

# Continuous Mixers

S. Howes Continuous Paddle Mixers (sometimes called pug mills) provide continuous, uniform mixing and blending of dry ingredient recipes including liquid addition ingredients. The mixing action of the adjustable solid or loop-type provides vigorous, uniform mixing of free-flowing/non-plugging ingredients. For liquid addition, paddle combinations and feed locations can be arranged for optimal coating of products to ensure uniform absorption of liquids throughout the mix.

Continuous Mixers are available in Simplex (single agitator shaft) and Duplex (twin agitator shaft) models. Standard capacities range from 1 to 300 tons per hour; custom designs for higher capacities are also available.



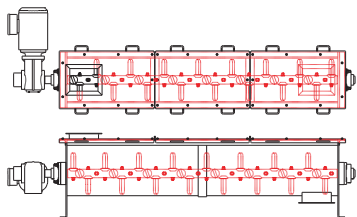
## Complete Range of Process Equipment

- Thermal Processors
- Mixers & Blenders
- Screeners & Sifters
- Screw Conveyors
- Size Reduction
- Filtration Systems



## Standard Features

- Heavy-duty construction
- Simplex (single shaft) and Duplex (dual shaft) designs
- Duplex models feature intermeshing paddles with a single drive
- Independently adjustable bolted paddles
- Direct drive or shaft mounted gear reducer & belt drive
- Self aligning bearings
- Carbon steel, stainless steel or other alloys

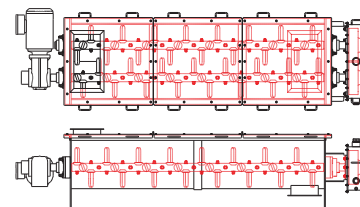


## Simplex Mixers

Simplex, or single shaft, continuous mixers include 5 standard models ranging from 5 to 12 tons per hour nominal capacity with larger models available.

## Duplex Mixers

Duplex, or dual shaft, continuous mixers include 10 standard models ranging from 1 to 300 tons per hour nominal capacity with larger custom models available.



## Engineered To Order

S. Howes sales and engineering department can recommend a standard design for your application or work with you and your team to develop a custom design, depending on your processing requirements. If the features you need are not listed, contact us to see how we can develop a solution to meet your requirements.



## Sample Applications

Continuous paddle mixers are ideal for mixing multiple dry ingredients and adding liquids. They are suitable for processing a wide variety of products including:

- |                 |                    |                      |                    |
|-----------------|--------------------|----------------------|--------------------|
| • Biosludge     | • Lime             | • Gravel/Asphalt     | • Molasses         |
| • Animal Feed   | • Minerals         | • Crushed Limestone  | • Chemicals        |
| • Salt Coating  | • Bentonite        | • Fertilizer         | • Powders/Slurries |
| • Food Products | • Corn Feed        | • Pellets            | • Frac Sand        |
| • Seeds         | • Soybeans         | • Forest Products    | • Drill Tailings   |
| • Spent Grain   | • Rubber & Plastic | • Powdered Detergent | • Fly Ash          |



## Mixer Options

### Paddle Designs



Solid Type



Loop Type



Welded



Abrasion Resistant

### Thermal Options

- Cooling Jackets
- Heating Jackets
- Integral or Bolt-On
- ASME "U" stamp



### Abrasive Wear Liners

- Replaceable
- Completely lines the mixing area inside the mixer



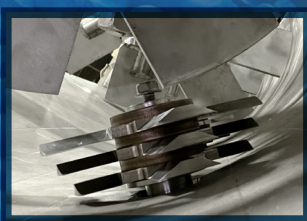
### Liquid Addition

Spray Bars, Spray Nozzles, Spray Balls, Drip Manifold, Inlet Pipes & Valves



### High Velocity Intensifiers

Improves Mixing, Reduces Blending Time, Breaks up Lumps



### Quick Access

Sanitary Clamp Fittings, Inspection Doors, Side Access Ports, Probe Ports



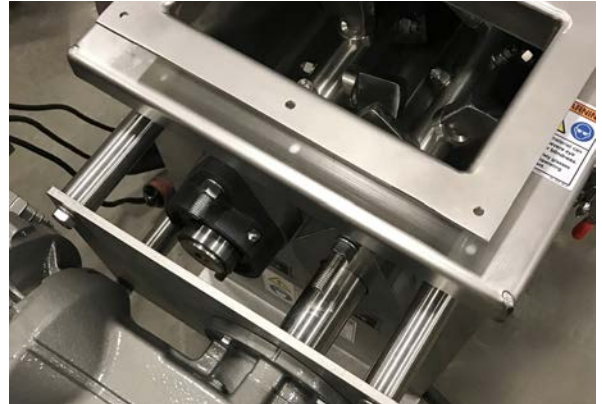
## Complete Integrated Systems

S. Howes can provide additional processing equipment such as dryers, coolers, and air pollution control systems to handle various stages of material processing. These machines can be integrated upstream or downstream into existing or new process lines.



## Engineering & Manufacturing

- 3D equipment modeling
- State-of-the-art manufacturing facilities on three continents with robotic cutting and welding
- Manufacturing expertise working with mild steel, various grades of stainless steel, duplex steels and other exotic alloys for specialty applications
- Welders certified to ASME & AWS standards
- ISO 9001:2015 certified



## Innovation Center & Testing Lab

Be confident that your powder and bulk solids processing is efficient with CPEG's 15,000 ft<sup>2</sup> state-of-the-art test lab. With our lab, you have access to the most extensive testing capabilities in the industry. Multiple pieces of equipment can be combined for multistep and multistage testing to simulate field operation, validate new equipment designs and provide complete process solutions. Combined with our full analysis of material characteristics and measurements of material behavior in specific processing applications, you are assured an efficient, reliable and safe solution.

Field testing with rental equipment is available when lab testing would not effectively simulate process operating environments.



S.HOWES LLC  
25 Howard Street  
Silver Creek, NY 14136, United States  
Tel: +1-716-934-2611  
showes.com | sales@showes.com

Carrier Process Equipment Group, Inc.  
3400 Fern Valley Rd  
Louisville, KY 40213, United States  
Tel: +1-502-969-3171 | Fax: +1-502-969-3172  
cpeg.com | info@cpeg.com

**100%** **EMPLOYEE OWNED**

