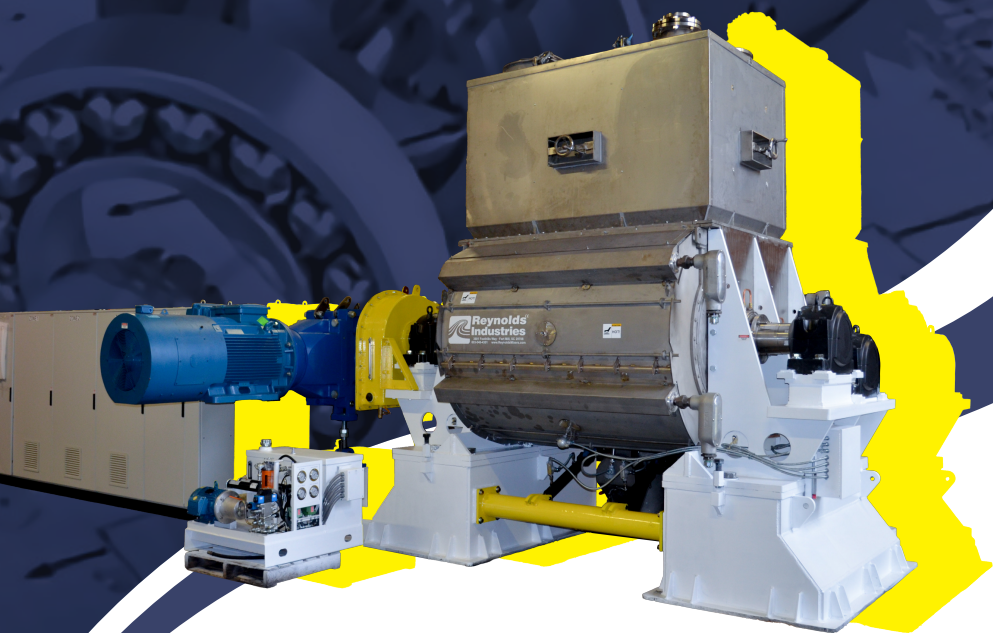




**THE MOST DEPENDABLE & EFFICIENT
INDUSTRIAL MIXING SYSTEMS**

SIGMA MIXER



www.reynoldsmixers.com

SIGMA MIXER

DESCRIPTION

Sigma mixers are known as “universal mixers” because they are almost unlimited in application. They are equipped to process batches of material in wide viscosity range. The universal mixing and kneading machine consists essentially of a rectangular trough curved at the bottom to form two half-cylinders, with two blades horizontally disposed, and driven by suitable gearing on one or both ends of the trough. The blades sweep the entire area of the half-cylinder on each revolution, revolving toward each other at unequal speed and imparting both transverse and lateral motion to the batch.

Clearance between blades and trough is extremely close so that no particle of the batch can escape the mixing action of the blades, with every particle constantly in motion while the blades are moving. An intensive kneading action is performed simultaneously with the mixing as the material is pulled and squeezed against blades, saddle, and sidewalls. Sigma mixers can efficiently handle mixes ranging in consistency from dry powders to very stiff plastic.

Vacuum mixers serve a very definite purpose in many industries mixing operations. It is often advantageous, and many times imperative, that mixing can be carried out under vacuum conditions. A batch can be economically dried by vacuum which remove solvents or moisture while material is being mixed. Oxidation of sensitive materials can be prevented by mixing; occluded gasses can also be efficiently removed and air will not be worked into mixes.

MIXER FEATURES

- Working Capacity of up to 1,000 gallons and custom models available
- Choice of stationary or tilting units for loading and unloading to suit your production needs; bottom valve discharge units also available
 - Mono-screw extruder models available
 - Jacketed trough design for heating and cooling
- Independent blade arm drive with differential rotating speeds an adjustable ratio
- Two sigma shaped blades fitted horizontally in each trough of the bowl
- Vacuum or pressure designs
- The complete mixer is mounted on steel fabricated stand of suitable strength to withstand the vibration and give noise free performance
- Explosion-proof constructions available

MIXER OPTIONS

- Special metal or alloys such as stainless steel, monel, nickel, ni-clade, etc can be used either as linings or as base materials for trough, trough ends, blades, and cover
- Hardened coating on blades can be provided to permit mixing abrasive materials
- The inner meeshing of sigma shaped blades creates high shear and kneading actions
- The trough shell and ends are split for ease in maintenance
- Automatic bearing lubrication
- Cored blades are employed to increase the heating or cooling of the batch
- Special vacuum machines are employed for mixing under vacuum, vacuum drying, or recovery of solvents and other liquids at low temperature with vacuum distillation



MIXER APPLICATIONS

- Adhesives
- Biscuit dough
- Butyl rubber
- Bakery
- Carbon pastes
- Ceramics
- Chemicals
- Chewing gum
- Crayon and pencil lead
- Fiberglass resin dough
- Gasket and gland packing
- Hot-melts
- Inks and pigment product
- Marzipan
- Mastics
- Metal powders
- Molding preparations
- Plastic
- Sealing compounds
- Silicon rubber
- Soap and detergends
- Solid propellants
- Sugar pastes
- Viscous rubber solutions

WHY CHOOSE US

DEPENDABLE LONGER LASTING MIXERS

Made in the USA. 100% designed and built in-house. We can provide full system integration which ensures everything works together.

EFFICIENT MINIMIZE BATCH CYCLE TIME

Make more product in less time. We patented the helical blade for industrial mixers, and have been maximizing performance ever since.

LOWEST TOTAL COST RIGHT FIT & EASY MAINTENANCE

We tailor our standard designs to your specific needs, and provide solutions to enhance your profitability.

CONTACT US



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