

Typical Applications and Specifications

COSMETIC/ PERSONAL CARE	FOOD & BEVERAGE	PHARMACEUTICAL	CHEMICAL
Perfumes Toothpastes Hair Dyes Creams & Lotions Shampoos Soaps	Yogurt Salad Dressings Mayonnaise Cheese Sauce Condiments Creams BBQ Sauce Spreads	Antibiotics Topical Creams & Gels Ointments Injectables Suppositories Nutritional Drinks Oral Suspensions	Asphalt Emulsions Fungicides & Insecticides Toners Pigments Lacquers Resins

		MODEL		
		Z1	Z3	Z5
POWER (Maximum)	HP (kW)	10 (7.5)	25 (18.5)	60 (45.0)
CAPACITY*	gpm (lpm)	30 (115)	100 (380)	300 (1150)
RPM		6000	3600	1800
ROTOR & STATOR SETS		1 to 3	1 to 3	1 to 3
OPERATING PRESSURE	psi (bar)	0 - 120 (0 - 8)	0 - 120 (0 - 8)	0 - 120 (0 - 8)
INLET & DISCHARGE FITTING	in (mm)	1.5 (38)	2 (50)	3 (75)

*Actual capacities may vary depending on inlet pressure, tooling selection and product characteristics.



613 Colby Drive
Waterloo, ON, CA N2V 1A1



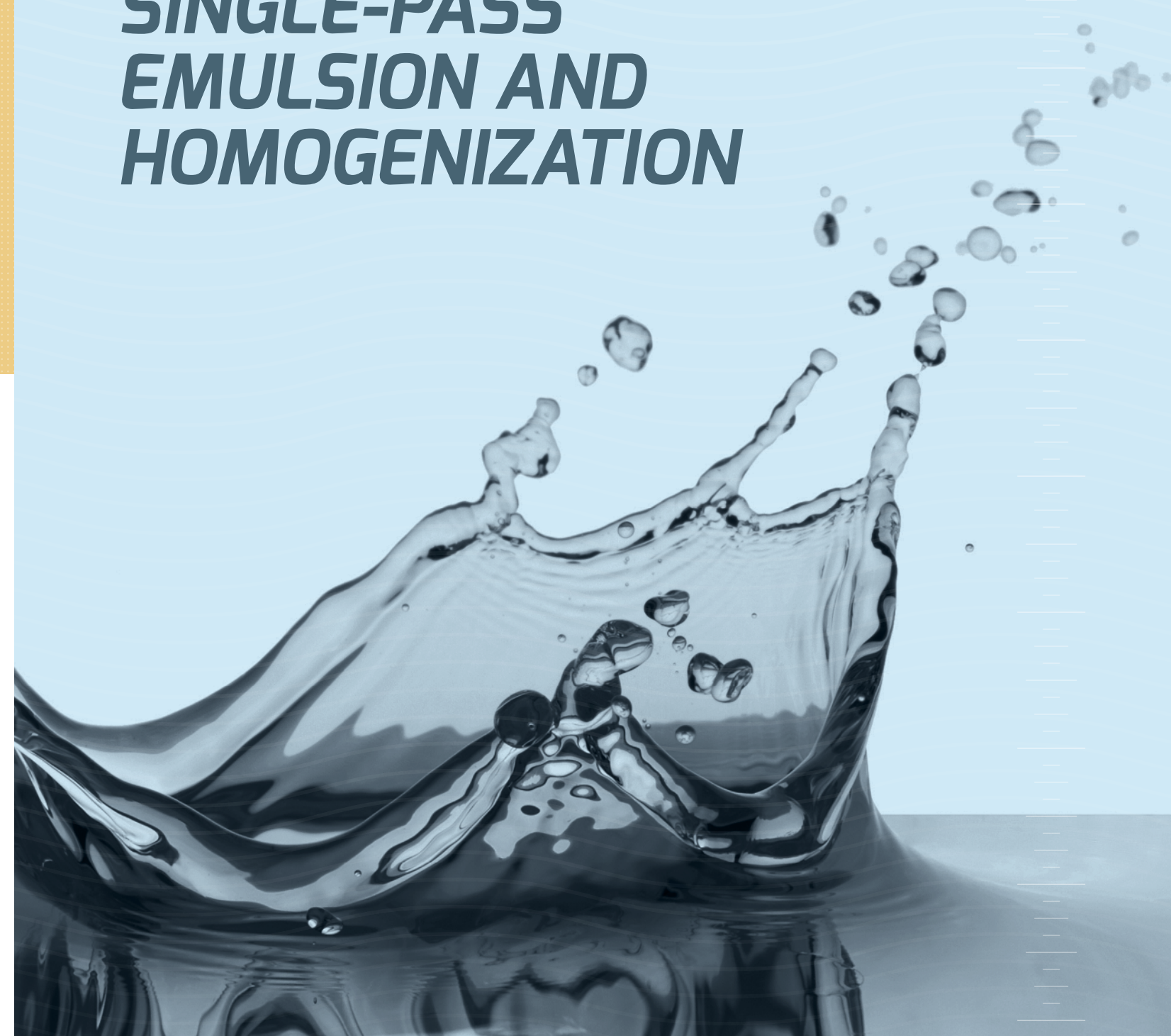
832 Industrial Drive
Elmhurst, IL 60126

Local Representative

quadrosales@idexcorp.com www.quadroliquids.com

YtronZ2015

SINGLE-PASS EMULSION AND HOMOGENIZATION



QUADRO® LIQUIDS PROCESSING Ytron Z Emulsifier

Unmatched performance. Exceptional service.

SINGLE-PASS EMULSION AND HOMOGENIZATION

HIGH SHEAR PROCESSING

The Quadro Ytron® Z Emulsifier delivers unparalleled consistency and control of high shear process applications such as immiscible phase emulsifying/homogenizing, wet grinding, deagglomeration and fine solids dispersing.



High differential velocities

Incorporating up to three sets of toothed rotor/stator heads, the Z Emulsifier processes product while passing multiple shear zones in a single pass. The result is consistent, repeatable quality at capacities exceeding conventional multi-pass technology.

Tooling flexibility

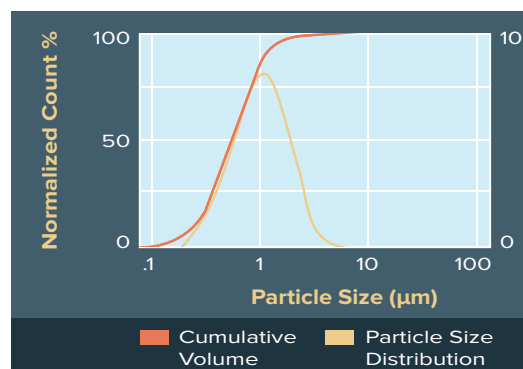
Rotor/stators for the Z Emulsifier are available in a variety of slot sizes which allows for a high degree of fine tuning. Through tooling selection aided by our application engineering team, as well as varying rotor tip speed, the amount of shear can be precisely controlled.

Scalable throughput

Four sanitary models are available from pilot plant capacities to >300 gpm (1136 lpm). Throughput can be scaled without altering product characteristics, texture or particle size distribution with the unique implementation of Quadro's turbulent kinetic energy model.

ENHANCED YTRON Z PERFORMANCE

In a single-pass, the Z Emulsifier achieves tight particle size distribution with typical d_{90} distributions between 1-5 micron.



Close tolerance tooling.



FEATURES

- 1 Sanitary design with clamped housing, easily dismantled for cleaning; CIP and SIP options available. Meets 3A® standards.
- 2 All stainless steel construction.
- 3 Single and double mechanical seals provide for high-temperature, high-pressure performance.
- 4 Single-speed drive with variable speed options.
- 5 Stainless steel base with portable, locking casters.



Unique three-stage tooling.

DYNAMIC PRINCIPLES

- Product enters housing axially under pressure, typically fed from a processing pump.
- One or more liquid phases and suspended particles are then pumped through 1, 2 or 3 sets of toothed rotor/stators.
- Controlled, high-intensity shear is delivered equally to all fluid elements.