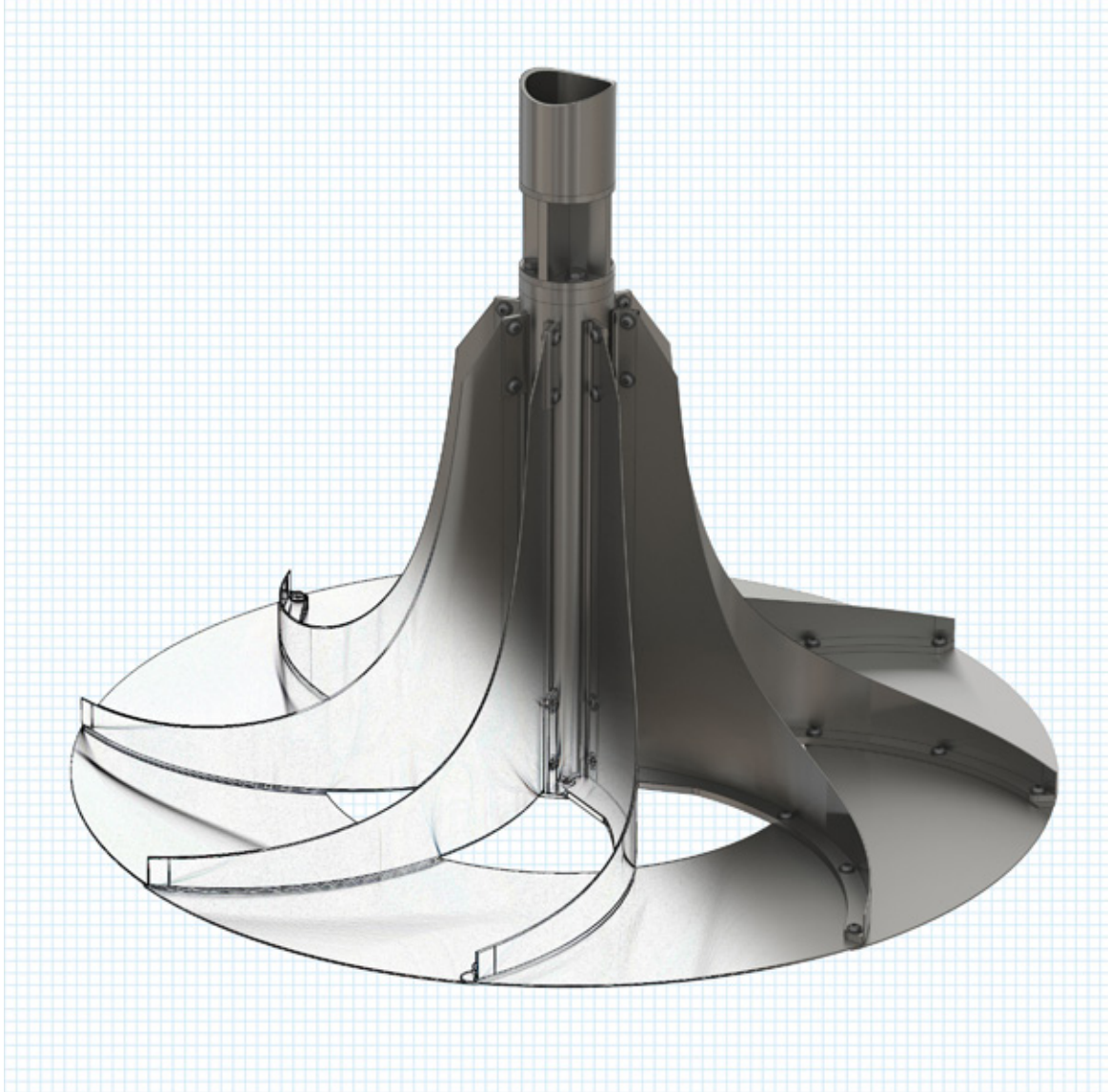


Hyperbolic Mixer



DBS MANUFACTURING®

DBS Hyperbolic Mixer

High energy efficiency is critical in today's world. Energy costs are rising, and there is a need to reduce our carbon footprint. The DBS Hyperbolic Mixer answers today's need to provide required mixing with a minimal energy expenditure.

Features

The DBS Hyperbolic Mixer rotor is specifically designed to operate at the bottom of a mixing basin where the rotor will efficiently draw water down and discharge it in a horizontal direction. This induced flow will circulate the water in the tank from bottom to top to maintain all solids in suspension.

The DBS Hyperbolic Mixer is specifically beneficial in process mixing such as flocculation, suspension, homogenization, and sub-surface aeration. Mixers are available from 1 HP (0.75 kW) to 30 HP (22 kW). Custom hyperbolic mixers for industrial applications are available.

The DBS Hyperbolic Mixer rotor has backwards curved pump blades that are specifically shaped and oriented to move the maximum volume of water with minimal power input.

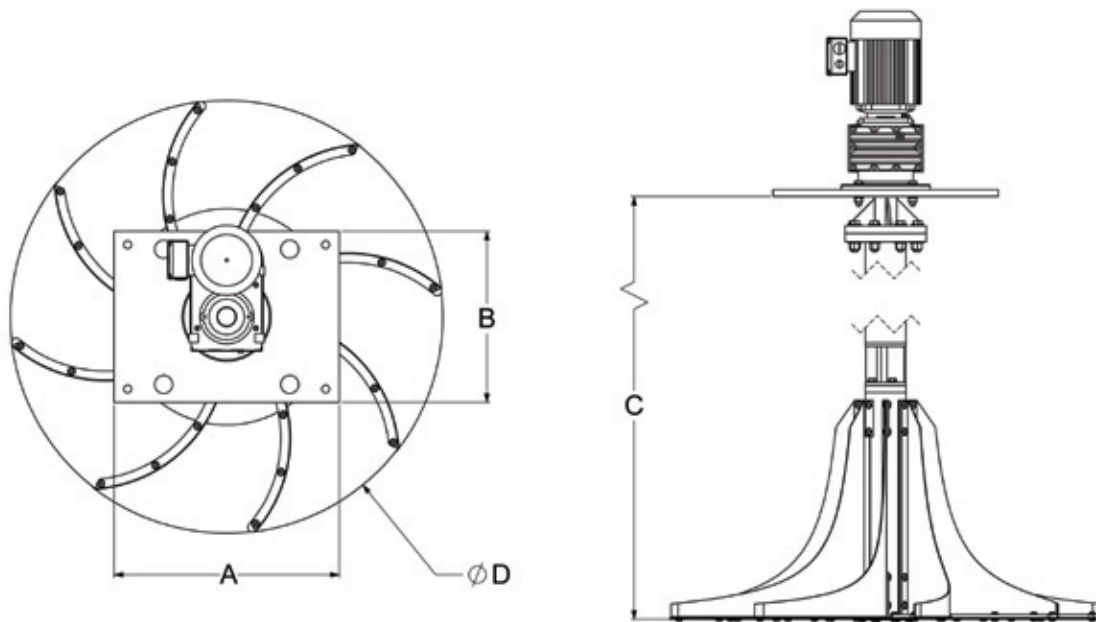
High efficiency design of the speed reducer minimizes parasitic power losses, maximizing the amount of power transferred to the water. High service factors are used in selecting the speed reducer with calculated life exceeding 100,000 hours. The heavy duty output bearings provide adequate support against all loads imposed by the rotor, eliminating the need for a lower guide bearing.

Oversized drive shaft and robust mounting base minimize rotor deflection and vibrations.

Wetted parts are manufactured from AISI 304 or AISI 316 stainless steel for corrosion resistance. Special coatings and materials can be provided at customer's request for very saline or aggressive wastewaters.



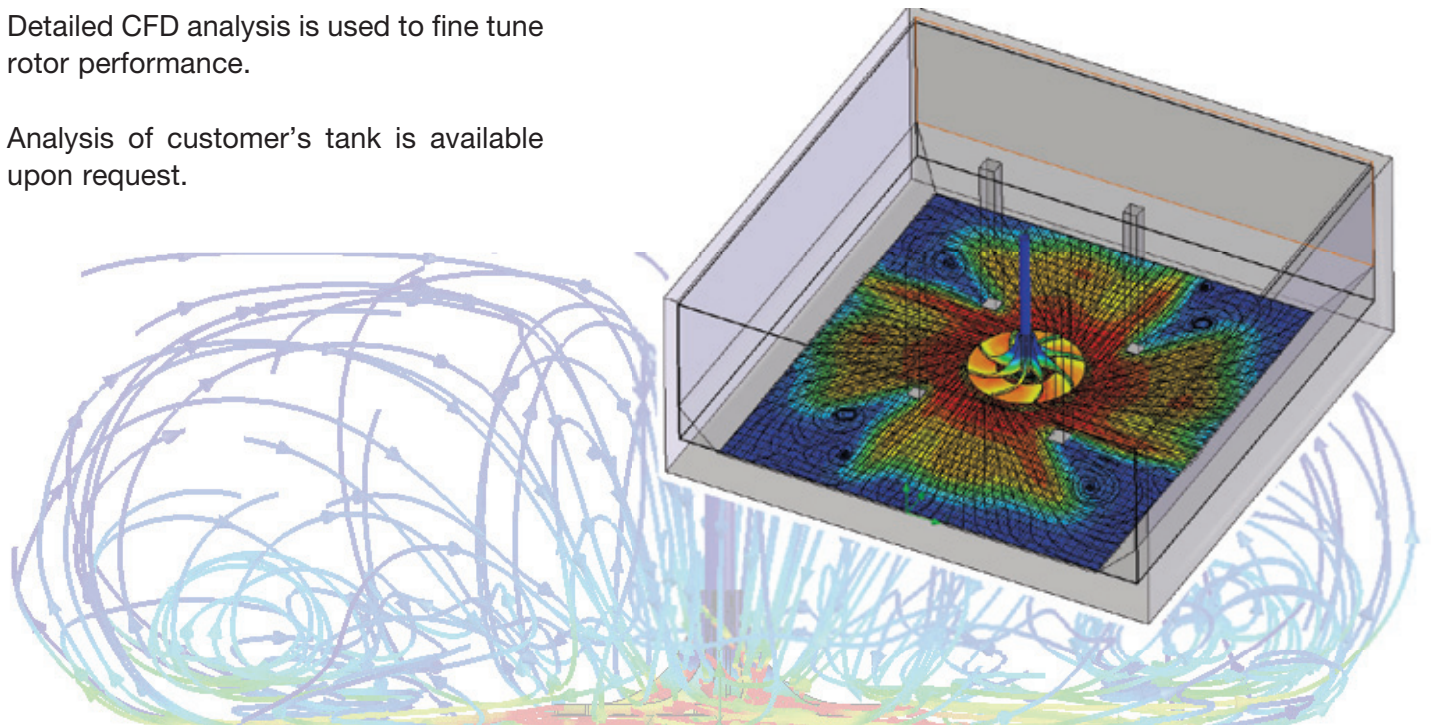
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Hyperbolic Mixers											
Model	Power		RPM	A		B		C max		ØD	
	HP	kW		in	mm	in	mm	in	mm	in	mm
HM-1400	1-5	0.75-3.7	40-70	18	457	24	61	120	3048	55	1400
HM-1900	2-10	1.5 -7.5	32-54	24	610	36	91	180	4572	75	1900
HM-2500	2-30	1.5-22.4	18-42	24	610	36	91	300	7620	102	2500

Detailed CFD analysis is used to fine tune rotor performance.

Analysis of customer's tank is available upon request.





Hyperbolic Mixer Rotor

Clarifier & Thickener Drives

Retrofits

Low-Speed Surface Aerators

Rotary Distributor Center Mechanisms

DBS Manufacturing, Incorporated

45 SouthWoods Parkway, Atlanta, Georgia 30354 USA

404.768.2131 phone 404.761.6360 fax

www.dbsmfg.com email: engineering@dbsmfg.com