

ROTARY BATCH MINI MIXERS

Gently blend dry materials in 2 to 3 minutes, add liquids uniformly, discharge with no segregation and sanitize quickly—on a laboratory, pilot plant or small-production scale

MUNSON® Rotary Batch Mini Mixers deliver the same unique advantages as larger inline models, but in capacities from 0.25 to 15 cu ft (7 to 425 liters) for off-line laboratory,

Internal mixing flights direct material towards and through a discharge gate for complete evacuation which, together with unrestricted interior access, allows thorough cleaning and sanitizing in minutes.

Batch Mini Mixer ideal for a broad range of laboratory, pilot plant and small-production applications, from pharmaceutical, nutraceutical and food applications requiring absolute cleanliness, to minerals, glass and concrete blending requiring extraordinary durability.

Mixing efficiency from 100% of rated capacity to as low as 5% (33% for liquid additions), providing unsurpassed flexibility. In addition, results obtained are scalable to MUNSON's high capacity inline Rotary Batch Mixers.

MUNSON also offers inline Rotary Batch Mixers that have stationary inlets and outlets and capacities from 5 to 600 cu ft (142 liters to 17 m³), and Rotary Continuous Mixers with capacities from 25 to 5000 cu ft/h (708 liters to 142 m³/h).

This superior combination of attributes makes the Rotary



With a 0.25 cu ft (7 liter) batch capacity, model MX-1/4 is MUNSON's smallest Rotary Batch Mini Mixer. It is equipped as standard with manual tilt and removable drum, with results scalable to models having capacities to 600 cu ft (17 m³), making it ideal for countertop testing.

pilot plant, small-production or pre-blending applications.

The four-way mixing action gently tumbles, turns, cuts and folds the material, producing a thorough blend in only 2 to 3 minutes, while preventing degradation by imparting minimal energy and intensity to the product.

This blending action also prevents segregation during discharge regardless of particle sizes, shapes or bulk densities, and provides an ideal fluid bed for liquid additions/coatings.

Unlike stationary mixers with agitators, Rotary Batch Mini Mixers produce homogeneous blends with no shear, discharge completely with no stratification, and have no internal shafts or shaft seals to contact material.



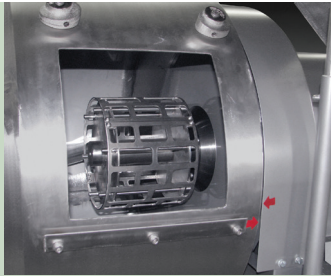
This 5 cu ft (142 liter), sanitary Rotary Batch Mini Mixer model MX-5-SS is equipped with a large access door as standard. Options shown include Swing-Away Intake Chute, Discharge Chute with frame extension, and all stainless steel construction including support frame and casters.

FEATURES

- Capacities from 0.25 to 15 cu ft (7 to 425 liters)
- 1 to 3 minute cycle times
- Uniform dry blends regardless of disparate bulk densities and particle sizes
- Uniform liquid additions, coatings, flavorings and impregnations (when equipped)
- Internal mixing flights provide a four-way mixing action: tumble, turn, cut and fold
- Gentle mixing with no shear
- Total discharge with no segregation
- Sanitary/pharma, food-grade and industrial finishes
- Long life with minimal maintenance
- Internal mixing flights configured for complete discharge and ease of clean out
- Mixing efficiency from 100% of rated capacity to as low as 5% (33% for liquid additions), providing unsurpassed flexibility
- Low power requirements, high mechanical efficiency
- Large, gasketed access door for rapid product charging, visual inspection of every interior surface, dust-tight operation, and rapid cleaning/sanitizing
- Blend quality and mix times scale identically with high capacity Rotary Batch Mixers, allowing laboratory results obtained with the Mini Mixer to be scaled up with accurate projections of system performance
- Quick-acting hand wheel for easy operation of standard valve-type discharge gate
- External seal resides out of mixing drum and is easily removed
- Small footprint—easily moved
- Gear reduced drive with direct drive or chain and sprocket arrangement
- Enclosed drive guards standard
- Mixing drum supported by twin outboard mounted heavy-duty pillow block roller bearing assemblies

OPTIONS

- Internal spray line for the introduction of liquids for coating, flavoring, coloring, agglomeration or impregnation
- Pressure pot with scale for liquid additions
- Extra-heavy-duty models for materials with high bulk densities
- Low pressure or ASME-code jackets for heating or cooling with water, steam or oil
- Finishes to meet USDA, FDA and pharmaceutical requirements
- Intensifier for dispersion of difficult-to-blend materials
- Locking casters for mixer mobility
- Mixing flights welded or bolted to inside of drum
- Drain plug for complete discharge of cleaning solutions
- #304 or #316 stainless steel, exotic alloys, carbon steel and abrasion-resistant steel
- Internal welds with minimum 0.25 in. (6.35 mm) radius, with product contact surfaces of #304 or #316 stainless steel, in #2B Mill Finish, or #4 or #7 polish
- Support structure and guards available in #304 stainless steel construction
- Removable discharge hood with vent for directing products into small containers and for dust control
- Swing-Away Intake Chute to assist with product loading into vessel access door
- Extra drum door for increased access during cleanout
- Special-purpose discharge covers for extra spray lines, heat circulation, and liquid addition air atomizing
- Controls in addition to standard NEMA Type 1



The optional Intensifier imparts shear to promote uniform dispersion of non-free-flowing or agglomerated materials.



Model MX-15-SS, 15 cu ft (425 liter) capacity Rotary Batch Mini Mixer showing large access door and optional discharge chute.

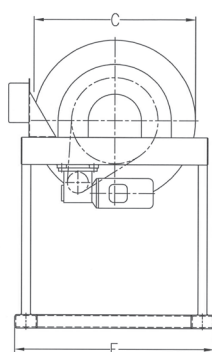
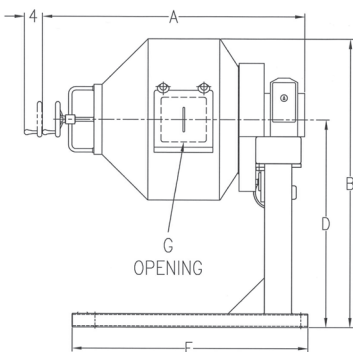
SPECIFICATIONS

Models	Batch Volume Cu Ft/ Liters	Drum Volume Cu Ft/ Liters	HP/ KW	Max Batch Weight	Shipping Weight lb/kg	Dimensions (Inches/Centimeters)						
						A	B	C	D	E	F	G
MX-1/4	0.25/ 7.1	0.5/ 14.2	0.25/ 0.19	25/ 11.3	150/ 68.0	28/ 71.1	26/ 66.0	21/ 53.3	19/ 48.3	22/ 55.9	23/ 58.4	—
MX-1	1.0/ 28.3	2.0/ 56.6	1.0/ 0.75	100/ 45.4	800/ 362.9	43/ 109.2	52/ 132.1	20/ 50.8	38/ 96.5	39/ 99.1	36/ 91.4	6x8 (15.2x20.3)
MX-3	3.0/ 85.0	6.0/ 169.9	1.0/ 0.75	350/ 158.8	860/ 390.1	49/ 124.5	53/ 134.6	30/ 76.2	38/ 96.5	46/ 116.8	36/ 91.4	10x10 (25.4x25.4)
MX-5	5.0/ 141.6	10.0/ 283.2	1.0/ 0.75	500/ 226.8	1000/ 453.6	55/ 149.7	56/ 142.2	36/ 91.4	38/ 96.5	52/ 132.1	42/ 106.7	10x10 (25.4x25.4)
MX-10	10.0/ 283.2	20.0/ 566.3	1.5/ 1.12	750/ 340.2	1150/ 521.6	66/ 167.6	60/ 152.4	42/ 106.7	39/ 99.1	59/ 149.9	48/ 121.9	12x12 (30.5x30.5)
MX-15	15.0/ 424.8	30.0/ 849.5	2.0/ 1.49	1000/ 453.6	1500/ 680.4	72/ 182.9	64/ 162.6	48/ 121.9	39/ 99.1	63/ 160.0	54/ 137.2	12x12 (30.5x30.5)

The above power requirements are generalizations that may not apply to your application. Please consult factory.

WARNING: In order to clearly show details of machines, some covers, shields, doors and guards have either been removed or are shown in the open position in photographs throughout this brochure. All protective devices must be properly installed before operation of equipment. Failure to do so may result in personal injury and/or damage to the machine components.

See "Rotary Batch Mixer Series" for larger maximum batch sizes—10 to 600 cu ft (0.28 to 17 m³).



RELATED MUNSON® EQUIPMENT:

MIXERS: Rotary Batch, Ribbon/Paddle/Plow, Cylindrical Plow, Vee-Cone, Double-Cone, Rotary Continuous, Variable Intensity, Fluidized Bed

SIZE REDUCTION EQUIPMENT: Knife Cutters, Screen Classifying Cutters, Pin Mills, Attrition Mills, Hammer Mills, Lump Breakers, Shredders

SEPARATORS: Rotating Drum Screens, Centrifugal Sifters

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