

SYSTEM OVERVIEW

Powder mixing systems, incorporating our new shear pump, are now available from Sepak Industries. The powder mixing system is a skid mounted, inline, powder/liquid blending system for introducing powders into continuous wet processes. This system is used where 'difficult to wet' powders cannot be simply tipped into a process vessel and stirred.

The powder mixer utilizes a shear pump, a self-priming pump together with a powder hopper, valves, and pipe work to significantly reduce dissolving times (up to 90%). The system can successfully dissolve 15 tonnes per hour of sugar into cold water, resulting in cost savings compared to other dissolving processes. The high shear energy, up to 125000 s^{-1} , is produced from the shear pumps 0.3 mm rotor/stator clearance and up to 38 m/s rotor tip speeds, has been proven to create homogenous emulsions from a diverse range of products.

FEATURES

- Very fast processing time
- Ensures all powder goes through the mixing head
- Homogenised product
- Hygienically constructed
- All Stainless-Steel wetted parts
- On wheels for easy handling
- Optional Dust Extraction Hood (no extraction fan included)

MULTI-PURPOSES USES

- Suitable for polishing chocolate sauces
- Puree soups and sauces
- Remix of wasted products
- Emulsifying products



Other proven applications include:

- Pectin, sugar, citric acid in cold water
- Homogenising of frozen Banana puree 30m³/h
- Egg-powder in water
- Sugar / salt in liquid eggs
- Solving minerals (magnesium carbonate) in water
- Bio-Flour (>25%) in water in a yeast factory
- Solving sugar in condensed milk (40m³/hr)
- Producing chocolate topping (cocoa, milk powder, cream powder & fat in syrup)
- Solving of minerals/vitamins /pectin/xanthan gum/fluid-aroms in juice concentrate.
- Solving of powder in fluids, like PTFE in Oil.
- Solving of fluids in fluids, like additives in engine / gear-oil, lubricants



SHEAR PUMPS

Sepak Industries Shear Pumps are designed to blend difficult to mix Powder to liquid or homogenising products. Our shear pumps can be used for Powder Mixing, Product reconstitution, Shear blending and Product emulsification.

The application of this shear pump mixer is wide ranging and include the following:

- Powder mixing
- Chocolate polishing (the shear pump can make chocolate shiny in single pass)
- Oil to water emulsifying
- Mayonnaise making
- Egg blending
- Mixing of pactum, gum etc. To water

Standard Dimensions contact us for special requirement