

  
**HOCKMEYER**

# HRX Series

**TEMPERATURE-REGULATED  
IMMERSION ROTOR-STATOR**



Patents 11,766,648 (2023) & 11,931,707,B1 (2024)

# HRX Series

The variable speed rotor-stator is a highly efficient and versatile tool designed for

- Mixing
- Deagglomerating
- Dispersing
- Particle size reduction
- Homogenizing

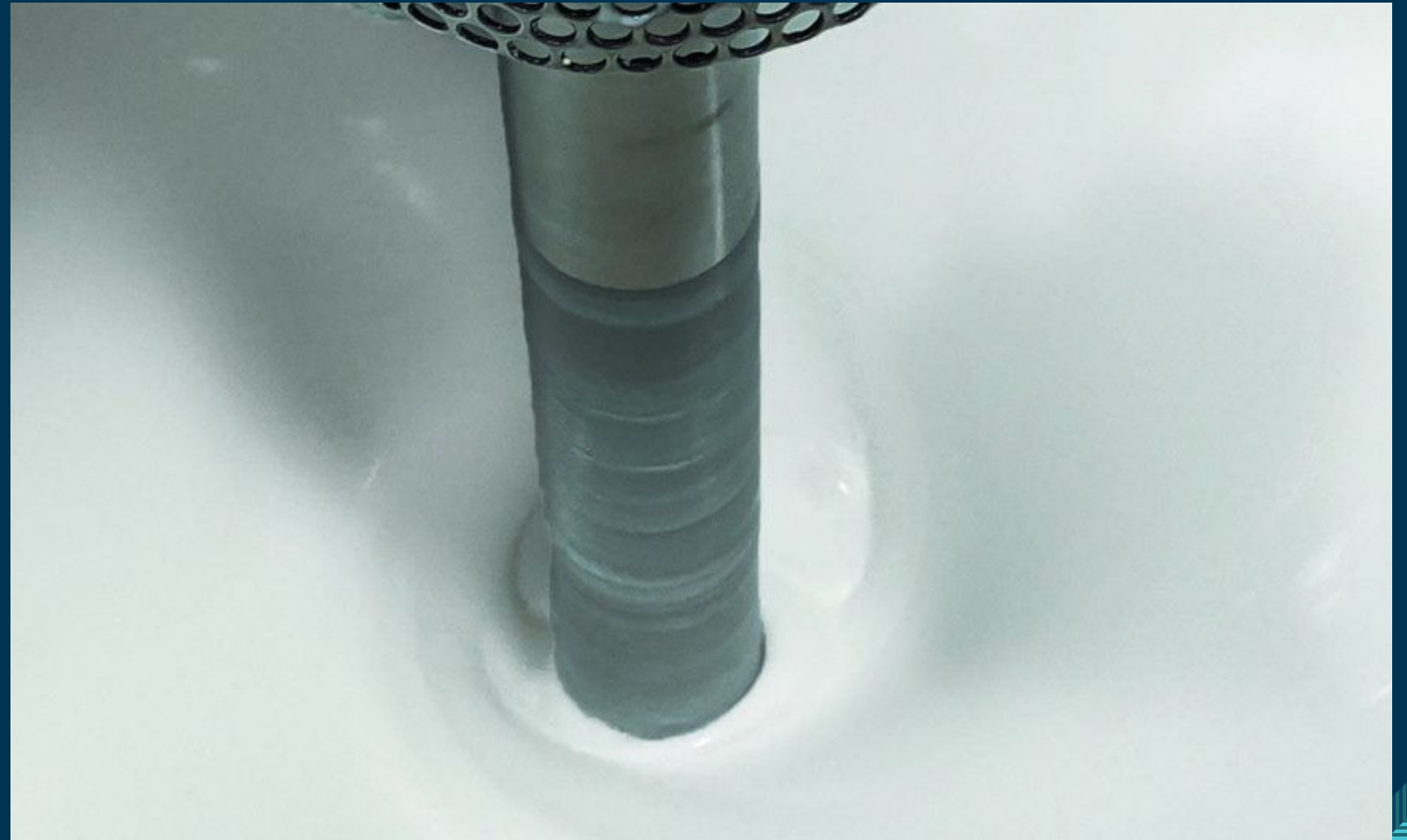
The design creates mechanical shear by feeding the material into the rotor and expelling it out radially through the precision-sized openings in the stator.

The HRX adds a new element to process products that require a temperature-regulated environment while processing.

Customized stators allow for the processing of virtually any material, adapting to a wide range of incoming particle sizes and viscosities.

# The HRX Series - SHEAR... ENERGY... CONTROLLED

The variable speed function allows the operator to control the amount of shear



# The HRX Series - HOW IT WORKS

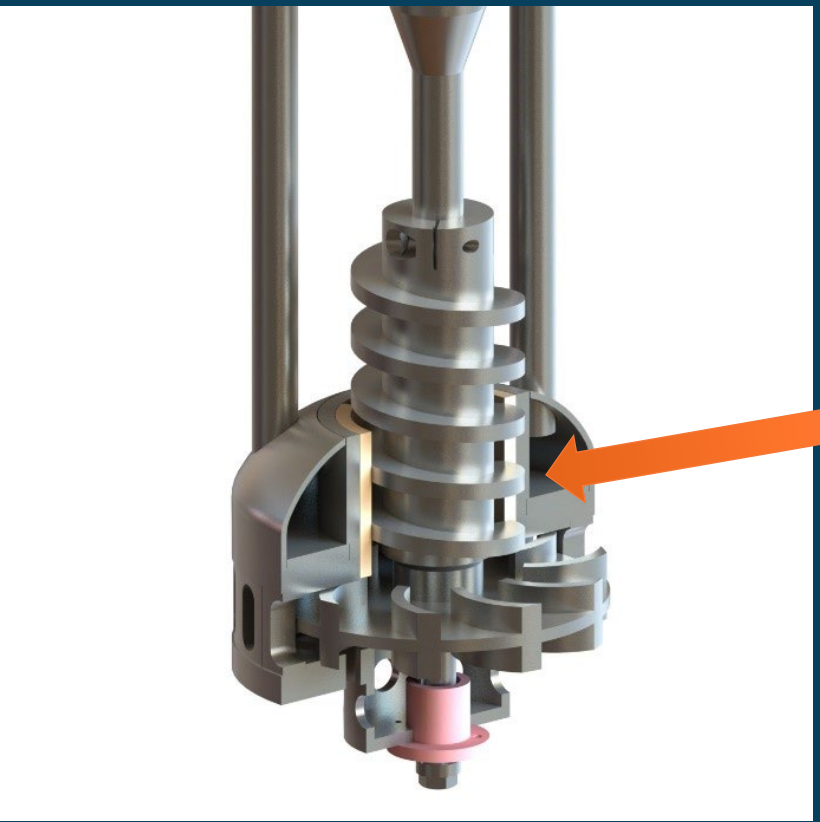


The clearance between the rotor's tips and the stator's inside diameter controls the discharge and shear rates.

The tighter the tolerances and exit ports, the higher the shear and the lower the discharge rate.

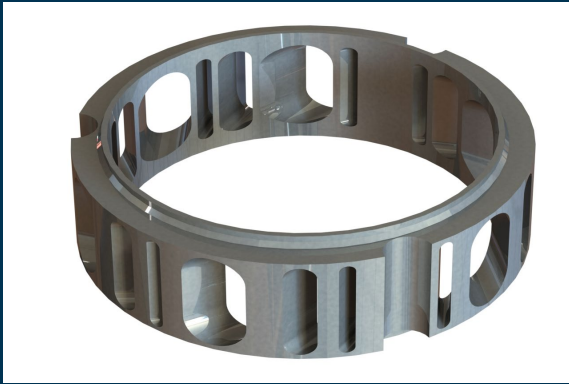
Increasing the open area of the exit ports is accomplished by increasing their number and positioning.

# Optimizing Deagglomeration, Dispersion, and Particle Size Reduction While Controlling Processing Temperature

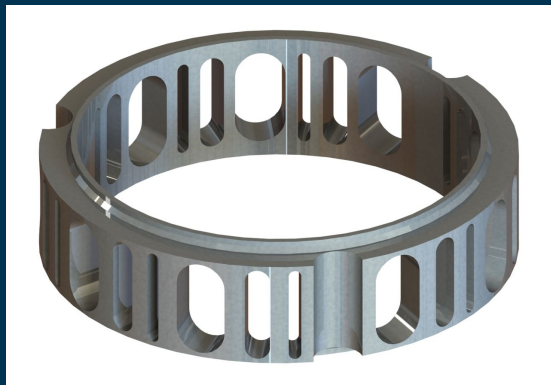


The jacketed dome adds another performance improvement level for maximum operation control for temperature-sensitive applications.

# The HRX Series ROTOR & STATOR DESIGNS



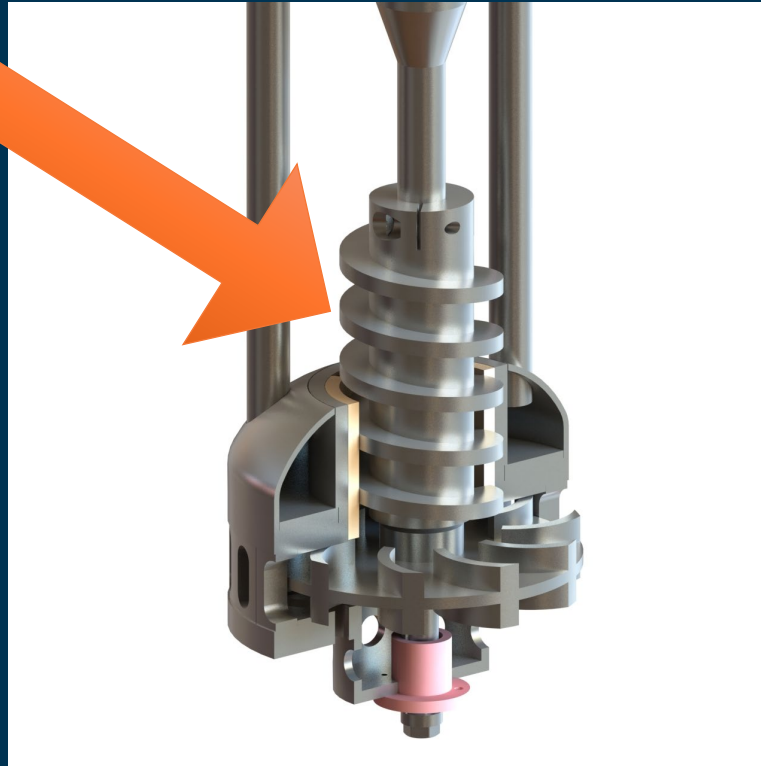
A high-efficiency rotor is teamed with dynamic stator designs with openings in different sizes, shapes, and angles to enable rapid deagglomeration and particle reduction.



Controlling the exit ports' positioning, size, and discharge angle maximizes the machine's performance.

# The HRX Series FOR HIGH VISCOSITY PRODUCTS

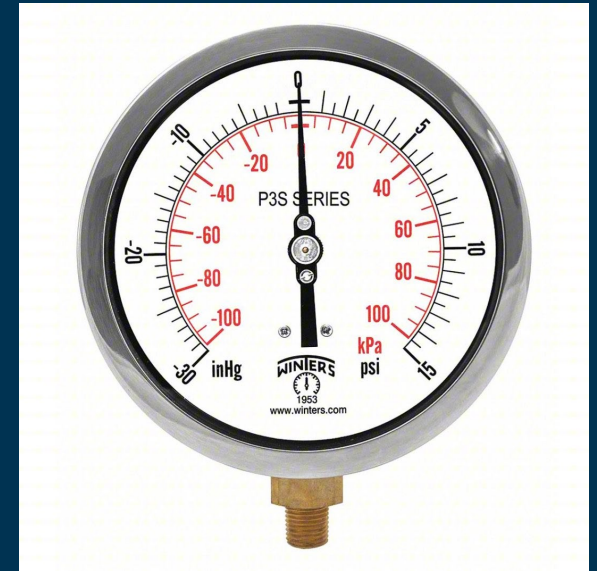
With the addition of an auger and a sweep blade, it can process unlimited viscosity ranges.





# The HRX Series MATERIAL DE-AERATION

The addition of vacuum to the process vessel assists in the deaeration of the feedstock for volumetric accuracy





# The HRX Series - HOW TO CHOOSE

When choosing a new piece of equipment for your process, it is essential to carefully evaluate how that equipment will perform on your unique products. Equipment should fit into your current process seamlessly or, ideally, remove steps to help create a leaner process.

Process time, scale-up, cleanability, product loss, ergonomics, and the ability to meet or exceed your standard are all elements you will need to explore to make an educated choice.

At Hockmeyer we understand how challenging this process can be, so we have equipped our Customer Service Testing Facility with laboratory, pilot, and production models of our equipment for client trials.

Contact us to schedule!

[WWW.HOCKMEYER.COM](http://WWW.HOCKMEYER.COM)

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