

# The ShockWave Power™ Reactor



The Next Generation  
Reactor For The Chemical  
Industry

Process Intensification  
&  
Increased Mass Transfer

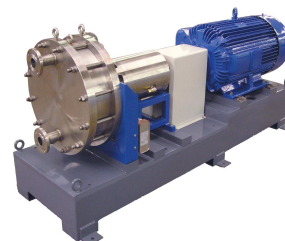
## The Problem

Making high quality product in the shortest reaction time using in the greatest yield with the least raw materials.

## The Solution

### The ShockWave Power™ Reactor

The ShockWave Power™ Reactor harnesses cavitation to many chemical reactions in **seconds**. The process intensity drives the reaction further to completion than with conventional reactors in a fraction of the time. Whether in batch or continuous systems, less reaction time can lead to fewer byproducts.



The ShockWave Power™ Reactor has an elegantly simple and robust design proven through years of commercial operation in the chemical, petroleum, and food industries. The robust stainless steel construction, easy to use control system, small footprint, and quiet operation make the SPR an unparalleled biodiesel reactor.

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

## **Applications**

- Liquid-Liquid Mixing and Reaction (emulsion)
- Gas-Liquid Mixing and Reaction (oxidation)
- Solid-Liquid Mixing and Reaction (hydration)
- Extraction
- Batch to Continuous Processing

## **The Benefits**

- Proven Technology With Operating Installations
- Fast Reaction
- Reduced Capital Cost
- Small Footprint
- Improved Yield With Fewer Byproducts
- Expand Capacity
- Improved Quality
- Easy Retrofit For Existing Operations
- Systems Available Up To 2000 Gallons Per Minute

## **The Product Line**

The SPR is available for almost any temperature and any pressure and can be constructed out of almost any material to allow chemical compatibility.

Lab units are available for rental or sale for testing.

**[www.hydrodynamics.com](http://www.hydrodynamics.com)**