



POWDER-MAX

Quickly Blend Wet and Dry Ingredients

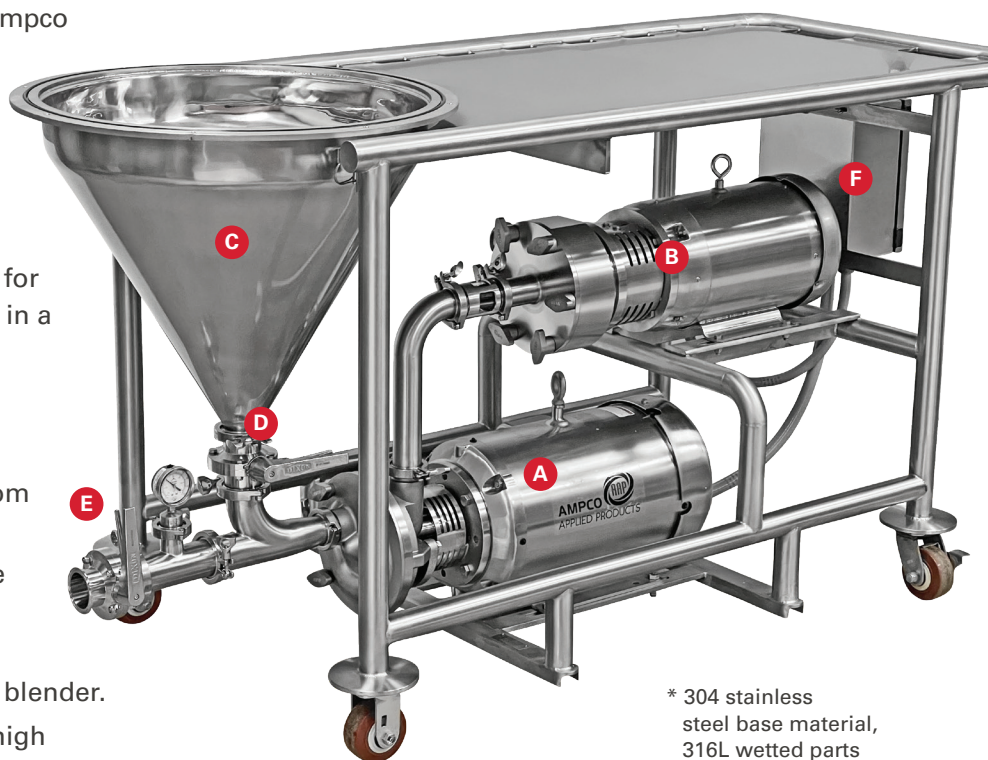
EFFICIENCY AND PRECISION WITH NO BATCH SIZE LIMITS

Reduce processing time with optimal product consistency and no batch size limitations. The Ampco Applied Products POWDER-max delivers!

Our innovative CIP-able POWDER-max features an ergonomically designed tabletop to facilitate limitless production runs. The fully customizable streamlined and operator-friendly POWDER-max safely allows for the quick blending of wet and dry ingredients in a single, fully portable unit.

How it Works

- The fluid from the batch tank is drawn in from the self-priming SP liquid ring feed pump.
- Powder and fluid meet in the induction tube when the hopper's valve is opened.
- Mixing begins in the SP pump, then flows through a short transfer tube into the shear blender.
- The standard option shear blender runs at high speeds to continue the process of efficiently mixing the fluid and powder.
- The final mixture is then pumped into a batch or process tank.
- Ampco Applied Products engineers understand that one size does not fit all and offer many custom options or adaptations to the POWDER-max to fit your application needs.



* 304 stainless steel base material, 316L wetted parts

Key Components

- | | |
|-----------------------------------|---------------------------------|
| A. Feed pump- SP liquid ring pump | D. Powder control valve |
| B. Ampco shear blender/mixer | E. Fluid control valve |
| C. Powder hopper | F. Dual-motor starter - NEMA 4X |

Options

Custom Components:

- | | |
|---------------------------|------------------------|
| • Hopper lids | • Hopper level sensors |
| • Bulk bag connectors | • Pressure switches |
| • Hopper screens | • VFD control unit |
| • Hopper vibrators | • Custom table designs |
| • Pneumatic valves | |
| • Explosion-proof options | |

Feed Pump:

The POWDER-max is available with several feed pump options to match product viscosity with the proper flow rate.



SP Liquid Ring Pump - Standard Option

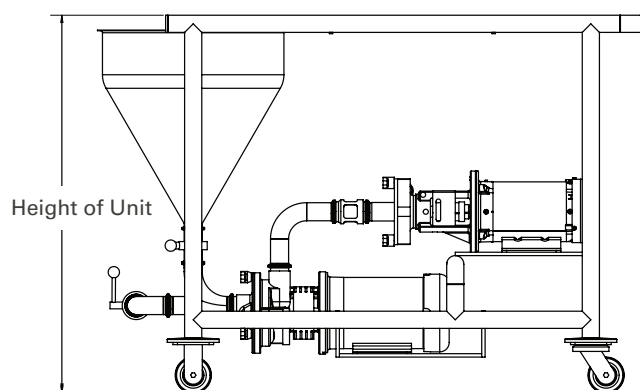
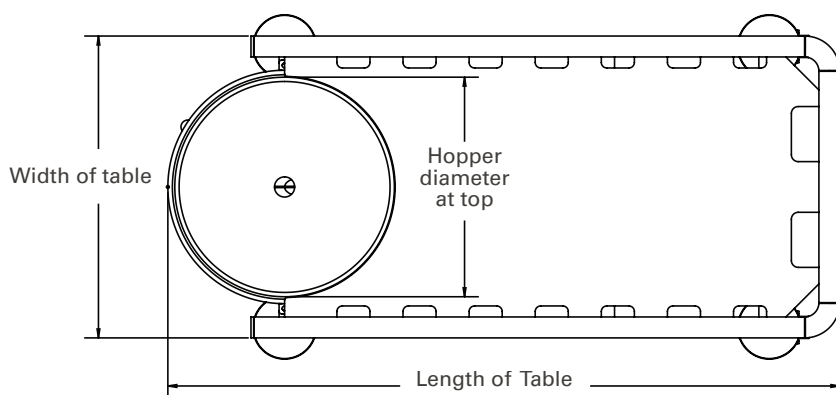
Self-priming, suited for products with planned or unplanned entrained air while maintaining specified performance and efficiency levels.

Additional feed pump options:

- ZP Series — Circumferential Piston
- AL Series — Rotary Lobe
- SLH — Twin Screw

Specifications

| | PM210 | PM215 | PM220 | PM225 |
|--|--------------------|--------------------|--------------------|--------------------|
| Performance | | | | |
| SP Model and Power | SP210 – 7.5 HP | SP215 – 10 HP | SP220 – 15 HP | SP225 – 20 HP |
| Liquid Flow (Approx) | 30-65 GPM | 65-100 GPM | 100-140 GPM | 120-175 GPM |
| Power Induction Rate | 50-100 lbs/min | 75-200 lbs/min | 125-450 lbs/min | 200-700 lbs/min |
| Thickener Induction Rate | 5-25 lbs/min | 10-50 lbs/min | 15-75 lbs/min | 20-100 lbs/min |
| Dimensions | | | | |
| Inlet and Outlet Sizes (Respectively) | 2.5"/2" | 2.5"/2" | 2.5"/2" | 2.5"/2" |
| Hopper Capacity (Approx by Vol) | 2.0 cu ft/14.7 gal | 2.2 cu ft/16.3 gal | 2.2 cu ft/16.3 gal | 2.2 cu ft/16.3 gal |
| Hopper Diameter at Top | 20" | 24" | 24" | 24" |
| Width of Table | 27.4" | 31.9" | 31.9" | 31.9" |
| Length of Table | 61.0" | 75.5" | 75.5" | 92" |
| Height of Unit | 38.2" | 37.7" | 37.7" | 37.7" |



Mixers:

The POWDER-max will be configured with one of the inline mixer options below to achieve maximum efficiency and the desired product mixture.



SBH Shear Blender

Multiple shearing teeth supply moderate-to-high shear and good product flow



SBI Shear Pump

Pumps and blends in a single stage with medium shear and great product flow



SHEAR-max High Shear Mixer

Single or dual-stage high-shear mixer, can disperse, dissolve, emulsify, de-agglomerate, homogenize, or blend



Product Application List

Beverage

- Energy Drinks
- Tea
- Fruit Juice
- Vegetable Juice
- Coffee Blends

Food

- Salad Dressing
- Salsa
- Hot Sauce
- Pizza Sauce
- Ketchup and Mustard

Dairy

- Yogurt
- Sour Cream
- Ice Cream Mix
- Flavored Milk
- Eggnog
- Pudding

Personal Care

- Toothpaste
- Lotion
- Cream
- Shampoo and Conditioner
- Body Wash

Thickeners

- Gum
- Pectin
- Starch
- Gelatin

Ingredients and Additives

- Aspartame
- Non-Fat Dry Milk
- Salt
- Citric Acid
- Sugar
- Egg Powder
- Whey Protein Concentrate
- Calcium Carbonate
- Honey
- Powder Flavoring

Bio-Pharmaceutical

- Cough Syrup
- Ointment
- Lotion
- Vitamin Drink
- Contact Solution
- Coatings

