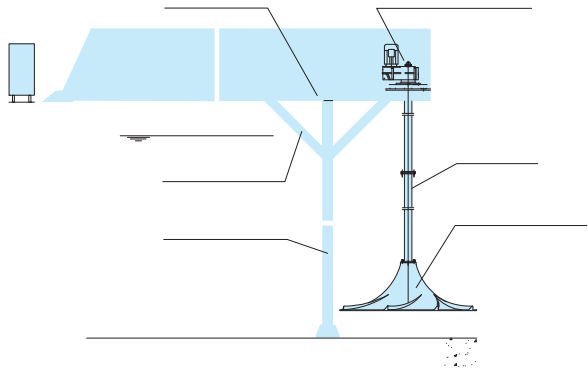
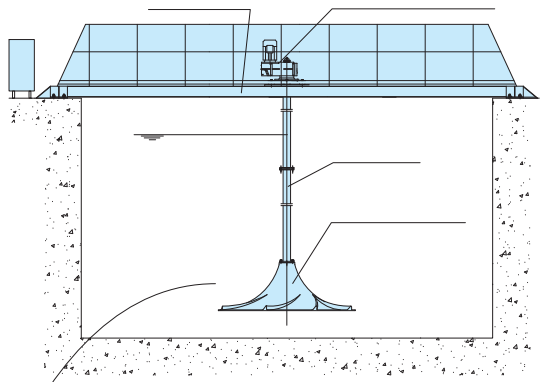
(kW) Power (kW)  
 (r/min) Speed (r/min)  
 (mm) Diameter of impeller (mm)  
 Hyperboloid mixer



## Construction

The MH hyperboloid mixer is composed of transmission part, impeller, base and hoisting system .

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## Operating features

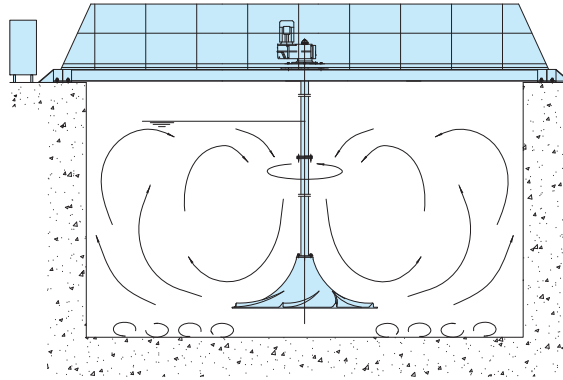
The MH hyperboloid mixer can hold a large capacity flow, and can get a big area circulating and gradual water flow. The unique impeller design perfectly combines the fluid features and mechanical movement to the maximum degree. The curved surface of hyperboloid impeller is shaped by the curve of formula  $xy=b$  rotating around y axis, in order to cater to the water flowing, the impeller is designed to feed water from the center, on one hand, the turbulent flow is reduced, on the other hand, the pressure of the liquid on the impeller surface is equal and even, therefore the machine will be balanceable in the movement status. Eight guide vanes are equally distributed on the involute dual cambered surface. The kinetic energy is created with help of the potential energy from the supplementary water fed by the deadweight pressure of the fluid and the centrifugal force by the impeller rotating, the fluid will move along the tangent of the impeller circumference under the condition of acceleration of gravity, with reflection of the pond wall, a circulating water flow is formed from bottom to top, therefore the cross-water flow is formed in the direction of axial Y and radial X. The structure features and special installation mode (in the bottom of the pond) of the hyperboloid mixer impeller decide the ideal mixing effectiveness, and effectively avoids mixing dead zones.

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$$xy=b \quad y$$

(y) (x)

## Fluid figure



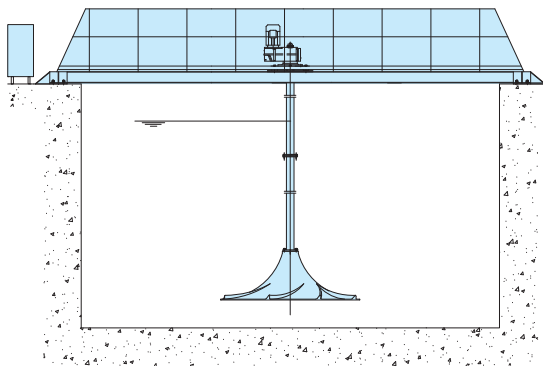
## Performance parameters

型式 Model	叶 直径(mm) Impeller diameter	(r/min) Speed		功率(kW) Power		服务 围(m) Service area	(kg) Weight
		标准 Standard	围 Range	标准 Standard	围 Range		
MH	500	76	40~250	1.1	0.75~1.5	1~3	320
	1000	55	30~80	1.5	1.1~2.2	2~5	480
	1500	38	30~60	2.2	1.5~3	3~6	510
	2000	33	20~42	3	2.2~3	6~14	560
	2500	27	20~40	5.5	3~5.5	10~18	640
	2800	24	20~30	7.5	4~7.5	12~22	860

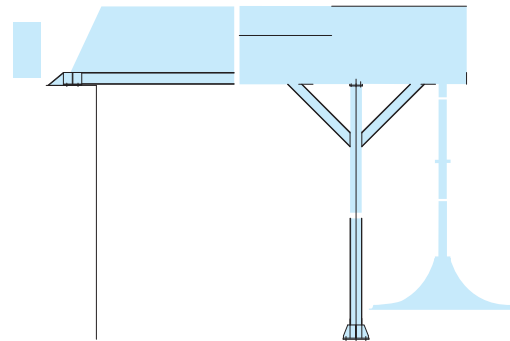
1. 0.8 0.9%
- 2.

Notes: 1. The standard figure is suit for the common municipal wastewater with 0.8~0.9% dry sludge concentration.  
2. According to the medium and pond form, the mixer's power and speed could be adjusted in the range of the chart.

## Installation mode



Whole bridge



For further details, please fulfill the chart below.

Customer \_\_\_\_\_ Undertaker \_\_\_\_\_

Name of project \_\_\_\_\_ Address of project \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Basic parameter	* Locations	<input type="checkbox"/> Equalization tanks	<input type="checkbox"/> Anaerobic reactors		<input type="checkbox"/> Denitrification reactors	<input type="checkbox"/> Flocculation reactors	
		<input type="checkbox"/> Sludge tanks	<input type="checkbox"/> Alternating biological reactors		<input type="checkbox"/> Disinfection reactors	<input type="checkbox"/> Others	
	* (m) Pond form	Rectangular pond			Circular pond		Others
		Length	Width	Depth	Diameter	Depth	
	* (m) Available depth						
* Media parameter	Name		Density				
	Constituents		pH				
	( ) Temperature		Viscosity				
	Solid containing rate		Others				
Technique parameter	* Installation mode	<input type="checkbox"/> Standard installation			<input type="checkbox"/> Others		
	* (m/s) The minimum flow speed at the bottom						
	Other request						
Material	* Impeller	<input type="checkbox"/> FRP (standard)		<input type="checkbox"/> stainless steel			
	* Mixing shaft	<input type="checkbox"/> Carbon steel with antiseptis (standard)		<input type="checkbox"/> Stainless steel	<input type="checkbox"/> Carbon steel covered with FRP		
Other requests							

- 1.
2. \*\*\*

Notes: 1.Please fill in the parameter lists as complete as possible.  
2.The item with '\*' must be filled .

# 欢迎索取以下产品型录



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EP6 | | RS-485



| MBR | |



| PAC | PAM |



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