

OPEN TANK UNITS: Installation of units for batch operation in open vessels is simple and fast, with little construction required. For bolting to support beams, units are equipped with carbon steel rectangular mounting plates fitted with dust-seals to protect the bearings. All units have rings for hoisting.

CLOSED TANK UNITS: For operation in closed systems, under pressure, vacuum, or in continuous "in line" duty. All units have mounting flanges with standard ASA bolt drillings. Series 8000 closed tank Dispersators are equipped with either single or double inside-type mechanical shaft seals. With single seals they can be operated at pressures up to 100 psi, or with 28 inches of vacuum. Maximum temperature is 400°F. When equipped with double mechanical seals, the Dispersator can operate up to 1000 psi, or 28 inches of vacuum, with a maximum temperature of 550°F.

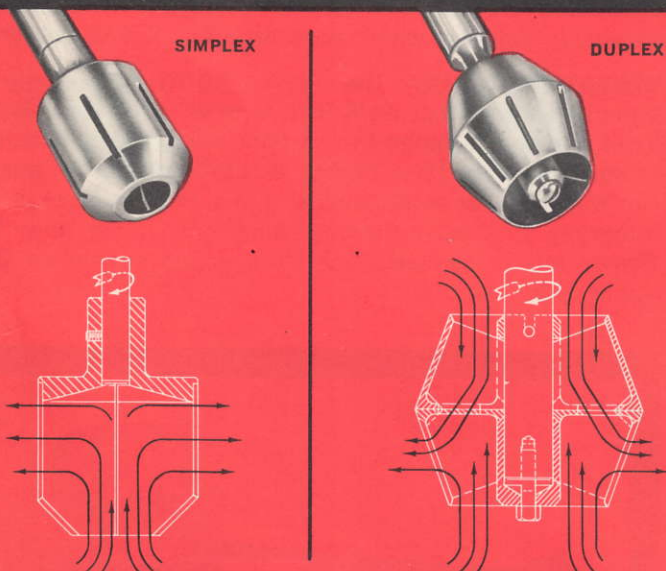
PREMIER SERIES 8000 DISPERSATOR

CONSTRUCTION: The Premier Series 8000 Dispersator head and shaft assembly is driven from motors by cog rubber timing belts, thus combining the positive, non-slip action of chain drive with the flexibility and shock resistance of rubber. Power loss is nil, and maintenance is at a bare minimum. Bearings are of the highest quality, designed for continuous use at maximum torque and thrust delivered by the unit.

SPEEDS: Shaft speeds range from 1800 to 2400 rpm, depending on belt ratios. Tests on small, laboratory-size Dispers-

ators can be scaled up to indicate the proper speed of the Series 8000 unit. Motor sizes run from 15 to 50 hp., depending on specific gravity and viscosity of materials, head speed, intensity of circulation desired and other factors. All appropriate voltages and cycles are available with open drip-proof, totally enclosed, or explosion-proof motors.

MATERIALS: All wetted parts — head, shaft and mounting flanges are made of type 304 or type 316 stainless steel. Other alloys, such as Hastelloy B, can also be supplied.



PRINCIPLE OF OPERATION

The carefully balanced and slotted cylindrical head with internal baffles rotates at high speed to draw material in. Centrifugal force whirls the material out through precision-machined slots. Thus material is (1) sheared hydraulically as it passes through the slots, and (2) sheared by the "blades" of material emerging from the cylinder and knifing into the slower-moving liquid mass outside. This intense action overcomes surface forces and produces complete wetting and breakdown of particle size.

SIMPLEX DISPERSATOR HEAD for dispersing materials heavier than the suspending liquid. Pumping action pulls material up through single opening.

DUPLEX DISPERSATOR HEAD disperses materials that float. Pulls material up and down. Mixes all gravities.

If Your Process Involves **DISPERSING • EMULSIFYING • DISINTEGRATING • HOMOGENIZING . . .** look to **PREMIER**



PREMIER MILL CORPORATION

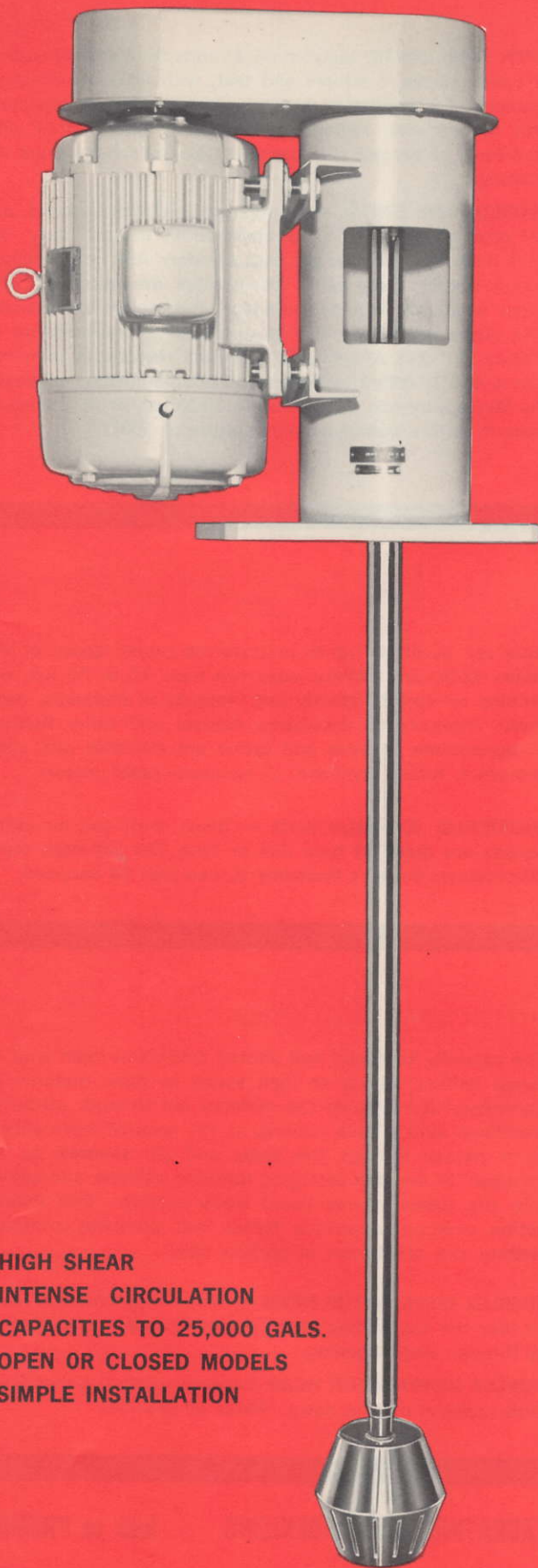
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- HIGH SHEAR
- INTENSE CIRCULATION
- CAPACITIES TO 25,000 GALS.
- OPEN OR CLOSED MODELS
- SIMPLE INSTALLATION

PREMIER SERIES 8000 DISPERSATOR

THE PLUS FACTOR IN VOLUME MIXING

PERFORMANCE PLUS: The Series 8000 Dispersator blends, mixes, homogenizes and emulsifies. It is a combined submerged pump and high shear device for rapid and thorough dispersion and solution. It picks up where conventional mixers leave off, and accomplishes much more.

EFFICIENCY PLUS: Where ordinary equipment fails, the Dispersator with high intensity action succeeds. Surface forces are overcome — particles are thoroughly wetted.

It will speed up chemical reactions by bringing the components into more intimate contact with each other. It will dissolve, emulsify, disperse and generally mix faster than ordinary equipment.

The product is hydraulically sheared as it passes through precisely machined slots in the Dispersator Head, and impinges upon the slow moving surrounding liquid. In addition to its higher intensity, it gives better overall circulation because of its submerged pumping action, all without excessive swirling, which does little but use up power.

VERSATILITY PLUS: The Series 8000 Dispersator is equipped with either an 8 inch Simplex or 8 inch Duplex head. Capacities range from 1,000 to 25,000 gallons, and motor sizes from 15 to 50 hp. In addition to batch quantities it is ideal for continuous systems and can be mounted integrally on a mixing tank or directly in a pipe-line. The Dispersator is available for either open or closed tank application.

OPEN TANK UNIT



CLOSED TANK UNIT

