

# ROTOR STATOR



THE SCHOLD ROTOR STATOR CREATES GREATER SHEAR FORCE COMPARED TO AN OPEN-DISC SAWTOOTH DISPERSER BLADE.

Our Variable-Speed Rotor/Stator was designed for high-speed dispersing, mixing, size reduction and deagglomerating at significant process savings.

Requiring liquid in the batch at all times, it creates mechanical shear by continuously drawing product components into the rotor and expelling them radially through the precision milled openings in the stator.

The rotor stator improves the high-speed dispersion of paints, resins, inks, coatings, adhesives and more. It is not limited to these items, so if you have a product to test, we have the trial equipment available at our lab in Chicago, Illinois.



Side tank cutaway of Schold Rotor Stator and particle flow.





### HOW IT WORKS

A rotor turns within a slotted stator at very high speeds, allowing it to act as a centrifugal pump. This centrifugal force draws product down into into the rotor and pumps it out against the slots of the stator. This radial velocity and following impact causes the product to break down against the slots and surfaces of the stator, ultimately shearing the particles. The product is then cycled back into the shearing process repeatedly through the continued rotation of the rotor to achieve maximum dispersion.

#### THE ROTOR STATOR DIFFERENCE

The ultra-shear design acheives dispersion at a much faster rate, enabling greater process efficiency. Compared to a standard high-shear blade, a rotor stator setup can save up to 90% of production time. Depending on the product, it can also eliminate the need for additional processes such as grinding, milling or additional mixing. This allows for savings on additional machinery and time in extra cleanup.

#### EFFICIENT RESULTS

The Schold rotor stator allows you to disperse, emulsify, homogenize, dissolve, mill, mix and blend. Reduce even the toughest agglomerates in size, blend them with liquid additives and wet them out, to create a consistent and stable dispersion result. Schold offers custom builds to fit your process—contact us today to get started.

Shown left: overhead cutaway of Rotor and Stator shearing process.

## WHY CHOOSE SCHOLD

A trusted name since 1949, **Schold** has made breakthroughs and improvements, but one thing has held true—we have continually remained a **client-centric solutions provider.** While we offer a variety of standardized machinery models, we will also work with you to design, fabricate and install entirely **customized solutions** based on your application needs. Beyond installation, it is our commitment to provide unparalleled customer service. You can count on **Schold** for more than just reliable equipment, you can count on us to be a **trusted partner to your business**.

