

Ribbon Blenders

and other horizontal mixers

- Double Ribbon
- Paddle Ribbon
- Paddle



**AMERICAN
PROCESS
SYSTEMS**

The Most Comprehensive Line of Mixers...Anywhere!

Design Flexibility for Individualized Process Solutions

The Traditional U-Shaped Shell...

is found on the majority of ribbon blenders. The full open top allows for ease of access during cleaning.

Cover designs typically include a flanged filtered bag dump work station and end covers. The covers also routinely include nozzles for dumping super sacks of major ingredients or carriers.



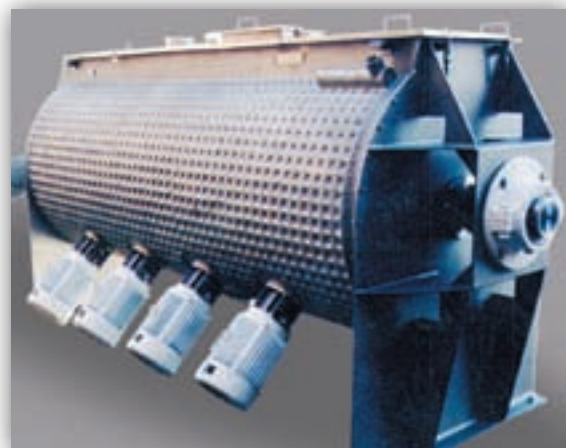
Cylindrical Shells...

find application when vacuum or pressure or heating/cooling is required. A cylindrical shape withstands these higher pressures with minimal increase in shell thickness. Also, a cylindrical shell offers more jacketed area in contact with the product. Access is limited to small side access doors or top mounted manways.



Semi-Cylindrical Shells...

lend themselves to cooker/cooler applications where a greater level of heat transfer is needed than can be accommodated in a U-shaped vessel. The large rectangular top provides greater access than found in a cylindrical unit. The 300° cylindrical shell also eliminates pinch points for shear sensitive products.



Mix & Match to Suit Your Application



The Double Ribbon Agitator...

is valued for its thorough mixing. It consists of an inner and an outer ribbon providing counter-directional flow while keeping the product in constant motion throughout the vessel. Inside ribbons move materials toward the ends of the blender whereas the outside ribbons move material back toward the center discharge.

The long trailing edge of the outer ribbon transmits high mechanical energy and product shear to the mix. Typical mix times are in the 10-15 minute range for fill levels from 40 to 100% of the working volume.



The Paddle/Ribbon Agitator...

combines inner ribbons with outer paddles. It is especially well suited for fragile, heat sensitive products.

While maintaining counter-directional flow, the outer paddles minimize pinch points at the wall thus introducing less frictional heat than a continuous outer ribbon.

The cupped outer paddles can mix quicker than a second outer ribbon and will achieve an even greater range of possible batch sizes.



Paddle-Only Designs...

are best suited to products of uniform size and density such as feed and grain, non-directional liquid or slurry mixes, and soap pellets with fragrance.

Without the inner ribbon tooling, material can mound in the center reducing effective mixing and may cause demixing of products with differing bulk densities or particle sizes.

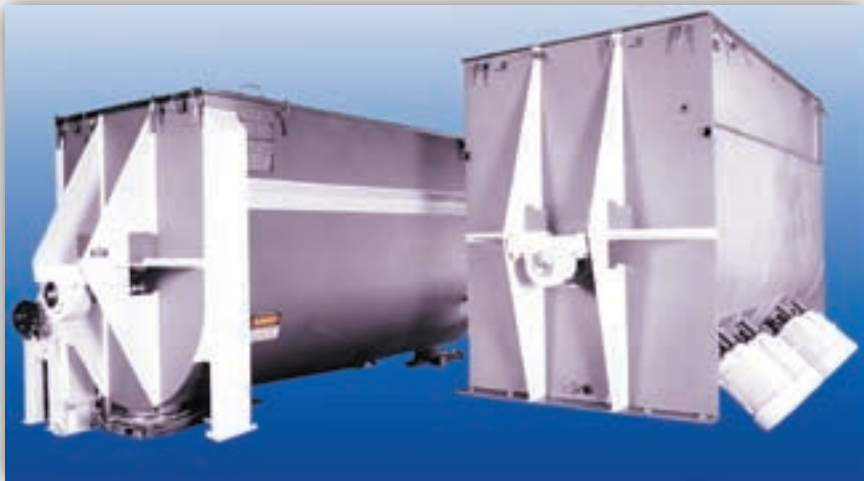
System Installations & Process Solutions

Sanitary Mixers

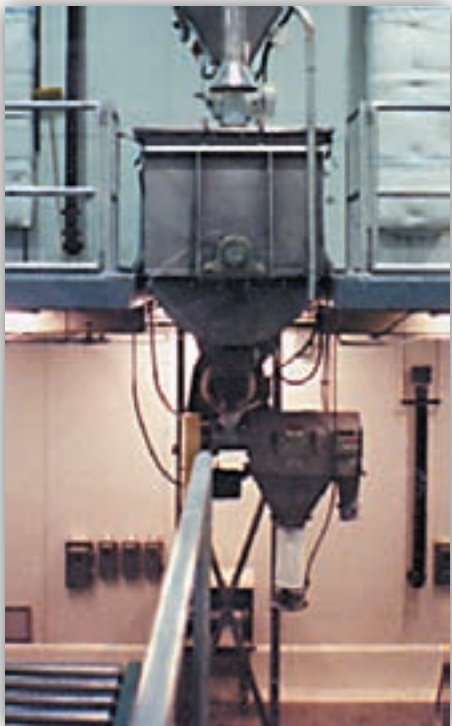
The APS sanitary and ultra-sanitary double ribbon, paddle, and combination paddle/ribbon blenders consist of a stainless steel, U-shaped mixing tank with a two piece, removable solid bar shaft agitator supported at each end by suspended pillow block bearings.

The tank is a one-piece weldment. There are no removable or slotted endplates with seams for unmixed materials to accumulate.

Heavy duty, plasma cut agitator tool support posts, flange free construction and continuous welds ground smooth with large radii throughout adding further to the structural integrity and cleanliness of our agitator and housing design.



Bakery premix system: Main blender for flour / shortening mix with high speed dispersing choppers and secondary agitated surge feeding two packaging lines.



Spice blending operation: bag/drum dumping, conveying, dust collection, mixing, and screening.



APS Expertise

American Process Systems has for over 35 years developed and installed equipment tailored to the requirements of many different industries.

Our installations can be found in plants ranging from bakeries to pesticides, seasonings to PVC, dairy to detergents, pigments to pharmaceutical, drink mixes to animal feed.



The APS Agitator Shaft—Guaranteed For Life

Every APS agitator shaft is constructed of solid stainless or carbon steel and designed to be free of any nuts, bolts, or flanges. The unique design provides much greater strength than pipes or tubes.

The agitator is warranted to the Purchaser by American Process Systems to be free of any defects, including breakage, for the life of the mixer.



Value added sugar processor with scaling of major ingredient and filtered bag dump for minors

Mixers For Industrial Applications

Industrial processes may require carbon steel, stainless steel, or many other types of exotic material like super duplex stainless steel.

Tanks can be U-shaped, semi-cylindrical or cylindrical and may have pressurized jacketing for a variety of applications.

The APS agitator which is "Guaranteed For Life" against breakage is a definite advantage when heavy duty or extra heavy duty construction is required.



Combination of Options... ..Tailored for Your Application



Bulk bag inlet ports with screens and magnetic grating



Dust controlled, easy clean, tailored blender cover



Tailored blender covers for hand dumping and easy cleanability



Removable pneumatically vibrated screen with hinged cover



Custom control panels



Direct drive, in-line shaft mount



Direct drive, right angle shaft mount



Manually actuated paddle gate



ASME dimple jacketing for heating or cooling



Side access doors



Compressed air header to seals and discharge valve and NEMA 4x SS J-box for single phase components



Tri-clamped ferrule with removable spray ball for CIP cleaning



CO2 tangentially mounted injection nozzles and manifold



Salina Vortex roller gate valve



Contoured flush plug valve



Rotary disc valve



Flush bottom drop gate valve



Air purged packing gland seal with split housing



Split, removable packing gland seals with Teflon V-Rings, suitable for USDA dairy applications



Meco shaft seal



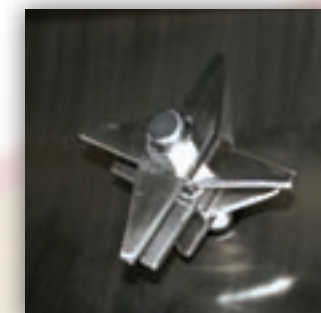
Air purged seals with flow meters and F/R/G



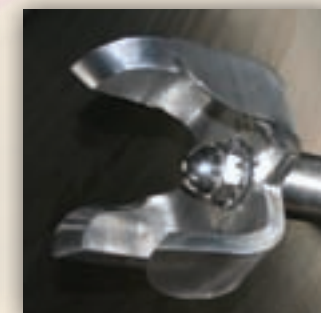
Shrouded endplates for easy cleaning



Chopper motors



X-mas tree style choppers for greater milling

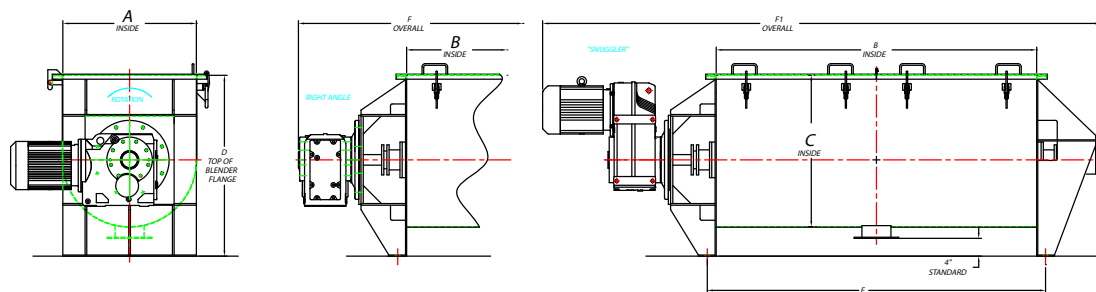


Tulip style chopper head designed to be externally removable

Engineered Solutions.....

Our range of mixing and blending equipment enables us to be impartial in testing and recommending equipment tailored to your process. Visit our manufacturing and test facility in Gurnee, Illinois and put us to the test!

Standard blender sizes and approximate dimensions



MODEL	WORKING CAP. ft ³	HORSE POWER RANGE		APPROXIMATE DIMENSIONS (IN.)		
				A	B	C
DRB-1	1	1	- 3	12 1/2	18	17
DRB-5	5	1 1/2	- 5	17	38	20
DRB-11	11	3	- 7 1/2	21	48	26
DRB-20	20	5	- 10	26	60	30
DRB-24	24	7 1/2	- 15	26	66	30
DRB-30	30	10	- 20	30	72	34
DRB-36	36	15	- 25	30	78	34
DRB-40	40	15	- 25	32	78	36
DRB-55	55	20	- 40	34	90	39
DRB-66	66	20	- 40	37	96	41
DRB-80	80	25	- 60	40	96	48
DRB-100	100	30	- 75	45	96	54
DRB-120	120	30	- 75	44	120	52
DRB-155	155	40	- 100	50	120	59
DRB-180	180	40	- 100	54	120	61
DRB-215	215	50	- 125	54	144	61
DRB-270	270	50	- 125	60	144	66
DRB-325	325	60	- 150	66	144	73
DRB-385	385	60	- 150	72	144	80
DRB-515	515	60	- 150	72	192	80

American Process Systems Member of the Eirich Group

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AMERICAN PROCESS SYSTEMS

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Bag Dump Workstations



OptimaBlend™



OptimaBlend™