

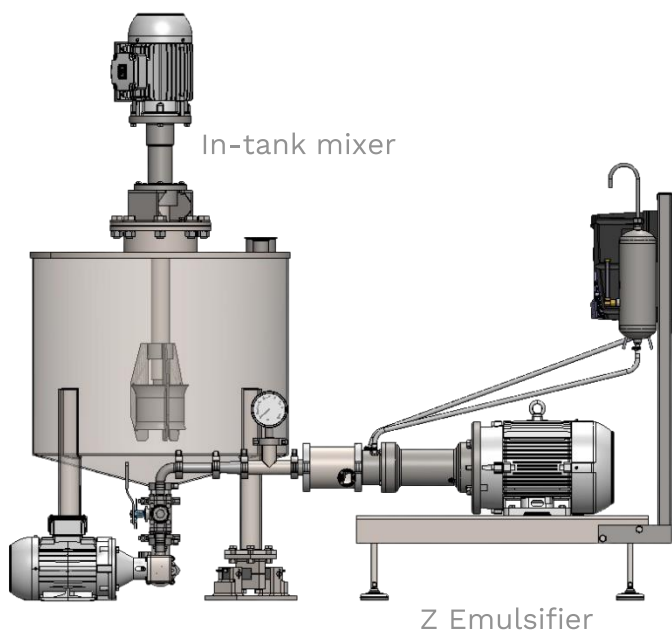


## **The Quadro Ytron® Z – Inline Emulsifier Mixer** **SINGLE-PASS EMULSIFICATION & HOMOGENIZATION**

The Quadro Ytron® Z Emulsifier high-speed, high shear emulsifying mixer delivers unparalleled consistency and control of high shear process applications such as emulsifying, wet milling or grinding, suspension deagglomeration, texturizing, and fine-particle dispersion.

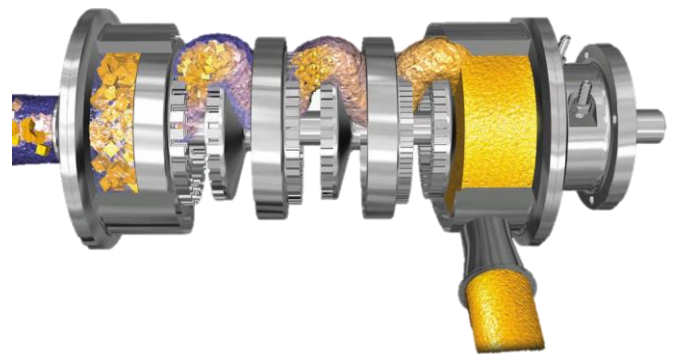
The Quadro Ytron® Z Emulsifier can be used to replace inefficient in-tank high shear mixers and low-pressure piston homogenizers. It can also be used as an additional processing step to make up for poor dispersion or processing of ingredients upstream of the unit.

### **The Quadro Ytron® Z – Inline Emulsifier Mixer** **TYPICAL SET-UP**



Positive Displacement Pump

### **The Quadro Ytron® Approach**



#### **Dynamic Principle**

1. Product enters the housing axially.
2. One or more liquid phases and suspended particles are pumped through 1, 2, or 3 sets of toothed rotors / stators.
3. Controlled, high-intensity shear is delivered equally to all fluid elements, regardless of product characteristics.
4. Shear rate is constant, dependent only on rotor / stator tooth selection and rotor tip speed.

**Unparalleled consistency  
& control of high shear  
process applications**



## The Quadro Ytron® Z – Inline Emulsifier Mixer BENEFITS

### Improved Performance

Multiple stage tooling improves mixer performance and eliminates product bypassing. An equal application of shear energy avoids over-processing.

### Versatility

The variety of available tooling enables a unique solution for each mixing application.

### Increased Capacity

Toothed-style tooling offers increased capacity over other inline milling technologies.

### Ease of Assembly

Efficient design reduces installation and maintenance time.

### Repeatability

Constant batch-to-batch production capabilities.

### Enhanced Product Quality

Improved “sheen” and product texture through smaller and more homogenous particle size.

### Precise Scalability

Use of the Ytron® Z Emulsifier mixer allows a greater precision in scaling from pilot to production.

### Cleanability

Designed to meet 3-A Sanitary Standards for easy cleaning.

## COMMON APPLICATIONS



### Personal Care & Cosmetics

Creams & Lotions  
Shampoos  
Soaps  
Toothpaste  
Hair Dyes  
Perfume



### Pharmaceutical

Ophthalmic  
APIs  
Oral Suspensions  
Topical Creams & Gel  
Antibiotics  
Ointments  
Injectables  
Suppositories



### Food

Yogurt  
Salad Dressings  
Sauces & Condiments  
Beverages  
Creams  
Spreads



### Chemical

Fungicides  
Insecticides  
Toners  
Pigments  
Lacquers  
Resins

## Quadro Ytron® Z Model Sizing

		Z MODEL			
		ZC0 (Z0)	Z1	Z3	Z5
MOTOR SIZE*	HP(kW)	3 (2.2)	10 (7.5)	25 (18.5)	60 (45)
CAPACITY	gpm (lpm)	15 (60)	30 (115)	100 (380)	300 (1,150)
RPM		6,000	6,000	3,600	1,800
ROTOR & STATOR STAGES		1	1 to 3	1 to 3	1 to 3

\* Max. Size - Other motor sizes available.