

Quadro Ytron Powder Dispenser Model: XC1-3A

Mfg: Quadro Ytron

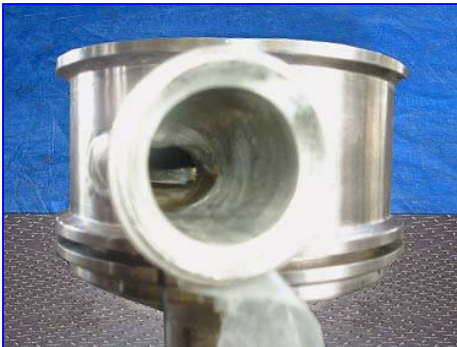
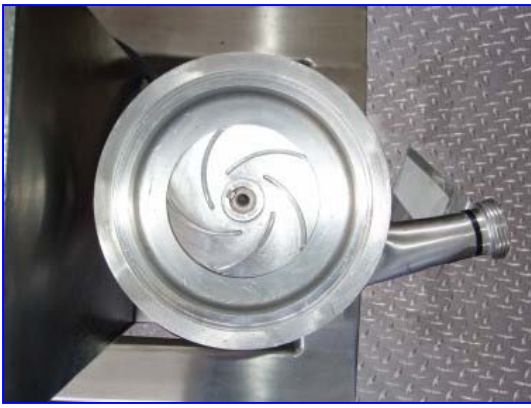
Model: XC1-3A

Stock No. ENDX746.6

Serial No. XC1-0007R

Quadro Ytron Powder Dispenser, Model: XC1-3A, S/N: XC1-0007R. Liquid capacity: 40-70 gpm, Powder capacity: 150 lbs/min. 3A sanitary CIP cleanability. (2) 4.25 in. dia impellers. VP motor: 7.5 hp, 3,520 rpm, 6.7 amps, 575 V, 60 Hz, 3 phase. Final speed: 5,400 rpm. Inlets/outlets: (2) 1 1/2 in., (1) 2 in., (1) 1 in. The Quadro Ytron XC has a dual stage reactor housing designed specifically to incorporate and disperse large quantities of powders into a liquid stream in a single pass, without aeration. The first stage in the reactor creates a strong vacuum ensuring the powders are drawn into the reactor head. Immediately after the powder comes into contact with the liquid, the premix is subjected to directional and velocity changes as the mix repeatedly impinges on stationary baffles. The second stage tangentially discharges a smooth, lump-free, homogeneous product. Unit serves many applications in the food & beverage, pharmaceutical, and industrial field. See pdf for detailed information on this unit. Overall dimensions: 29 in. L x 21 in. W x 32 in. H.





Quadro Ytron XC Powder Dispenser - Innovative Technology for the Food, Beverage, Pharmaceutical, Personal Care and Fine Chemical Industries.

Homogenous dispersion of powders into a liquid stream at high concentrations.



The Quadro Ytron XC Powder Dispenser complies with 3A Sanitary Standards and is USDA accepted as a Full CIP Sanitary Design and Fabrication for Dairy Processing Equipment. The Quadro Ytron XC has a dual stage reactor housing designed specifically to incorporate and disperse large quantities of powders into a liquid stream in a single pass, without aeration. The Quadro Ytron XC can be used continuously as part of an in-line process or as part of a batch process. The Quadro Ytron XC is available in two models, the Quadro Ytron XC1 and Quadro Ytron XC3.



Advantages of the Quadro Ytron XC are:

Performance

- Concentrations up to 40% in a single pass.
- Lump free dispersions, even at cold temperatures.
- Higher product yield due to the intensive wetting of the powders.

Single Pass Operation

- Repeatable, consistent product, batch to batch.
- No product recirculating required, reduced batch times.

Inline Powder Incorporation

- No unnecessary air entrainment.
- No powder wastage.

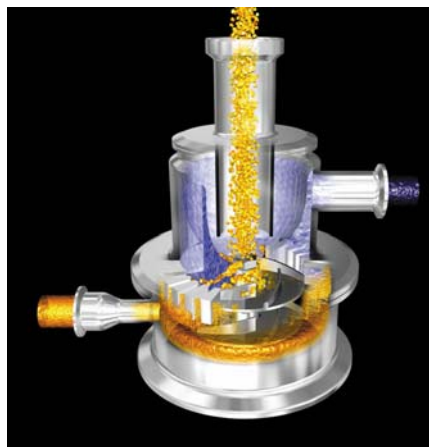
Easy Clean-up

- 3A Approved.
- CIP.
- Sanitary construction.

Principle of Operation

The Quadro Ytron XC has a dual stage reactor. The first stage in the reactor creates a strong vacuum ensuring the powders are drawn into the reactor head. Immediately after the powder comes into contact with the liquid, the premix is subjected to directional and velocity changes as the mix repeatedly impinges on stationary baffles. The second stage tangentially discharges a smooth, lump-free, homogeneous product.

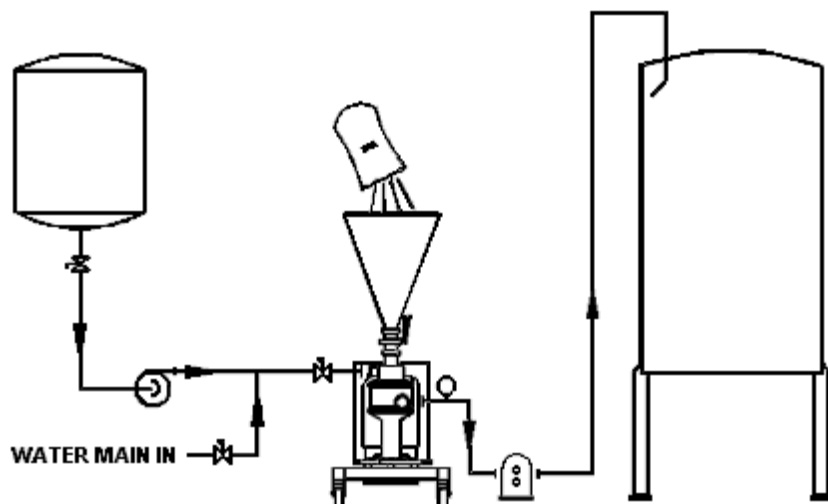
The Quadro Ytron XC Powder Dispenser overcomes the inherent problem of in-tank batch mixers which expose the powder agglomerates to randomly distributed inconsistent shear resulting in unpredictability, batch to batch. Inline dispersion ensures each particle is subjected to uniform shear as they pass through the rotor / stator, guaranteeing consistent, homogeneous dispersions.



The Quadro Ytron XC Powder Dispenser can be adapted to accept powders from a multitude of feed methods. Some of the more common methods include:

- Hand feed powder into a hopper.
- Bag dump station.
- QuadroVac vacuum delivery system.
- Wanding from a bag or drum.
- Feed from a silo.
- Feed from a bulk bag delivery system.

Typical Quadro Ytron XC Set-up, Single Pass

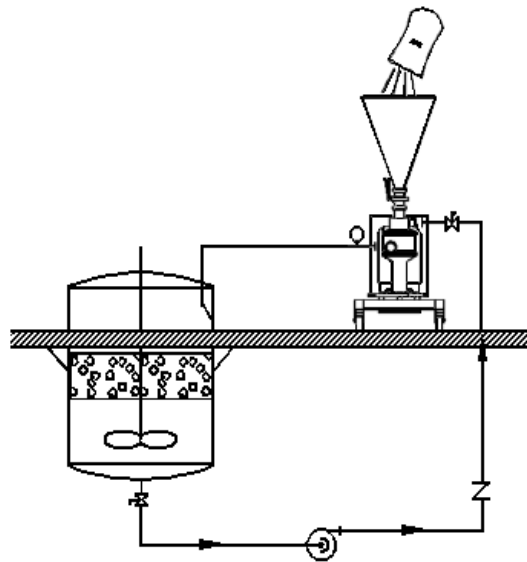


Liquid Feed - The Quadro Ytron XC requires a consistent, positive liquid feed. For the majority of applications the supply can be direct from a water main or via a centrifugal pump with some type of flow

control, i.e. orifice plate, manual valve or control valve.

Discharge - The Quadro Ytron XC is designed with a dual stage reactor housing. The second stage is designed to aid in the discharge of the product and typically if the discharge line is less than 50 ft. (15 m) on the Quadro Ytron XC1 and 200 ft. (60 m) on the Quadro Ytron XC3 a discharge pump is not required.

Single Tank Set-up



A characteristic of the Quadro Ytron XC is that the powder incorporation rate will decrease with an increase in recirculating product viscosity. However, floating the discharge on the surface, via a zero foam inlet and feeding the Quadro Ytron XC from the bottom of the tank will allow for a single tank set-up.

Technical Specifications

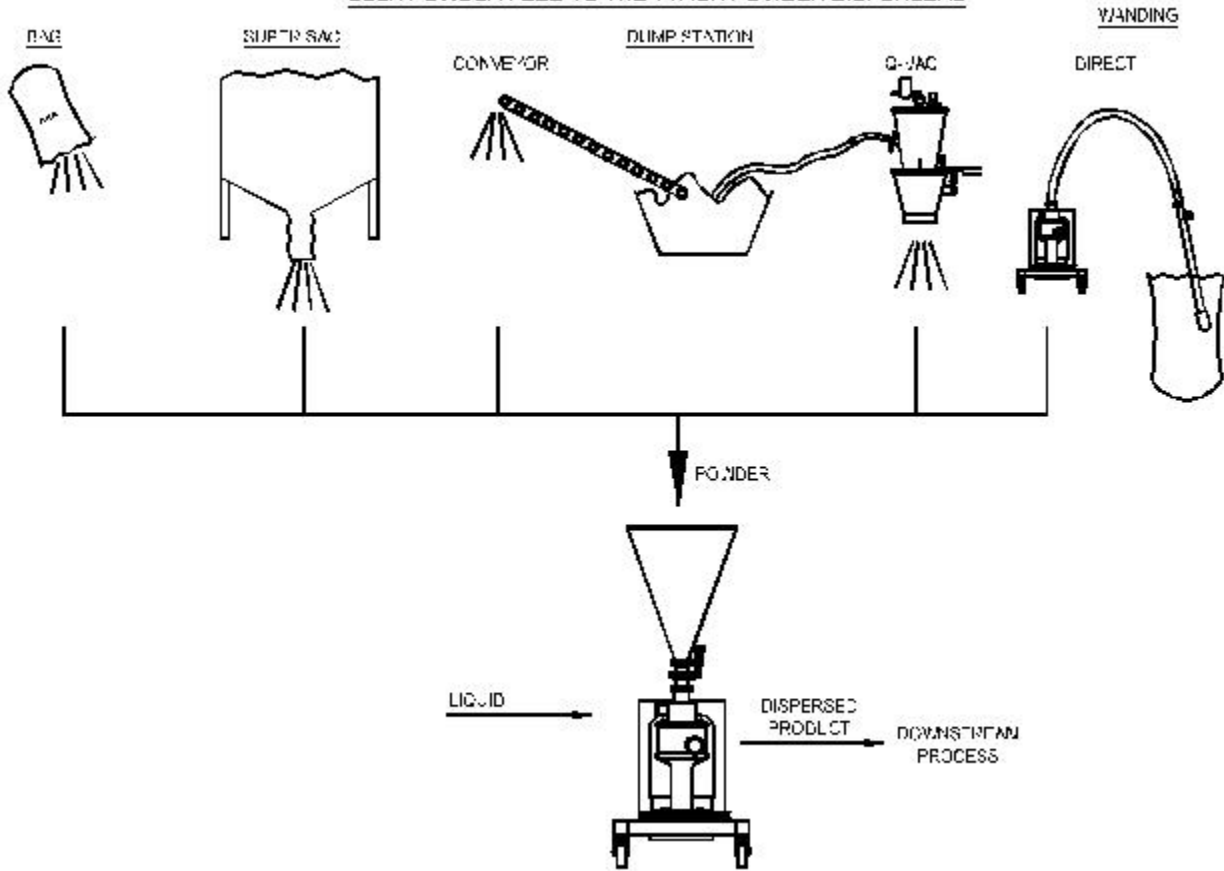
The Quadro Ytron XC is manufactured of stainless steel and is available in two model sizes. Each model is available with single or double mechanical seals.

QUADRO YTRON "XC" INLINE POWDER DISPERSION MODELS TECHNICAL SPECIFICATIONS

Item	Quadro Ytron XC1
Liquid Capacity (USGPM) [L/min]	40 - 70 [150 - 265]
Powder Capacity (lbs/min) [kg/min]*	150 [68]
RPM	5400
HP [kW]	7.5 [5.5]
Inlet Fitting Size (in) [mm]	1 ½ [38]
Outlet Fitting Size (in) [mm]	1 ½ [38]
CIP Cleanability	Yes (3A)

* Actual powder capacity will be based upon powder flow characteristics and bulk density.

BULK POWDER FEED TO THE YTRON POWDER DISPENSERS



Typical Applications

Food & Beverage

- Milk powder
- Whey powder
- Protein powders
- Gums & Stabilizers
- Cocoa
- Starch
- Maltodextrin
- Ice cream mix
- Drink syrups/concentrates
- Infant formula
- Yogurt mix

Pharmaceutical

- Nutrient replacement drinks
- Antacids
- Cough syrup
- Growth media
- Cell cultures
- Gelatin
- Pigment dispersions

Industrial

- Paint
- TiO₂, oxides, pigments
- Stabilizers
- Coatings
- Carbon dispersions
- Inks
- Resins
- Textile colors