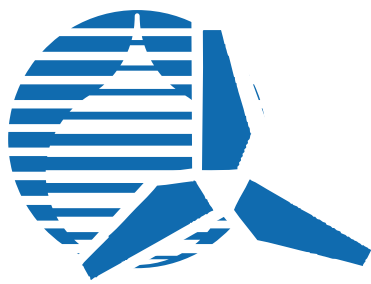


A dynamic splash of clear blue water against a light blue background, with droplets and ripples visible.

# MIXING



**MILTON ROY**  
**Mixing**

**Mixing is the heart of your process**



**MILTON ROY**  
**Mixing**

# AGITATORS

## HRmix®

### One solution for each application



1. Thin profile 3 blades propellers with high efficiency and high flow.



2. Two-blade impeller for flocculators.



3. Turbine impeller, favouring heat exchange in non-viscous medium.



4. Marine propeller impeller for low flows.

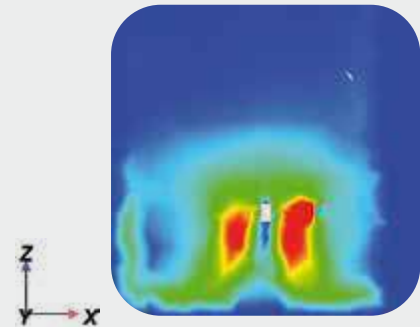
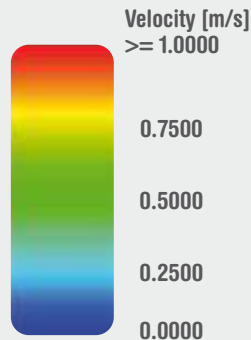
- Preparation of reagents such as aluminium sulphate, lime slurry, activated charcoal, sodium and potassium permanganate, urea, caustic soda, etc.
- Treatment and storage of chemical products.
- General blending processes.



Vertical mixers with electric motors

Vertical mixers with pneumatic motors

#### Optimization of the impeller design with CFD simulations



Tank diameter.: 3000 mm  
Liquid height: 3000 mm  
Impeller diameter.: 1000 mm, located at 1000 mm from the bottom  
Rotation speed: 60 RPM  
Density: 1000 kg/m<sup>3</sup>  
Viscosity: 20 Cp

#### Applications in processes of:

- Homogenization • Neutralization • Flocculation • Dissolving • Precipitation
- Crystallization • Dispersion • Sludge suspension holding.

#### Characteristics:

- Standardized solutions for volumes from 40 L to 300 m<sup>3</sup> and 700 m<sup>3</sup> in flocculation.
- Optimal power consumption.
- Easy maintenance.
- Possibility to adapt materials to special service conditions.

*Mixing is the heart of your process*

## Standardized high-speed agitators



### HR1A Series

Marine propeller for low pumping flows ( $\varnothing$  100 to 200 mm)

Speeds: 1000 RPM and 1500 RPM

Power: From 0.25 to 1.5 kW

Tank volume: From 40 L to 3 m<sup>3</sup>

Temperature: Ambient

Pressure: Atmospheric

Applications: Homogenization, dissolving, reagent preparation, neutralization.

## Standardized low-speed agitators



### HR2A / HR2B Series

Axial 4x45° blade turbine ( $\varnothing$  350 to 800 mm)

Speeds: From 75 to 100 RPM

Power: From 0.37 to 3 kW

Tank volume: From 200 L to 10 m<sup>3</sup>

Temperature: Ambient

Pressure: Atmospheric

Applications: Homogenization, dissolving, reagent preparation, neutralization.



### HR5A / HR5B - Flocculator Series

Two-bladed impeller ( $\varnothing$  300 to 4000 mm)

Speeds: From 7 to 96 RPM

Power: From 0.37 to 3 kW

Tank volume: From 100 L to 750 m<sup>3</sup>

Temperature: Ambient

Pressure: Atmospheric

Application: Flocculation



### HR6A / HR6B Series

Thin profile 3 blades propellers with high efficiency and high flow ( $\varnothing$  200 to 2000 mm)

Speeds: From 52 to 295 RPM

Power: From 0.37 to 11,0 kW

Tank volume: From 200 L to 200 m<sup>3</sup>

Temperature: Ambient • Pressure: Atmospheric

Water treatment applications: Homogenization, preparation of additives and polymers, suspension, fast mixing.

Applications in other industries: Dissolving, heat transfer, storage, suspension.



# MILTON ROY Mixing

## Innovation and competitive, that is our motto!

Because productivity, investment cost and operating cost are your daily indicators, MILTON ROY Mixing is introducing range HRmix that meet your expectations.

Thanks to modern technology of flow analysis (CFD) and experience in many processes, Milton Roy Mixing offers an optimized solution for your needs in mixing.

Simple design, robust, based on thousands of devices in operation, the HRmix range is fitted with dedicated propellers for your application and volume to blend (low or high shear, very low power or very high pumping flows ...) to provide a cost effective but efficient solution for each of your agitation project.

The wide range, from 40 liters to 750 m<sup>3</sup>, and the diversity of type of propeller as rotation speed will meet your most tough needs in mixing.

Non contractual document. Equipments included in the present document may be subjected to change without previous notice.  
All the information herein is under exclusive property of MILTON ROY MIXING and shall not be used as liability object or reproduced without the owner's express authorization.

REV.0



# MILTON ROY Mixing

[www.miltonroymixing.com](http://www.miltonroymixing.com)