

PROCESS TANK MIXERS

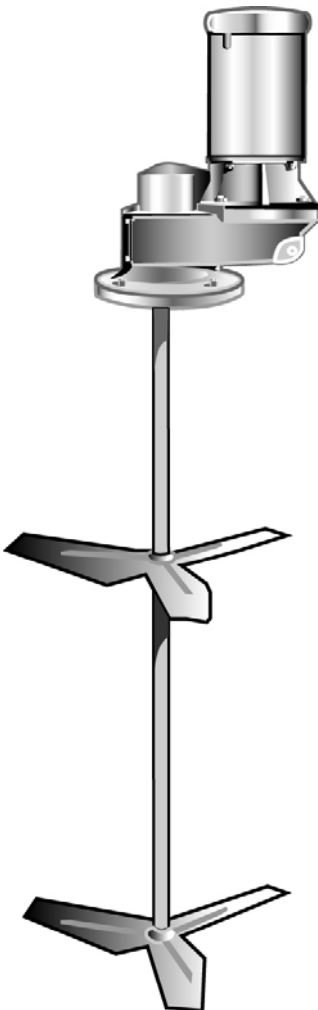
THE NEW STANDARD FOR INDUSTRIAL AND
MUNICIPAL WASTEWATER TREATMENT



What is a **HELLBENDER**® Process Mixer and how is it used?

- Units are specifically designed to be used in wastewater treatment processes where the wastewater needs a particular degree of agitation to promote solids suspension, coagulation, flocculation, or pH neutralization.
- Each unit is designed by an experienced staff to meet actual process conditions and performance requirements. Mixers can be provided with or without process tanks.
- Applications include:

<input type="checkbox"/> coagulation	<input type="checkbox"/> flocculation
<input type="checkbox"/> pH neutralization	<input type="checkbox"/> sludge mixing
<input type="checkbox"/> polymer blending	<input type="checkbox"/> equalization mixing



Features of the **HELLBENDER**® Process Mixer

- High-efficiency parallel, helical/bevel gear design.
- Reliable, long life.
- Available in many sizes and configurations.
- Supplied with rugged, TEFC motors, inverter-duty rated.
- Superior efficiency over a broad torque range.
- Available as a replacement mixer on almost any existing tank, or can be packaged as part of a complete mixing system for any wastewater system retrofit.

How is the **HELLBENDER**® Process Mixer different from other process mixers?

- All drives are AGMA rated with cast-iron housings and high efficiency helical gears.
- Units are designed with a minimum 2X margin of safety in horsepower and 5X in torque.
- Higher torque ratings vs. comparable mixer designs.
- All units are beam mounted to reduce large overhung loads which cause premature bearing failure.
- Standard motors and parts available in 1-2 weeks at no extra charge. Special parts are available for a nominal charge.
- All units include oversized bearings for severe duty applications.
- High-efficiency foils are used to pump fluid efficiently, thereby reducing horsepower requirements.
- **Made in the USA.**
- **Application assistance from highly experienced technical staff.**

Performance and Features

MIXER MODEL	HBMM	HBM-100	HBM-125	HBM-150	HBM-200
PERFORMANCE					
Flow (nominal in clean water), gpm	120-2,100	205-4,110	1,600-15,000	6,000-18,000	7,500-80,000
PHYSICAL CHARACTERISTICS					
Motor Size, hp	0.5	0.5-2.0	0.5-5.0	0.5-5.0	1.0-20.0
Motor Voltage, V	120 (1 ph) 230/460 (3 ph)	120 (1 ph) 230/460 (3 ph)	230/460 (3 ph)	230/460 (3 ph)	230/460 (3 ph)
Drive Speed, rpm	90-275	86-370	84-315	64-206	33-80
Shaft Diameter, in	1.0	1.0	1.25	1.5	2.0
Propeller Quantity	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2
Propeller Diameter, in	8-12	10-18	16-30	22-48	34-80
MATERIALS OF CONSTRUCTION					
Casing	Aluminum	Cast iron	Cast iron	Cast iron	Cast iron
Propeller	Aluminum ¹	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Shaft	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel

¹ Stainless steel optional.



Contact ETS for information on other wastewater treatment products including:

- **Hellbender[®] Mix Tank Systems**
- **RT-Series[®] Dissolved Air Flotation (DAF)**
- **SepaFloat[®] Flotation Systems**
- **Hellbender[®] DAF Pumps and Whitewater Systems**
- **pH Control Systems**



HBM102005