New PROCESS EQUIPMENT COMPANY

ph: 630-350-2200 | fx: 630-350-9047 sales@aaronprocess.com

Custom and Standard Industrial Mixers for Powders, Solids and Difficult, Viscous, Non-Flowing Materials









www.aaronprocess.com



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After decades of repairing, refurbishing and rebuilding mixers produced by leading OEMs in the U.S. and Europe, we determined the strengths and weaknesses of many of the mixer designs.

It was from this accumulated experience that the **AARON PROCESS EQUIPMENT COMPANY** was launched with a very simple mission:

to build the best, most rugged and most dependable, engineered mixers in the world period!

Since then, we have refined our mission to emphasize service & commitment and we have included state-of-the-art electronic controls.

Today, we still offer the industry's best value mixers-proven for the most difficult and challenging materials. Aaron Process Equipment Company is recognized for designing and manufacturing the most advanced line of quality mixing and blending machinery in the Industry. Aaron Process offers a complete line of Sigma Blade Mixers, Mixer Extruders, Food Grade Stainless Steel Batch Mixers. Plow Mixers. FDA approved Sanitary Ribbon Blenders, Planetary Mixers, and Laboratory style mixers. All of our mixers are available in many sizes and come with standard design

You should also know that:

features and custom options.

- Aaron Process maintains a large inventory of replacement parts to assure immediate delivery if needed.
- Our shop has total capabilities to rebuild or remanufacture any mixers you have.
- We accept trade-ins toward your purchase of Aaron Process Mixing Equipment.



Batch Mixer With Hydraulic Tilt



This standard height Double Arm Mixer with rugged hydraulic tilt for discharge was the first of Aaron's mixer line. Engineered to incorporate the best features used in the industry, it offers unsurpassed performance—the advantages of proven features, the widest selection of options available, and the technical knowledge that comes from decades of experience.

- Standard ASME jackets for heating (or cooling).
- Capable of vacuum operation coincident with mixing or drying with optional cover kit.
- Also available in 10 gallon and 50 gallon pilot capacities.

Model MCG100	
Total Capacity	200 Gallons / 757 Liters
Mixing Capacity	100 Gallons / 378 Liters
Blade Motor	60-100 HP (45-75 KW)
Power Pack	7.5 HP (5.6 KW)
Blade Speed	44 RPM (Front) / 25 RPM (Rear)
Tilt Angle	1029

Model MCG150	
Total Capacity	340 Gallons / 1287 Liters
Mixing Capacity	150 Gallons / 568 Liters
Blade Motor	75-125 HP (56-93 KW)
Power Pack	7.5 HP (5.6 KW)
Blade Speed	44 RPM (Front) / 25 RPM (Rear)
Tilt Angle	1079

New PROCESS EQUIPMENT COMPANY

390 Gallons / 1476 Liters
200 Gallons / 758 Liters
150-250 HP (112-189 KW)
7.5 HP (5.6 KW)
44 RPM (Front) / 25 RPM (Rear)
107º

Model MCG300	
Total Capacity	450 Gallons / 1703 Liters
Mixing Capacity	300 Gallons / 1135 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	1029

Model MCG400	
Total Capacity	670 Gallons / 2536 Liters
Mixing Capacity	400 Gallons / 1515 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	1029

Model MCG500	
Total Capacity	820 Gallons / 3104 Liters
Mixing Capacity	500 Gallons / 1893 Liters
Blade Motor	200-300 HP (150-224 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	102º

Model MCG600	
Total Capacity	1250 Gallons / 4731 Liters
Mixing Capacity	600 Gallons / 2271 Liters
Blade Motor	250-400 HP (189-298 KW)
Power Pack	15 HP (11 KW)
Blade Speed	28 RPM (Front) / 16 RPM (Rear)
Tilt Angle	107º

Model MCG900	
Total Capacity	1780 Gallons / 6738 Liters
Mixing Capacity	900 Gallons / 3407 Liters
Blade Motor	250-400 HP (189-298 KW)
Power Pack	15 HP (11 KW)
Blade Speed	28 RPM (Front) / 16 RPM (Rear)
Tilt Angle	107º

Also Available in 10 and 50 Gallon Capacity

600 Gallon with Vacuum Cover



50 Gallon, Unitized with Cover



50 Gallon with Hydraulic Ram Cover



Large Capacity Mixers



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Batch Mixer Bottom Dump



MBG

Our most economical unit is a true workhorse which combines all the basic advantages from our line of double arm mixers. A wide variety of applications are able to take advantage of our bottom discharge arrangement.

- Suitable for mixing and drying of heat-sensitive materials that undergo phase changes during processing, such as liquids, plastics, and powders.
- Flush bottom doors for complete mixing action.
- Lower maintenance costs result from the absence of connecting gears and additional room is provided to access the gland and packing areas outboard of the mixing shafts.

Model MBG150	
Total Capacity	340 Gallons / 1287 Liters
Mixing Capacity	150 Gallons / 568 Liters
Blade Motor	75-125 HP (56-93 KW)
Power Pack	7.5 HP (5.6 KW)
Blade Speed	44 RPM (Front) / 25 RPM (Rear)
Tilt Angle	1079

400 Gallon Bottom Dump with Hydraulic Flush Bottom Doors and TriMax™ Gearbox



Exclusive "MXT" Gearbox





Model MBG200	
Total Capacity	390 Gallons / 1476 Liters
Mixing Capacity	200 Gallons / 758 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	7.5 HP (5.6 KW)
Blade Speed	44 RPM (Front) / 25 RPM (Rear)
Tilt Angle	107º

Model MBG300	
Total Capacity	450 Gallons / 1703 Liters
Mixing Capacity	300 Gallons / 1135 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	102º

Model MBG400	
Total Capacity	670 Gallons / 2536 Liters
Mixing Capacity	400 Gallons / 1515 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	1029

Model MBG500	
Total Capacity	820 Gallons / 3104 Liters
Mixing Capacity	500 Gallons / 1893 Liters
Blade Motor	200-300 HP (150-224 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	1029

Model MBG600	
Total Capacity	1250 Gallons / 4731 Liters
Mixing Capacity	600 Gallons / 2271 Liters
Blade Motor	250-400 HP (189-298 KW)
Power Pack	15 HP (11 KW)
Blade Speed	28 RPM (Front) / 16 RPM (Rear)
Tilt Angle	107º

Model MBG900	
Total Capacity	1780 Gallons / 6738 Liters
Mixing Capacity	900 Gallons / 3407 Liters
Blade Motor	250-400 HP (189-298 KW)
Power Pack	15 HP (11 KW)
Blade Speed	28 RPM (Front) / 16 RPM (Rear)
Tilt Angle	107º

Control Panel for Operation of Hydraulic Doors



TriMax™ Gearbox



Batch Mixer Low-Boy™ Design

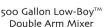


WCG

Aaron's unique Low-Boy™ Design represents a true breakthrough in the engineering of equipment for processing large batches in the most compact equipment available. The ultra-clean design minimizes both floor space and head room required.

- Unitized Design allows installation in areas unable to accommodate standard mixers.
- Less need for structural supporting platforms.
- Can be furnished with belt drive (up to 250 hp) or with direct connected motor and gearbox arrangement.
- Still allows ample room to access gland area and perform maintenance of shaft packing.

Ask about optional features to meet your requirements.





Twin Hydraulic Tilt Cylinders



Heavy Duty Sigma Blades



450 Gallons / 1703 Liters 300 Gallons / 1135 Liters

Mixing Capacity	300 Gallons / 1135 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	102º

Model WCG300 Total Capacity

Model WCG400	
Total Capacity	670 Gallons / 2536 Liters
Mixing Capacity	400 Gallons / 1515 Liters
Blade Motor	150-250 HP (112-189 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	102º

Model WCG500	
Total Capacity	820 Gallons / 3104 Liters
Mixing Capacity	500 Gallons / 1893 Liters
Blade Motor	200-300 HP (150-224 KW)
Power Pack	10 HP (7.5 KW)
Blade Speed	30 RPM (Front) / 17 RPM (Rear)
Tilt Angle	102º

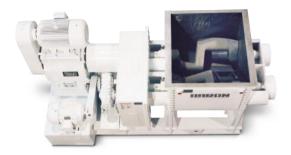
Model WCG600	
Total Capacity	1250 Gallons / 4731 Liters
Mixing Capacity	600 Gallons / 2271 Liters
Blade Motor	250-400 HP (189-298 KW)
Power Pack	15 HP (11 KW)
Blade Speed	28 RPM (Front) / 16 RPM (Rear)
Tilt Angle	1079



Range of motion of the NEW 500 Gallon Low-Boy™ Double Arm Mixer



Mixer Extruder With Standard Drive





The Aaron Process Mixer Extruder is designed to offer the advantages of a screw discharge for the more difficult, non-flowing materials that are encountered in the chemical, food, drug, plastics, and rubber industries. The screw "extruding" discharge arrangement offers improved ease of discharge compared to traditional tilt or bottom discharge arrangements.

- "Mixtruder" discharge arrangement is engineered to overcome any clogging or obstruction.
- Extrusion/discharge rates will depend on product processed and any die configuration utilized at the end of the extruder barrel.
- Also available in Pilot Size units.

Ask about optional features to meet your requirements.

Mixer Extruder with Non-Cored Blades



Unitized Construction



Model MXG150 Total Capacity 240 Gallons / 908 Liters Mixing Capacity 150 Gallons / 568 Liters Blade Motor 50-100 HP (37-75 KW) Screw Motor 30-50 HP (25-37 KW) 44 RPM (Front) / 25 RPM (Rear) Blade Speed Screw Speed 60 RPM (Bi-Rotational)

Model MXG200

300 Gallons / 1135 Liters Total Capacity 200 Gallons / 758 Liters Mixing Capacity Blade Motor 75-125 HP (56-93 KW) 30-50 HP (25-37 KW) Screw Motor 44 RPM (Front) / 25 RPM (Rear) Blade Speed 60 RPM (Bi-Rotational) Screw Speed

Model MXG300

Total Capacity 450 Gallons / 1703 Liters Mixing Capacity 300 Gallons / 1135 Liters 150-250 HP (112-189 KW) Blade Motor 50-100 HP (37-75 KW) Screw Motor 30 RPM (Front) / 17 RPM (Rear) Blade Speed Screw Speed 60 RPM (Bi-Rotational)

Model MXG400

Total Capacity 670 Gallons / 2536 Liters Mixing Capacity 400 Gallons / 1515 Liters 150-250 HP (112-189 KW) Blade Motor 50-100 HP (37-75 KW) Screw Motor 30 RPM (Front) / 17 RPM (Rear) Blade Speed Screw Speed 60 RPM (Bi-Rotational)

Model MXG500

Total Capacity 820 Gallons / 3104 Liters Mixing Capacity 500 Gallons / 1893 Liters 200-300 HP (150-224 KW) Blade Motor Screw Motor 75-125 HP (56-93 KW) 30 RPM (Front) / 17 RPM (Rear) Blade Speed 60 RPM (Bi-Rotational) Screw Speed

Model MXG900

1780 Gallons / 6738 Liters Total Capacity Mixing Capacity 900 Gallons / 3407 Liters Blade Motor 250-400 HP (189-298 KW) Screw Motor 100-150 HP (75-112 KW) Blade Speed 28 RPM (Front) / 16 RPM (Rear) Screw Speed 60 RPM (Bi-Rotational)

Mixer Extruder with AC Drives on Blades and Screw



Variable Drive Options



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Mixer Extruder With New TriMax™ Gearbox





This Aaron Process Mixer Extruder comes with the proven advantages of the screw discharge arrangement and also offers the benefits of the TriMax™ Gearbox and its Triple Output Shaft design.

- Lower maintenance costs result from the absence of connecting gears and additional room is provided to access the gland and packing areas outboard of the mixing shafts.
- Elimination of the connecting gear case reduces floor space requirements.
- Unitized construction eases installation costs.
- Capable of mixing materials with viscosities in excess of 10,000,000 centipoise!

Ask about optional features to meet your requirements.





300 Gallon Mixer Extruder



300 Gallon Mixer Extruder with TriMax™ Gearbox



PROCESS EQUIPMENT COMPANY 240 Gallons / 908 Liters

Model MXT150	
Total Capacity	240 Gallons / 908 Liters
Mixing Capacity	150 Gallons / 588 Liters
Blade Motor	75-125 HP (56-93 KW)
Screw Motor	30-50 HP (25-37 KW)
Blade Speed	44 RPM (Front) / 25 RPM (Rear)
Screw Speed	60 RPM (Bi-Rotational)

Model MXT200	
Total Capacity	300 Gallons / 1135 Liters
Mixing Capacity	200 Gallons / 758 Liters
Blade Motor	75-125 HP (56-93 KW)
Screw Motor	30-50 HP (25-37 KW)
Blade Speed	44 RPM (Front) / 25 RPM (Rear)
Screw Speed	60 RPM (Bi-Rotational)

Model MXT300	
Total Capacity	450 Gallons / 1703 Liters
Mixing Capacity	300 Gallons / 1135 Liters
Blade Motor	150-250 HP (112-189 KW)
Screw Motor	50-125 HP (37-93 KW)
Blade Speed	30 RPM (Front) / 19 RPM (Rear)
Screw Speed	60 RPM (Bi-Rotational)

Model MXT400	
Total Capacity	670 Gallons / 2536 Liters
Mixing Capacity	400 Gallons / 1515 Liters
Blade Motor	150-250 HP (112-189 KW)
Screw Motor	75-125 HP (56-93 KW)
Blade Speed	30 RPM (Front) / 19 RPM (Rear)
Screw Speed	60 RPM (Bi-Rotational)

Model MXT500	
Total Capacity	820 Gallons / 3104 Liters
Mixing Capacity	500 Gallons / 1893 Liters
Blade Motor	200-300 HP (150-224 KW)
Screw Motor	75-125 HP (56-93 KW)
Blade Speed	30 RPM (Front) / 19 RPM (Rear)
Screw Speed	60 RPM (Bi-Rotational)

Model MXT900	
Total Capacity	1780 Gallons / 6738 Liters
Mixing Capacity	900 Gallons / 3407 Liters
Blade Motor	300-500 HP (224-373 KW)
Screw Motor	100-150 HP (75-112 KW)
Blade Speed	28 RPM (Front) / 17 RPM (Rear)
Screw Speed	60 RPM (Bi-Rotational)

TriMax™ Gearbox



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Batch Mixer Split Level Design



ZBG

Aaron's Split Level 750 Gallon design has approximately 50% more effective mixing and heat transfer area as compared to conventional designs. A thorough mixing action is assured by the shape of the bowl and the close tolerance between the mixing blades and the bowl. Because one blade arm is positioned offset and above the other, only one discharge outlet is required.

Model ZBG-750 Bottom Disc	harge
Total Capacity	1100 Gallons / 4175 Liters
Mixing Capacity	750 Gallons / 2840 Liters
Drive	Available in belt drive and direct coupled drives up to 300 horsepower. Other options available are hydraulic powered.
Blade Speed	35 RPM (Front) / 38 RPM (Rear)
Discharge	12" Flanged Outlet
Seals	Standard Packing Glands
Blades	Sigma Design
Construction T304 S/S Material	Standard, Other material of construction available.

750 Gallon Split Level Design



Sigma Blades Mounted One Above–One Below





Batch Mixer Food Grade S/S Design



Aaron Double Arm Mixers can be designed for sanitary applications with all stainless construction, high polish, USDA approved components, wash down controls and can be engineered and tailored to a specific set of requirements.

Ask about optional features to meet your requirements.

Jacketed Bowl, Heated Discharge Valves



Cored Blades and Vacuum Encapsulated Seal Covers



Lab and Pilot Scale Equipment

New PROCESS EQUIPMENT COMPANY



Aaron's Lab Batch Mixer is furnished in three sizes with a manual hand tilt for discharge. Different mixer blades are interchangeable for studying results provided by different blade configurations. Variable speed drive arrangements are standard.



We can help with your scale-up issues.



Model LNG 1 (One	Gallon)
Total Capacity	2.3 Gallons / 8.7 Liters
Mixing Capacity	1 Gallon / 3.7 Liters
Drive	2 HP (2.7 KW) Direct Drive Gearmotor
Blade Speed	0-70 RPM (Front) / 0-40 RPM (Rear)
Discharge	Manual tilt over front bearing journal
Jacket	Suitable for steam, water or hot oil operation
Seals	Standard Packing Glands
Controls	1PH / 115-230 volts / AC controller with run / jog, start / stop, forward / reverse and variable speed control adjustment, 180 volt DC motor.
Chamber	Suitable for full vacuum operation
Blades	Available in Sigma or Dispersion style



Model LNG .25 (.25	Gallon)
Total Capacity	.5 Gallon / 2 Liters
Mixing Capacity	.25 Gallon / 1 Liter
Drive	.75 HP (1KW) Direct Drive Gearmotor
Blade Speed	0-70 RPM (Front) / 0-40 RPM (Rear)
Discharge	Manual tilt over front bearing journal
Jacket	Suitable for steam, water or hot oil operation
Seals	Standard Packing Glands
Controls	1PH / 115 volts / AC controller with run / jog, start / stop, forward / reverse and variable speed control adjustment, 90 volt DC motor.
Chamber	Suitable for full vacuum operation
Blades	Available in Sigma or Dispersion style



Model LNG 2 (Tw	o Gallon)
Total Capacity	3.75 Gallons / 14 Liters
Mixing Capacity	2 Gallons / 7.5 Liters
Drive	2 HP (2.7 KW) Direct Drive Gearmotor
Blade Speed	0-70 RPM (Front) / 0-40 RPM (Rear)
Discharge	Manual tilt over front bearing journal
Jacket	Suitable for steam, water or hot oil operation
Seals	Standard Packing Glands
Controls	1PH / 115-230 volts / AC controller with run / jog, start / stop, forward / reverse and variable speed control adjustment, 180 volt DC motor.
Chamber	Suitable for full vacuum operation
Blades	Available in Sigma or Dispersion style

Blade Selection





Blades are available in different styles. The appropriate selection is determined from the flow characteristics and physical consistencies of the materials to be processed.

Blades can be optionally constructed with cored interiors for cooling or heating.

Blades are constructed from cast steel, cast stainless steel, or other alloys.

Dispersion Blades



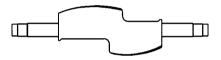
Provides a smooth folding action and is excellent for mixing a fiber reinforced product. Available in 135 degree or 180 degree spiral.

Sigma Blades



The most widely used blade for the process industry.

Masticator Blades



Used for a superior dispersion of difficult products such as rubber, plastics or abrasive materials.

Naben Blades



Also known as the Fishtail Blade. Suitable for mixing cellulose materials.

Blade Arrangement

The blades can be arranged tangentially (with optional rotation ratio) or overlapping (1:1 rotation ratio).

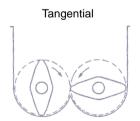


Figure 1



Figure 2

Figure 1: Illustrates the tangential style. The paths of the blades do not cross, therefore, the speed of each blade can be randomly set. This arrangement is often used when super-high-viscosity materials are mixed.

Figure 2: Illustrates the overlapping style. The path of the two blades cross, therefore, the blades are arranged so that they do not touch each other and the rotation ratio is 1:1.

This arrangement is primarily used for mixing or processing of medium- to high-viscosity materials.

Custom Designs & Control Systems

The Mixer Extruder, Standard Hydraulic Tilt, Low-Boy™ and Bottom Dump models can be furnished with hydraulic motors mounted directly to each mixer shaft. This extraordinary flexible design enables you to alter each blade speed independently and adapt to batch viscosity at different stages of your process cycle. This allows for progressive speed increase during start-up under

full load, as well as blade reversal for aiding discharge.





Aaron Process makes sure that all rotating components on their equipment are well guarded to ensure operator safety.







Floating Ram keeps material within the mixing zone.







Mixer Extruder with independent Blade and Screw Drives



Custom Design Shown with AC Motors



Custom Control Panels

Electronic controls are tailored to meet your requirements.

Reconditioning Services

Let Aaron Process Equipment Company rebuild your existing double arm mixing equipment. Rebuilding your current mixers can save you money and increase your return on investment. Old, worn out machinery can inflate your operating cost thru

additional maintenance and repair...not to mention utility costs.

Aaron Process Equipment Company takes pride in manufacturing NEW, quality mixing equipment for many different industries and applies these standards when rebuilding existing equipment from your plant. We offer different degrees of repair: from replacing worn out bearings, seals & shafts to complete equipment reconditioning.

With more than 50 years of experience, the experts at Aaron Process can help assist with the evaluation of your mixing needs, rebuilding or remanufacturing of an existing mixer, trade-in for a new mixer or your next purchase of a new or newly remanufactured double arm mixer, ribbon blender or plow mixer.

Aaron can rebuild virtually any make or model double arm mixer. Mixer manufacturers include:

Baker Perkins Littleford Day (J.H. Day)
AMK Werner & Pfleiderer
Readco Paul O. Abbé
Jaygo Guittard
Aoustin Winkworth
Linden Fritz Meili
Bramley Moriyama

Baker Perkins, Littleford Day (J.H. Day), AMK, Werner & Pfleiderer, Readco, Paul O. Abbé, Jaygo, Guittard, Aoustin, Winkworth, Linden, Fritz Meili, Bramley, Moriyama are all Registered Trademarks



















Ribbon Blenders





Sanitary Finishes



Diamond Support Posts





IMB

AARON PROCESS has developed a new T304SS Ribbon Blender that offers the value demanded for today's mixing requirements.

The versatility of the Standard Aaron Process Ribbon Blenders is valued by many industries including Chemical, Food, Plastics, Spices, Flavorings, Cosmetics, Nutraceuticals, and other specialty applications.

The New Standard Aaron Process T304SS Ribbon Blenders are offered with a "double" ribbon design and high polish on all product contact surfaces. Designed to be a workhorse for materials with density up to 75 lbs per cubic foot or more, they include:

- Stainless Steel Split Packing Glands
- Split Two-Piece Cover and Safety Grate
- Center Discharge—Manual or Pneumatic
- TEFC Gearmotor with Chain Drive
- Can be Integrated with Material Handling Systems.

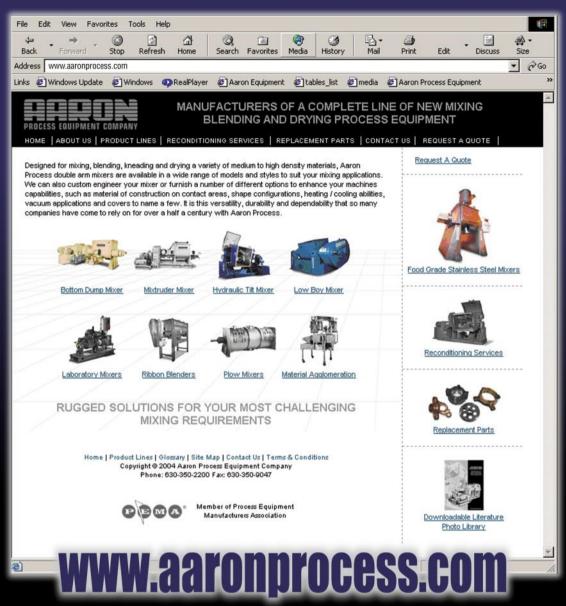
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For more demanding applications, Aaron Process has a Heavy-Duty line of Ribbon Blenders.

Also available in T304SS and with high polish, these Ribbon Blenders are reinforced with external stiffeners and driven by higher horsepower using a shaft-mounted drive arrangement suited for heavier materials.

Units can be configured for center or end discharge with options among a variety of manual or pneumatically controlled discharge arrangements and valves.

- Available with Double Ribbons, Split Ribbons or Paddles.
- Optional Jacket for Heating or Cooling.



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