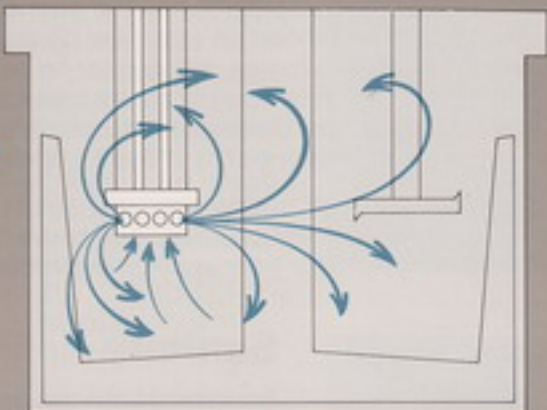
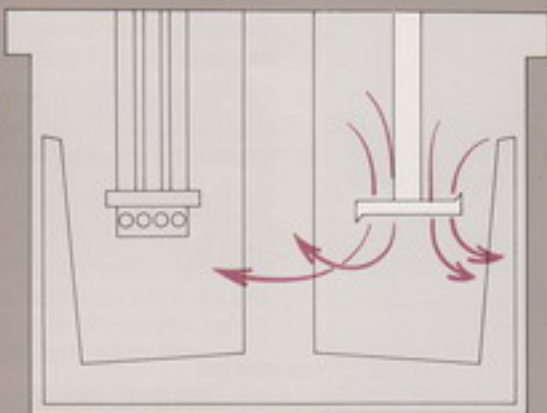


1 MIXER- EMULSIFIER



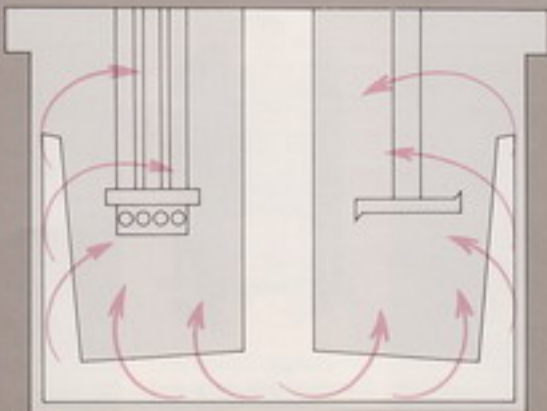
The high speed close-tolerance rotor and stator of this unique mixer provide a high degree of shear to all materials being passed through the rotor/stator gap. This intensive shearing action is used for reducing the particle size of solids, dissolution, homogenization, and emulsification. By itself it is best applied for materials that have a maximum viscosity of approx. 10,000 cps. In conjunction with the anchor its useful range can be extended to over 100,000 cps.

2 HIGH SPEED DISPERSER



The conventional shear disc dispersion blade is used to disperse solids into viscous liquid vehicles that are beyond the viscosity range of the mixer-emulsifier and anchor combination. This mixer is best applied by itself in a viscosity range to 50,000 cps, and in conjunction with the anchor to several hundred thousand centipoise.

3 ANCHOR AGITATOR



The standard three wing anchor agitator is designed to provide maximum movement under low shear conditions within the mix vessel. It moves materials in both a radial and axial direction to feed the materials to the high speed mixer heads and to also improve heat transfer by constantly removing material from the tank wall. The anchor is designed to permit either fixed adjustable or hinged teflon wiper attachment. Since the design is of a closed triangular shape it is easy to clean and is preferred for applications that will require regular cleaning between batches.



VersaMix

CHANGE

The change-can mixing concept lets the mixer do its job while additional cans are being loaded or unloaded. Other mixers are idle much of the time while being loaded and unloaded—a terrible waste of time considering the sizeable investment made in the equipment.

The Ross VersaMix is different! Its only interruption is the time that it takes to change cans. Cans may be mounted on caster wheels to make the changes quickly and easily. Mix cans may also be used for material storage, aging prior to packaging, or quality control checks. Cleaning is done efficiently away from the mix room thus keeping contamination possibilities to a minimum. Discharge systems are available to facilitate emptying. These may be supplied in different styles. See illustration below.

Most attractive are the cost savings. High quality products can be produced and achieved in less time at lower cost. We can prove the superiority of the VersaMix for your application in our laboratory.

Sanitary

Sanitary change can models are offered in the same wide range of sizes as are the standard models. They are constructed in either type 304 or 316 stainless steel. Corners are rounded and wetted stainless surfaces are polished to a 140 grit finish to facilitate cleaning between batches.

The stainless steel panels covering the drives and hydraulic lifting mechanism are all easily removed permitting access as required.

Ross designs and builds a unit to meet your exacting sanitary and process requirements, including superior polishes, as required.

MODEL PVM 100



Discharge System—
Elevated Position

FOLLOWER PLATE D

In an effort to assist our clients in the efficient handling of their material, we have designed a special follower plate discharge system for use in conjunction with our change-can mixers from 2 through 500 gallons capacity.

A flat follower plate of stainless steel construction is mounted on a heavy steel structural base frame assembly. The base may be mounted directly in front of the mixer or at a remote location. The base is either elevated on a platform to permit discharge of the

CAN DESIGN

Laboratory

Research and development results are readily scaled up to pilot plant and production equipment. The 1½ gallon working capacity laboratory model allows users to develop new products with the knowledge that their work can be duplicated on larger production equipment. This machine includes standard features such as stainless steel wetted parts, a jacketed mix bowl, up to 29½" Hg vacuum, Three-Wing Anchor, Mixer Emulsifier with three interchangeable heads and a conventional High Speed Disperser. All agitators have electrically controlled variable speed drives.



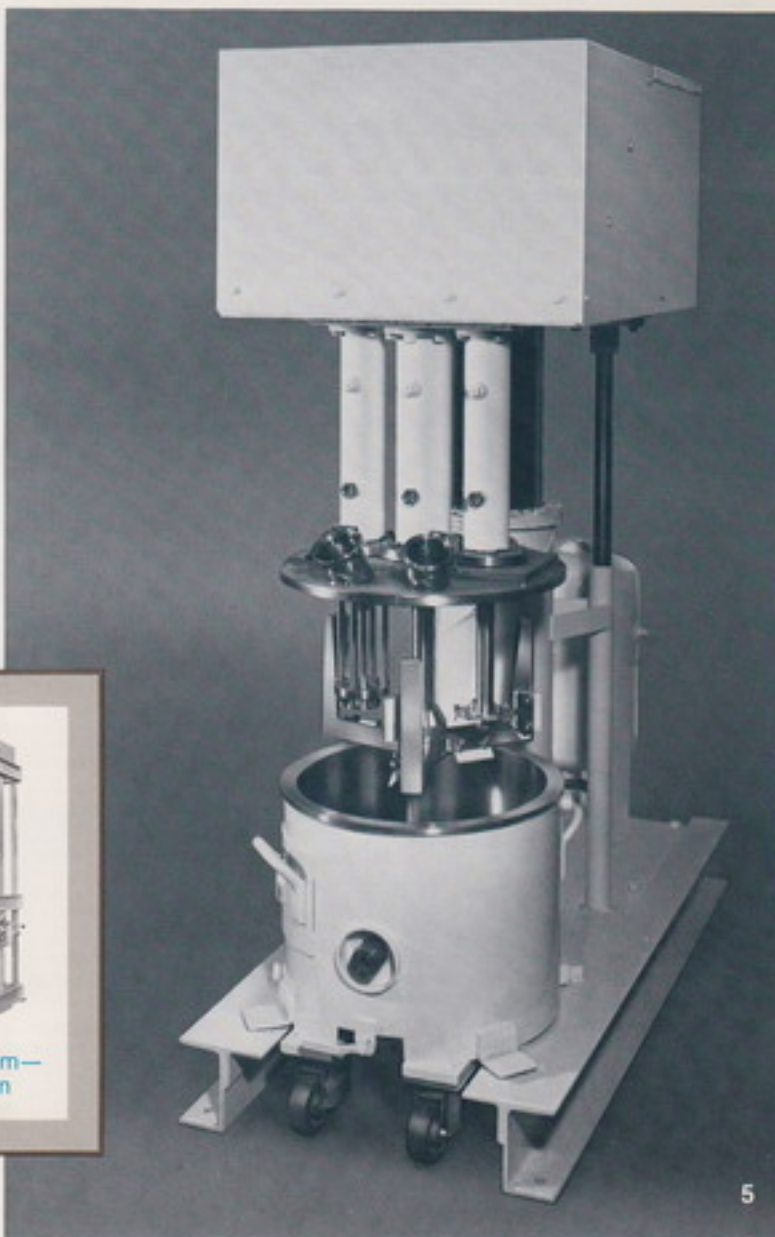
MODEL PVM 2

Standard

Standard units include steel wetted surfaces and heavy structural frames. All exterior surfaces are cleaned and painted with a high quality two-component epoxy coating formulated to resist a wide range of solvents. The motors and reducers are mounted in a manner to make them easily accessible for routine maintenance procedures. Bearings, shaft seals and sealing gaskets are selected so they can be replaced in a minimum of time.

Agitator shafts are supported in a 1 to 1 ratio relative to their overhung length. This feature minimizes possible shaft deflection and potential mechanical failures. Since most of these units are used for dense, viscous materials the rugged construction of the VersaMix lends itself to long term trouble-free operation.

A wide selection of optional features are available to meet your particular needs.



MODEL PVM 10

CHARGE SYSTEMS

mixed materials directly to packaging machinery or containers or it is automatically raised as illustrated.

A pneumatic or hydraulic cylinder is utilized to push the follower plate down into the mix can. The pressure of the plate forces the mixed materials through a discharge opening in either the bottom or front of the mix can. Wipers of either neoprene or Viton mounted around the periphery of the follower plate help to minimize hang-up of mixed materials on the walls of the vessel.



Discharge System—
Lowered Position

MODEL PVM CHANGE CAN AND VM FIXED TANK SELECTION CHART

Mixer	Mixing Capacity in Gallons (liters)	Full Holding Capacity in Gallons (liters)	Weight Lbs (kg)	Horsepower Range			Tank Diameter	Tank Depth	Base Length	Base Width	Lowered Height	Raised Height
				Mixer Emulsifier	Dispenser	Anchor						
PVM 2	1½ (5.7)	2 (7.5)	350 (155)	½	½	½	9½"	6½"	31"	18"	21½"	28½"
PVM 10	10 (37.5)	15 (56)	2,000 (910)	1½	2-5	1½-3	18"	13½"	48"	25½"	62"	77"
PVM 40	40 (151)	47 (179)	3,400 (1547)	1½-5	3-7½	3-5	25"	22"	65½"	33"	66"	89"
PVM 100	100 (378)	115 (435)	5,500 (2500)	5-15	5-10	5-10	34½"	28½"	88"	41"	91"	121"
PVM 150	150 (567)	184 (696)	8,000 (3640)	10-25	7½-20	7½-15	44"	28"	108"	47"	108"	144"
PVM 200	200 (757)	225 (851)	8,500 (3865)	10-25	7½-20	7½-15	44"	34"	108"	47"	108"	144"
PVM 300	300 (1135)	398 (1506)	9,500 (4320)	25-50	10-30	10-20	55½"	38"	140"	54"	130"	170"
PVM 500	500 (1875)	600 (2250)	11,500 (5330)	25-75	15-60	15-30	58"	55"	122"	62"	142"	198"
VM 750	750 (2812)	912 (3420)	10,200 (4533)	50-75	20-60	20-40	60"	82"	NA	68"	NA	106"
VM 1000	1,000 (3750)	1,231 (4616)	12,000 (5333)	50-75	25-75	25-50	66"	90"	NA	76"	NA	120"
VM 1500	1,500 (5625)	1,767 (6626)	15,000 (6666)	75-100	40-100	25-50	78"	94"	NA	90"	NA	124"
VM 2000	2,000 (7500)	2,420 (9075)	18,000 (8000)	75-150	75-150	25-75	90"	98"	NA	104"	NA	134"

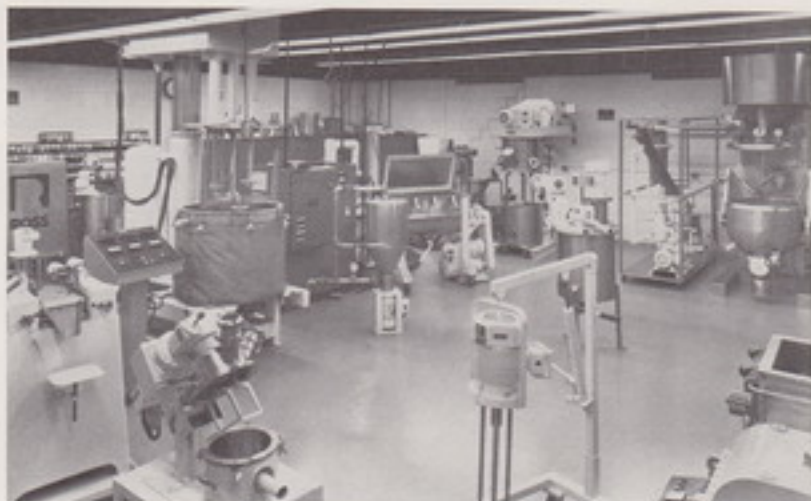
*All dimensions and weights are approximate as they vary with the actual horsepower and drive arrangement selected for a particular unit. Fixed tank VersaMix units available from 10 through 4000 gal capacity.

ROSS CUSTOMER SERVICE LABORATORY

A wider range of testing capability than any other single lab.

A complete Customer Service Laboratory is located at the main plant in Hauppauge and occupies over 3,000 sq. ft. This facility offers all types of equipment manufactured by Ross for your use prior to final selection and purchase of equipment. Many new ideas have been translated into actual production by such testing with the assistance of our technical service personnel.

If more convenient, laboratory and pilot plant models are available for rental and use in your facilities. We welcome the opportunity of assisting you on your mixing requirements. Our qualified technical staff is prepared to assist and recommend the correct mixer for each individual application.



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