

RAM ~~X~~ MIXERS



TURBINE & IMPELLER
MIXERS AND AGITATORS

ARDE BARINCO INC.

abmix@ardeinc.com • www.abmixer.com

TURBINE MIXERS ENGINEERED FOR YOUR INDUSTRY

RAM_x

**Propeller and Turbine mixers
engineered for your industry:**

Series 20, Low Horsepower Turbine Mixers
Series 30-100, Medium Horsepower
Turbine Mixers in Top & Side Entry
Series 200-220, High Horsepower
Top & Side Entry
Series 300-900, High Torque
Top & Side Entry Mixers
RAM_x Portable, Heavy Duty
Clamp Mount Mixers
Hyperfoil™ Impellers, For New and Used
Equipment

ARDE Barinco Mixers are engineered and built to match your unique application. Our RAM_x line serves a broad range of industries including chemical, energy, petrochemical, cosmetics, pharmaceutical, food and beverage, pulp and paper, water and wastewater, biotech, and mining.

And if a RAM_x Mixer or Agitator isn't the right unit for your application, we'll tell you that too. Contact Arde Barinco at:

800-909-6070
fax 201-784-0483
abmix@ardeinc.com
www.abmixer.com

We're experts in finding solutions to mixing problems, and we're always ready to talk mixing, grinding, dispersion and particle size reduction.

Buy With Confidence

As with all our products, Arde Barinco will let you find out if the RAM_x Mixer is right for you by putting it through its paces at our fully-equipped testing facility. You're under no obligation to buy; just give us your production requirements and we'll be happy to run capabilities tests.

If you do decide to buy any Arde Barinco product, you'll get free technical support for the life of the machine — fast, friendly service drawing on more than four decades of mixing experience.

SERIES 20

Low Horsepower Turbine Mixers

The Series 20 mixers are designed to pump up to 11,000 gpm for tanks up to 10' diameter and offer cost effective mixing for low volume applications. These mixers are ideal for applications in the cosmetic, film, bio-pharm and waste treatment industries.

Standard frame size industrial motors, cast iron gearboxes, hardened steel gears and anti-friction bearings are standard components in Series 20 Mixers



Features

- Extremely high pumping rate of up to 11,000 gpm
- Standard industrial components including NEMA frame motors
- Gearboxes with 1.5 service factor and 30,000 hr. bearing life
- Application-specific impeller configurations

Options

- Air, explosion proof, chemical-duty, and high efficiency motors
- High shear impeller configurations.
- High and low speed couplings.
- Mechanical seals and stuffing boxes for closed-tank applications.
- Stainless steel motors, gearboxes, bearing stands, polished shafts and turbines and food-grade lubricants for sanitary applications.
- Special coatings for corrosive applications.
- Grease-for-life bearings and gears.

Specifications

Pumping Rates:	up to 11,000 gpm
Speed Range:	11 to 1,800 rpm
Gear Drive:	Helical, single and double reduction
Horse Power Rating:	up to 5hp
Impeller:	Hyperfoil as standard up to 36" diameter
Motor:	NEMA C-face TEFC
Mounting:	Baseplate or Flange
Shaft Length:	up to 120" without steady bearing

SERIES 30-100

Medium Horsepower Turbine Mixers

Custom Manufactured In Top and Side Entry

These low-profile, application-specific mixers incorporate only the highest quality components to provide maximum mixing efficiency and dependable service at pumping rates of up to 67,000 gpm for tanks up to 25' diameter.

They are available for top and side entry applications for a wide range of mixing applications such as those found in the asphalt, edible oil, distillery, and food industries

Features

- High pumping rates of up to 11,000 gpm.
- Heavy-duty industrial components including tapered roller bearings.
- Extended bearing and gear life, with 1.5 service factor and 30,000 hr. bearing life.
- Low profile cast iron gear drive, especially good for low head-room requirements
- Solid shafting available in a wide range on metals.



- Application-specific impeller configurations.

Options

- Motors - Air, explosion-proof, chemical duty, and high efficiency options.
- High or low-speed couplings.
- Mechanical seals, lip seals and stuffing boxes for closed-tank operation.
- Polished shafts and turbines for sanitary applications.
- Special coatings for corrosive applications.
- Variable-speed controls.
- Drywell to prevent oil leakage.

Specifications

Pumping Rates:	Up to 67,000 gpm
Speed Range:	2 to 350 rpm
Gear Drive:	Worm and helical/worm gear combinations
Horsepower Rating:	Up to 25hp
Impeller:	Hyper-foil as standard up to 90" diameter
Motor:	NEMA C-face TEFC
Mounting:	Baseplate or Flange
Shaft Length:	Up to 240" without a steady bearing

SERIES 200-220

High-Horsepower Top & Side Entry Mixers

The Series 200-220 mixers are designed for heavy-duty applications that require pumping rates up to 122,000 gpm in tanks up to 30 ft diameter.

Typical applications for these versatile mixers are found in petrochemical, water, phosphate and plastics industries.

Its heavy-duty, cast iron housing is designed to maintain accurate gear alignment and to withstand the high stress associated with many severe mixing applications. The 200-220 series incorporates spherical roller shaft bearings to isolate impeller loading that can cause gear damage, and tapered roller bearings for high-thrust loads.



Features

- Cast iron helical gear reducer with no-leak drywell and 1.5 service factor
- Heavy-duty industrial motors
- Solid shafting available in a wide range of metals
- High and low speed couplings
- Application-specific impeller configurations that pump up to 122,000 gpm
- Oversize bearings with 100,000 hr. bearing life

Options

- Explosion-proof, chemical-duty and high-efficiency motors
- Axial, radial and anchor impellers
- Low speed couplings
- Mechanical seals, lip seals and stuffing boxes for closed tank applications
- Polished shafts and turbines for sanitary applications
- Special coatings for corrosive applications
- Variable speed controls

Specifications

Pumping Rates:	Up to 122,000 gpm
Speed Range:	7 to 350 rpm
Gear Drive:	Helical, double reduction
Horse Power Rating:	Up to 30hp
Impeller:	Hyper-foil as standard up to 120" diameter
Motor:	NEMA C-face in TEFC
Mounting	Baseplate or Flange
Shaft Length:	Up to 300" without a steady bearing

SERIES 300-900

High-Torque Top & Side-Entry Mixers

Engineered and manufactured for the most demanding applications, the Series 300-900 mixers feature industry high pumping rates of up to 300,000 gpm in tanks up to 70' diameter. Typical applications for these rugged mixers are found in the paper, mining, rubber, and paint industries. The construction of the Series 300-900 mixers features fabricated gear boxes with a combination of helical and spiral bevel gearing for the highest strength and efficiency in the industry.



Features

- Extremely high pumping rates to 300,000 gpm
- Heavy-duty industrial motors
- 98% efficient helical and bevel gearing
- High and low-speed couplings
- Application-specific impeller configurations
- Drywell housing design for no oil leakage
- Multiple speed ranges
- Oversize bearings: 100,000 hr bearing life
- Solid and pipe shafting: all metals

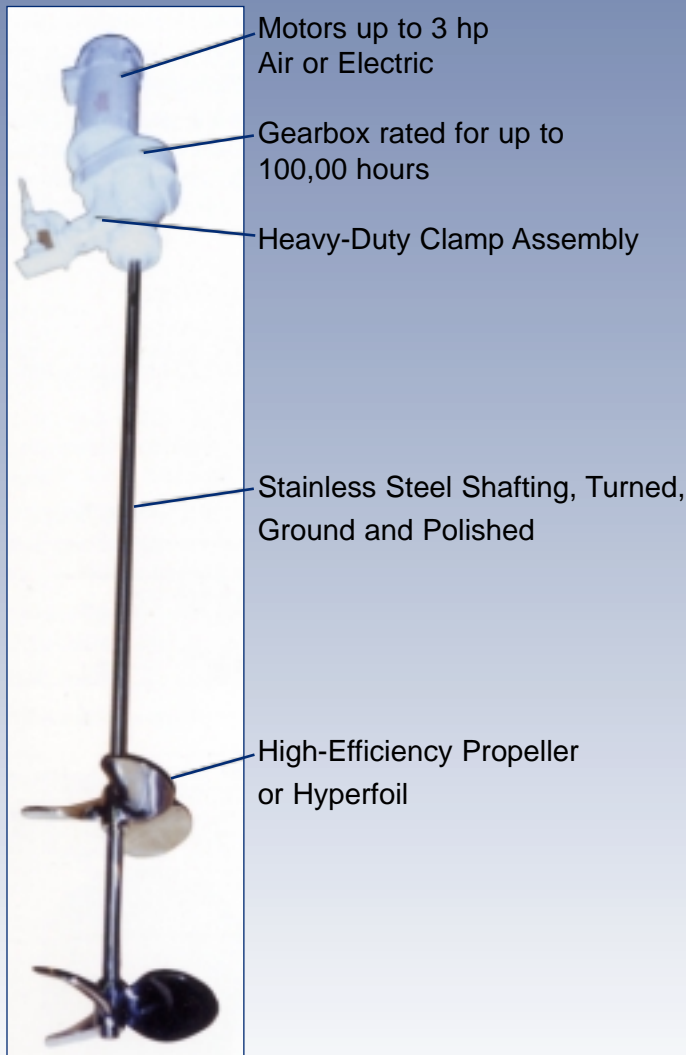
Options

- Explosion-proof, chemical-duty, and high-efficiency motors
- Axial, radial, and anchor & ribbon impellers
- Independent bearing support
- Mechanical seals, lip seals, and stuffing boxes for closed tank applications
- Polished shafts and turbines for sanitary applications
- Special coatings for corrosive applications

Specifications

Pumping Rates:	Up to 11,000 gpm
Speed Ranger	11 to 1,800 rpm
Gear Drive:	Helical, single and double reduction
Horse Power Rating:	Up to 5hp
Impeller:	Hyperfoil as standard up to 36" diameter
Motor:	NEMA C-face TEFC
Mounting:	Baseplate or Flange
Shaft Length:	Up to 120" without steady bearing

RAM_x Portable Mixers Heavy-Duty, Clamp-Mounted



- Motors up to 3 hp
Air or Electric
- Gearbox rated for up to
100,00 hours
- Heavy-Duty Clamp Assembly
- Stainless Steel Shafting, Turned,
Ground and Polished
- High-Efficiency Propeller
or Hyperfoil

RAM_x Heavy-Duty, Clamp Mounted Mixers are built to last and designed to handle tough mixing applications such as those found in the food and water industries.

Match the Mixer to Your Application

GAL Vis CPS	50 GAL	100 GAL	200 GAL	300 GAL	500 GAL	1000 GAL	2000 GAL	3000 GAL	5000 GAL
1	1/3D	1/3D	1/3D	1/3G	1/3G	1/2G	3/4G	1.5G	2G
100	1/3D	1/3D	1/2D	1/2G	1/2G	3/4G	1.5G	2G	3G
300	1/2D	1/2D	3/4D	1/2G	1/2G	1G	1.5G	2G	3G
500	1/2D	1/2D	1/2G	1/2G	3/4G	1.5G	2G	3G	
1000	1/3G	1/2G	3/4G	1G	1.5G	2G	3G		
2000	1/2G	3/4G	1G	1G	1.5G	3G			
3000	1/2G	3/4G	1G	1.5G	2G	3G			
5000	3/4G	1G	1.5G	2G	3G				
G = Gear D = Direct CPS = Centipoise Vis = Viscosity									

HYPERFOIL High-Flow, Low-Shear Impellers

All RAM_x mixers are available with Hyperfoil High Efficiency Impellers engineered specifically for your application. With Hyperfoil on your new RAM_x mixer, you will realize power reduction of 25% or more compared with any other mixer product.



Retrofit Technology

Hyperfoil impellers can also be used to upgrade other mixer products including Lightning, Chemineer, and Philadelphia mixers. They will reduce the power consumption, improve the mixing, or both.

Hyperfoil reduces power by 40% or more, or mixing is doubled for the same power. You essentially get a new mixer by only buying a Hyperfoil impeller.

Viscosity	Temperature °F	Material
1 cps	70	Water
10 cps	70	Sulphuric Acid
100 cps	70	SAE 10 Oil
1000 cps	70	SAE 70 Oil
5000 cps	70	SAE 90 Oil
10,000 cps	70	Karo Corn Syrup

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ARDE BARINCO...

**Innovation, Precision and Our Commitment to Help You Improve Your Process
With Advanced Mixing Technology**

ARDE Barinco is a subsidiary of ARDE Inc., one of the nation's leading aerospace manufacturers and a key participant in the nation's space program. Our parent company's background in metallurgy, precision manufacturing and quality assurance forms a unique background for ARDE Barinco and its mixing technology.

Our engineering, manufacturing, quality and product support programs draw on these qualifications. You'll find them reflected in our

performance -- durable, reliable products and fast, customer-oriented technical support.

Equipment To Meet Your Needs

We're specialists in finding solutions to mixing problems -- and we bring a wide range of mixing technologies to bear. Our standard product line includes specialized equipment to mix hard-to-wet dry solids into fluids and to create fine-grain emulsions (droplet sizes of 1-2 microns).

We're ready to meet your needs with:

- **Low Shear Solids/Fluid Dispersers** ● **Reversible Homogenizers**
- **Continuous In-Line Mixers** ● **Batch Processing Mixers** ● **Sanitary Mixers** ● **High-Viscosity Mixers**
- **Multi-Viscosity, Multi-Shear Mixing Systems with Comprehensive Process Analysis Capabilities**
- **Propeller Mixers** ● **Axial and Radial-Flow Turbines** ● **Anchor-Scraped Surface Agitators**



Test Facilities and Rental Machines to Assure Your Satisfaction

We're committed to total customer satisfaction. The ARDE Barinco mixers in our 2,000 square foot pilot test facility are fully equipped to measure significant process parameters such as viscosity, solid particle size distribution, liquid emulsion droplet size distribution, percent solids, density, power consumption, pH, RPM, temperature, amperage draw, shear rate and shear stress.

On-line digital monitoring allows us to provide continuous, real-time feedback on many of these parameters. We'll videotape tests and demonstra-

tions to provide a visual record -- to give everyone in your operation a firsthand look at the process.



Our full inventory of rental equipment, available in most commonly used configurations, allows us to provide mixers for short-term use, to allow you to test them in your plant.

All ARDE Barinco equipment is sold with free lifetime technical support. If you have any questions or require assistance, we're always available.

Need more information? Contact us today.

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