

# Quadro Ytron®

Y JET MIXER

## IN-TANK MIXING SYSTEM FOR LIQUID BLENDING, POWDER INCORPORATION AND DISPERSION

- Jet discharge creates a pure axial flow pattern
- Eliminates vortexing and unwanted air entrainment
- Reduces blend times by as much as 80%
- Easily suspends and re-suspends high settling rate solids
- Improves heat transfer
- Easily maintains complete tank motion of non-Newtonian fluids
- Low shear, bulk tank mixing for gentle handling of shear sensitive products

## TYPICAL APPLICATIONS

- |                         |                      |                   |
|-------------------------|----------------------|-------------------|
| • Beverages             | • Ice Cream          | • Paints          |
| • Pigments              | • Antacids           | • Fumed Silica    |
| • Cocoa                 | • Skim Milk          | • Tomato Paste    |
| • Lotions               | • Pectin             | • Sugar Solutions |
| • Carbon Black          | • Yogurt Mix         | • Tablet Coatings |
| • Salad Dressings       | • Shampoo            | • Paper Coatings  |
| • Bentonite Clay        | • Toothpaste         | • Sugar Solutions |
| • Fruit Blending        | • Gelatin            | • Gums            |
| • Granulation Solutions | • Diatomaceous Earth | • Antibiotics     |



# QUADRO YTRON®

## MAXIMUM PERFORMANCE

The Quadro Ytron® Y Jet Mixer uses a unique rotor/stator mixing head that creates a pure axial flow discharge jet to provide efficient in-tank mixing and blending. The wasteful radial flow and vortexing that are the downfall of conventional open impeller design mixers are gone forever. Air entrainment is virtually eliminated without the use of baffles.

The Y Jet Mixer's strong axial flow pattern produces a uniform velocity profile, throughout the vessel with no stratification or dead areas, improving heat transfer rates and reducing batch blending times by as much as 80%. The Y Jet Mixer's flow characteristics are ideal for the suspension and re-suspension of high-settling-rate solids.

### JET MIXER FEATURES

- No wearing components in contact with the process fluid
- Stainless steel construction
- Multiple mixer shaft sealing options for full vacuum through 185 psig at temperatures up to 400°F
- Air driven motors
- Variable speed options
- Sanitary CIP design option
- Available in top, side and bottom mounting configurations
- Significantly reduce air entrainment
- Subsurface, lump free dispersions, less product waste
- Excellent for difficult, floating powders
- Eliminates powder build-up on the vessel walls and mixer shaft - reduces cleaning times

## QUADRO'S APPROACH

An innovative **by-pass tube** makes use of the strong negative pressures at the Y Jet Mixer's rotor to draw powders and liquids directly into the rotor/stator head. The result is the immediate sub-surface dispersion of powders and viscous pastes into the liquid phase. Shear is applied to the product as it is discharged from the bypass tube for single-pass dispersing.



## SPECIFICATIONS

| Model   |         | Y0   | Y2    | Y3     | Y4     | Y5      |
|---|---------|------|-------|--------|--------|---------|
| Power (Maximum)                                       | HP      | 1/3  | 3     | 10     | 30     | 75      |
|   | kW      | 0.25 | 2.2   | 7.5    | 22.4   | 56      |
| Liquid Blending/<br>Solids Suspension<br>(Batch Size) | Gal     | 75   | 600   | 6,000  | 20,000 | 60,000  |
|   | Liters  | 285  | 2,280 | 22,800 | 76,000 | 228,000 |
| Powder<br>Incorporation<br>(Batch Size)               | Gal     | 25   | 300   | 1,000  | 4,000  | N/A     |
|   | Liters  | 100  | 1,140 | 3,800  | 15,200 | N/A     |
| Powder<br>Feed Rate                                   | lbs/min | 2    | 50    | 150    | 200    | N/A     |
|   | kg/min  | 1    | 23    | 68     | 90     | N/A     |

\* Actual volumes and capacities will vary depending upon product characteristics

## TRY BEFORE YOU BUY

Determine the exact savings and improvements to your process with free product testing in our R&D Test Center, or by trying a rental Y Jet Mixer in your plant. Visit our website at [www.quadro.com](http://www.quadro.com) for further details.

### LOCAL REPRESENTATIVE



**QUADRO**  
Leading Process Equipment Innovation

**IDEX**  
SANITARY GROUP

Quadro Engineering Corp.  
613 Colby Drive  
Waterloo, ON, CA N2V 1A1  
T 519-884-9660  
F 519-884-0253  
sales@quadro.com  
www.quadro.com

Quadro (US) Inc.  
55 Bleeker Street  
Millburn, NJ, USA 07041-1414  
T 973-376-1266  
F 973-376-3363  
sales@quadro.com  
www.quadro.com