HAYES & STOLZ
INDUSTRIAL MANUFACTURING CO.

Horizontal Batch Mixers

hayes-stolz.com

HAYES & STOLZ
INDUSTRIAL MANUFACTURING CO.

HORIZONTAL BATCH MIXERS

Hayes & Stolz Ind. Mfg. Co. uses a combination of creativity, state-of-the-art technology, and years of expertise to design and produce a line of mixing equipment that is unsurpassed in efficiency, fast mix time, and durability.

Ribbon and paddle type mixers are designed with the precise balance of shaft speeds, agitator component pitch, component widths and spacing, and width-to-length body ratios in order to deliver maximized performance.

Down time is minimized due in part to solid steel shafting and generously sized agitator components.

Mixers are custom designed and built to meet the most demanding mixing applications.

Available in SINGLE SHAFT or TWIN SHAFT body styles with RIBBON or PADDLE type agitators.

Standard finishes from mild or stainless steel commercial to sanitary food grade.

A wide range of standard sizes and options are available to choose from. With extensive knowledge of numerous applications in diverse industries, H&S is uniquely qualified to recommend performance enhancing options for your next mixer.

Twin Shaft Mixer

Single Shaft Mixer

Stainless Steel Mixer

Single Shaft Mixer

6500 CIRRUS DRIVE BURLESON, TX 76028 800.725.7272 HAYES-STOLZ.COM

SINGLE SHAFT MIXERS

The standard configuration for Horizontal Batch Mixers is the single shaft design, consisting of a U-shaped body and a single horizontal main shaft agitator assembly. Single shaft mixers are proven to be effective for mixing dry powders, granules, slurries and some pastes.

Available with RIBBON or PADDLE type agitators.

Homogenous mixing, measured as Coefficient of Variation (Cv) of less than 10, can be achieved in as little as 2 minutes for most products in the Hayes & Stolz Single Shaft Horizontal Batch Mixer.

Drop Bottom Discharge

CAPACITY *	DIMENSIONS (in.)	
	Width ID	Length ID
10 CF	22	44
15 CF	26	50
30 CF	32	64
42 CF	36	72
58 CF	40	80
86 CF	46	92
114 CF	50	100
128 CF	52	104
196 CF	60	120
238 CF	64	128
286 CF	68	136
339 CF	72	144
398 CF	78	144
464 CF	78	168
571 CF	86	172
662 CF	90	180

** Capacities are based on 100% of the swept volume of the agitator assembly. Special sizes are available upon request.*

Single Gate Discharge

Ribbon Assembly

Paddle Assembly

Stainless Steel Commercial

6500 CIRRUS DRIVE BURLESON, TX 76028 800.725.7272 HAYES-STOLZ.COM

HAYES & STOLZ
INDUSTRIAL MANUFACTURING CO.

TWIN SHAFT "COUNTERPOISE" MIXERS

"Counterpoise" by definition is the result of equal power or forces acting in opposition; a state of balance. This is what the counter-rotating twin shafts provide: a unique, smooth, continuous, multi-directional flow of particles in the mixing zone. The result is a quick, gentle mixing that is unsurpassed in mixing efficiency.

Available with RIBBON or PADDLE type agitators.

Homogenous mixing, measured as Coefficient of Variation (Cv) of less than 10, can be achieved in as little as 15 seconds to 1 minute for most products in the Hayes & Stolz Twin Shaft "Couterpoise" Mixer.

Can effectively mix smaller batch sizes down to 15% of rated capacity.

Ideal for mixing ingredients of dissimilar particle sizes and densities.

CAPACITY *	DIMENSIONS (in.)	
	Width ID	Length ID
16 CF	40	58
32 CF	50	73
63 CF	63	91
126 CF	80	115
189 CF	91	131
252 CF	100	144
315 CF	108	155
332 CF	108	167
383 CF	116	167
466 CF	128	167
542 CF	136	172
692 CF	156	157
750 CF	160	172

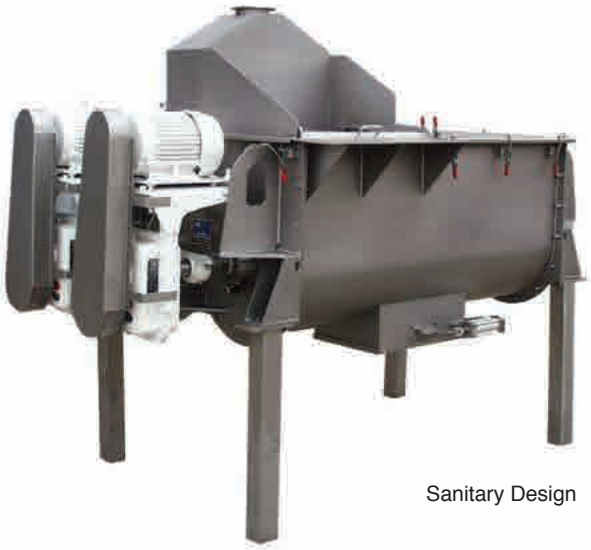
** Capacities are based on 75% of the swept volume of the agitator assembly. Special sizes are available upon request.*

Drop Bottom Discharge

Gate Discharge

Paddle Assembly

Stainless Ribbon Assembly



Sanitary Design

FOOD GRADE / SANITARY MIXERS

With experience since 1945 in commercial and industrial mixing, Hayes & Stolz reviews each application and recommends the required level of finish for product contact and non-contact surfaces.

Ultra-Sanitary Stainless Steel (USSS)

Used primarily when sanitary construction is specified for food, chemical and pharmaceutical industries requiring stainless steel product contact, a finish with no cracks or crevices, and a high degree of interior polish. Interior is polished to 120 grit final finish.

USSS Mixer

Sanitary Stainless Steel (SSS)

Used primarily when sanitary construction is specified for food, chemical and pharmaceutical industries requiring stainless steel product contact surfaces and a finish with no cracks or crevices, but not requiring the highest degree of interior polish. Interior is polished to 80 grit final finish

SSS Mixer

Stainless Steel Commercial (SSC II)

Used primarily when “stainless steel construction” is specified for applications requiring the benefit of internal and external stainless steel construction, but having no surface finish requirements. The exterior of SSC-II equipment will not be painted.

SSC II Mixer

Stainless Steel Commercial (SSC I)

Used primarily when “stainless steel product contact surfaces” is specified for applications where an unpolished stainless steel interior is required, but the remaining external components are carbon steel, providing cost savings. The exterior of SSC-I equipment will be painted.

SSC I Mixer

6500 CIRRUS DRIVE BURLESON, TX 76028 800.725.7272 HAYES-STOLZ.COM

HAYES & STOLZ
INDUSTRIAL MANUFACTURING CO.

FEATURES & OPTIONS

Ribbon Assemblies


Ribbon Shaft

- Constructed from solid steel shaft precision machined to exacting tolerances.
- Cross arms (ribbon support arms) from solid steel round bars secured with welded collars eliminating welds on the main shaft.
- Standard continuous double-inner and double-outer ribbon design assures end-to-end travel and balance of product across the length of the mixer for fast, uniform blending.
- Standard and optional ribbon design for center discharge requirements.
- Through holes in the main shaft are special-machined and treated to relieve manufacturing-induced stress in the shafts.
- Manufacturing procedures for welding of ribbon assemblies have been developed to reduce heat-induced stress.
- Ribbons are rolled to both pitch and diameter on a proprietary ribbon rolling machine.

Paddle Assemblies


Paddle Shaft

- Constructed from solid steel shaft precision machined to exacting tolerances.
- Paddle support arms of fabricated steel secured to the main shaft with bolted and keyed hubs, eliminating welds on the main shaft.
- Standard inner and outer paddle arrangement assures end-to-end travel and balance of product across the length of the mixer for fast, uniform blending.
- Standard and optional paddle assembly for center discharge designs

Cover Options


Hinged Cover Sections

- Hinged and Grated full or split covers
- Cover assist mechanisms available
- Flanged Inlet Ports for dry ingredient or liquid addition
- Dust Pickup Ports
- Bag Dump Stations
- Access openings

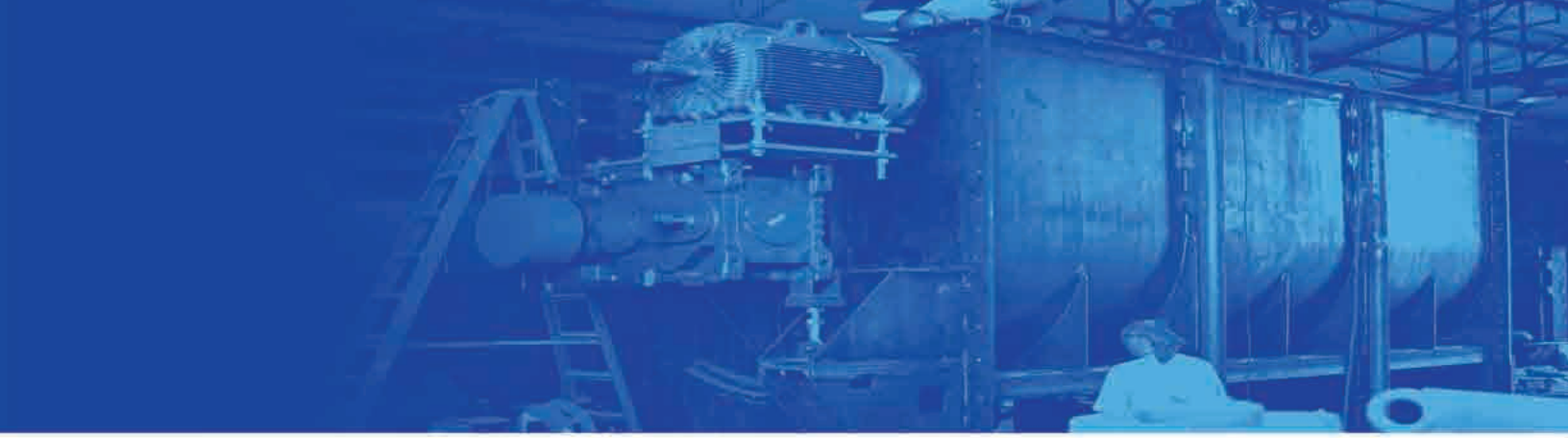
Shaft Seals


Split Block Seal


Flanged Gland Seal


Packing Gland Seal w/Air Purge

- Split Block Seal – UHMW body, steel front and back plates and two wraps of braided teflon packing – mild steel or stainless.
- Flanged Gland Seal – steel body, steel back plate and one wrap of braided teflon packing – mild steel or stainless – adjustable as packing wears.
- Packing Gland Seal – UHMW body with stainless steel front plate, back plate and pusher plate – optional stainless body – multiple wraps of braided teflon packing – adjustable as packing wears – with or without air purge.
- Seals from other manufacturers are available.



Liquid Addition

- Liquid manifolds and / or spray nozzles.
- Mounted either inside or outside the mixer body assembly.
- Located to minimize build-up on the agitator assembly and mixer body.
- Up first, then down" design of pipe extensions minimizes dripping" of liquids
- Optional design for nozzle inspection / replacement without removing the mixer cover

Liquid Addition Manifolds

Surge Bins & Unloading Conveyors

- Surge bins furnished with either a drag type or screw type unloading conveyor.
- Full-length removable baffle assembly over the return flights inside the surge bin.
- Horizontal, inclined or bent section drag conveyor configurations.
- Custom designed surge bins & unloading conveyors are available.

Hi-Flite Conveyor

Discharge Locations And Options

- Full-Length Drop Bottom Discharge – air operated – open/closed limit switches – optional door dampening system
- Flat Slide or Curved Slide Gates – single or multiple arrangements – manual, air or electric operators – optional open / closed limit switches
- Paddle Gates – manual, air or electric operators – optional open/closed limit switches
- Weir Discharges – discharge opening on sidewall or endplate – optional false wall (weir) inside mixer
- Through-The-Endplate Discharge Gates – manual, air or electric operators – optional open/closed limit switches
- Butterfly Valves
- Gates / Valves by other manufacturers

Drop Bottom Discharge

Single Gate Discharge

Butterfly Valve Discharge

High Speed Choppers

- For de-agglomerating and size reduction of lumps and balls or fibrous materials.
- Standard tulip blades are available of stainless steel for both commercial and sanitary/food grade applications or of plasmadized, abrasion resistant carbon steel for highly abrasive applications.

Choppers

Miscellaneous Options

- Heating and Cooling Jackets
- Intensifier Bars - steel rods for de-agglomeration
- Support Structures and Platforms
- Control Panels
- Load Cells
- Custom Designs

Heating & Cooling Jackets

6500 CIRRUS DRIVE BURLESON, TX 76028 800.725.7272 HAYES-STOLZ.COM

HAYES & STOLZ

Hayes & Stolz Industrial Manufacturing Company offers a wide variety of mixing, blending, processing and material handling equipment to serve your needs, including:

Batch Mixers
Continuous Blenders
Bucket Elevators
Distributors
Gates
Valves
Rotary Scalpers
Horizontal Coolers
Coaters

Other Services:
Laser / Water Jet Cutting
Contract Manufacturing

800.725.7272 817.926.3391
6500 CIRRUS DRIVE BURLESON, TX 76028
WWW.HAYES-STOLZ.COM EMAIL: SALES@HAYES-STOLZ.COM