

custom**designed**

purposebuilt

engineered**performance**

INDUSTRIAL MIXERS

introduction

allMIX is staffed by people with an extensive knowledge of the mixer industry. We have well over 40 years experience in selecting, designing and manufacturing mixers for the following industries:

- Chemical
- Water Treatment
- Mineral Processing
- Food and Beverage
- Coatings (Paint & Ink)
- Pharmaceutical
- Oil and Gas
- Dairy

Our range of mixers is suitable for many applications including:

- Blending
- Dissolving
- Solid Suspension
- Dispersion (powders, gasses, immiscible liquids)
- Heat Transfer
- Polymerisation
- Flocculation
- Rapid Mixing

These capabilities enable allMIX to offer the correct mixer for the application and to supply a quality product at a competitive price.



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mixing technology

Mixers are one of the most critical parts of the manufacturing process. To maximize the performance of the mixer, **allMIX** takes into account the product rheology and fluid characteristics, tank shape, and other process variables.

allMIX manufactures mixers that are:

- Custom designed
- Purpose built
- Competitively priced
- Engineered to perform

A high degree of mixing technology, back up and service are standard.

smallMIX mixers

smallMIX mixers come in two different configurations and are typically used in the 50 - 5000 L tank volume range.

Direct Drive:

These units are used for small tanks for Liquid/Liquid blending applications. They are available in sizes ranging from 0.37kW to 1.5kW.

Geared Drive:

These units are used in small to medium tanks of 200 – 5000 L. They can be used for blending, solid suspension, dissolving or for mixing low to medium viscosity materials.

The **smallMIX** range of mixers has a number of mounting options which include:

- Stand mount
- Flange mount
- Plate mount



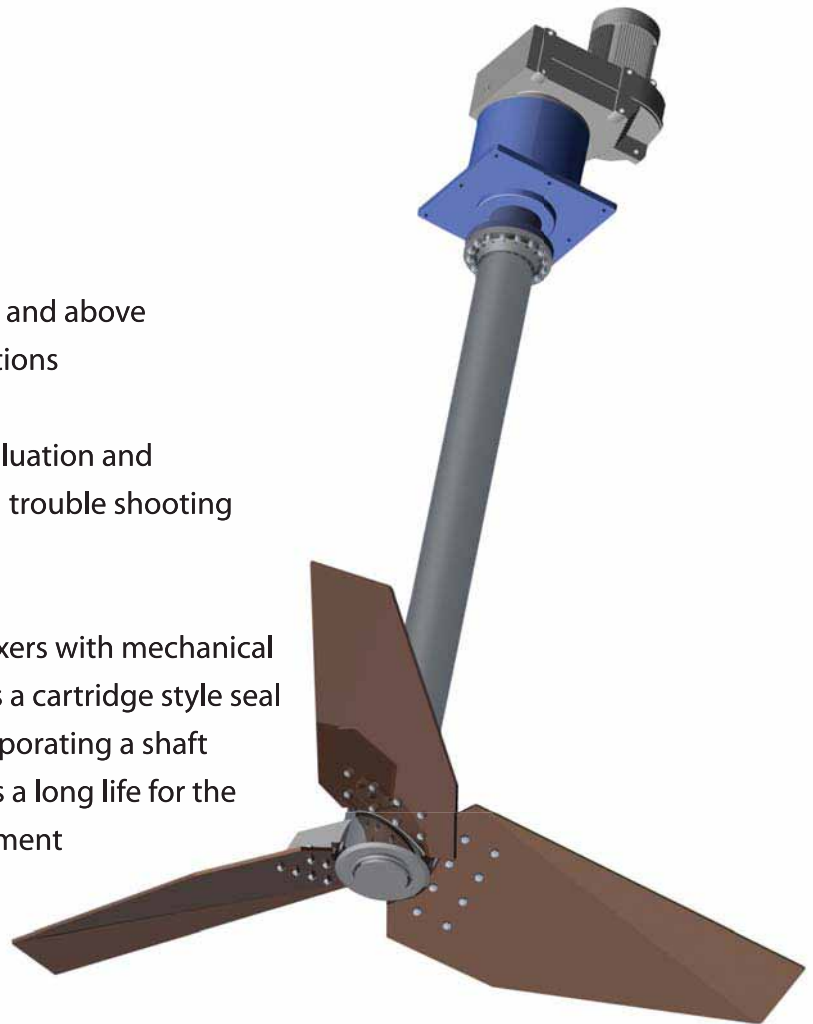


Heavy duty mixers include:

- Pilot plant scale mixers
- Production vessel mixers
- Low viscosity to paste mixing
- Motors from 0.25 kW to 90 kW and above
- Open and sealed tank applications

We are also able to assist with the evaluation and upgrading of existing equipment and trouble shooting with problem installations.

Where required, **allMIX** can supply mixers with mechanical seals. The standard mechanical seal is a cartridge style seal with 316 stainless steel housing incorporating a shaft support bearing. The bearing ensures a long life for the seal, as it minimizes any undue movement of the seal faces.



heavy duty mixers

mixer drive assemblies

allMIX heavy duty mixers are supplied with industry-leading gearboxes, motors and mounting pedestals complete with shaft support bearing. This shaft support bearing is designed to protect the gearbox from the high radial loads generated while the mixer is in operation.

There are various options for mixer drive assemblies including:

- Standard Top Entry
- Low Profile Design
- Side/Bottom Entry

The mixers can be offered with various motors including:

- Standard 3 phase motor
- Extra safety (Ex'e)
- Flameproof (Ex'd)
- Hydraulic drive
- Stainless steel motors (up to 7.5 kW)
- Air drive on smaller units
- Electronic variable speed control
- Mechanical variable speed drive
- Belt drive

To get the best from your mixer, we encourage you to contact us. We would be happy to visit your site to obtain an understanding of your requirements and submit our recommendations.



mixer impellers

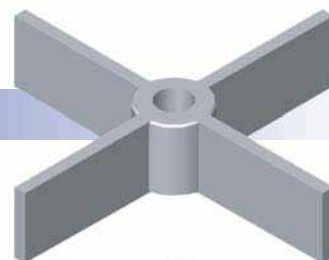
The style of impeller used for mixing is the most important part of the design. It is the type of impeller, it's size and rotational speed that determines the effectiveness of the mixer.

It is important to remember that there is not one impeller that is suitable for all mixing operations. There are a great number of different designs of impellers.

Below are a few examples of the more common types of impellers and turbines typically used in the mixing industry:

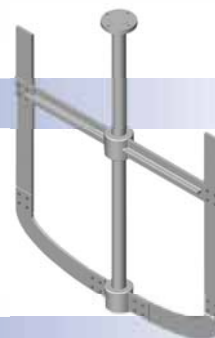
Vertical & Pitched Blade Turbine

These turbines are used in various applications such as low fluid depth and medium shear applications.



Anchor Impeller

The anchor style impeller is used in high viscosity, low shear applications. The flow is tangential and is often used in heat transfer duties.



Hydrofoil Impeller

The hydrofoil impeller is a high efficiency modern design and is most effective in blending, heat transfer and solid suspension applications in low viscosity fluids



HiFlo Impeller

This impeller is designed to give high flow in medium viscosity products. This style of impeller is also used in gassing applications.



Dispersion Disk

The dispersion disk is for high shear applications where hard to mix powders are used. Typical applications are in the Ink and Paint industries.



The impellers pictured are the more commonly used of our range. [allMIX](#) is able to design impellers to suit specific applications.

mixer data sheet

Company _____ Date _____
 Name _____ Email _____
 Address _____ Phone _____
 Project _____ Fax: _____

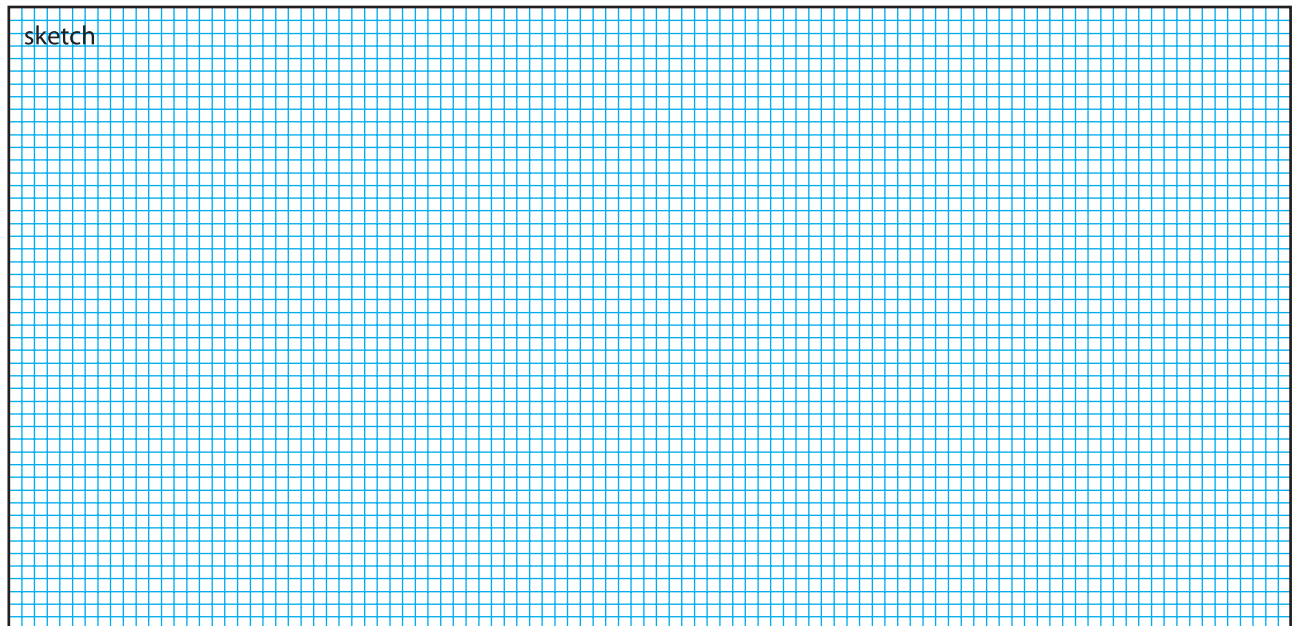
No. of Mixers _____ Tank Dia _____ m Height _____ m Baffles yes / no
 Tank Inlet top / bottom Outlet top / bottom

Mounting Nozzle / Beams / Post Details _____ (Height / Depth / Size etc.)
 Top Open / Cone / Dish Details _____ (Angle / Depth)
 Bottom Flat / Cone / Slope / Dish Details _____ (Angle / Depth)

	1	2	3	Solids
Products				
SG				
Viscosity				
Quantity				

Final SG _____ Visc _____ Vol. max _____ Vol. min _____
 Characteristics: Shear sensitive / Avoid aeration / Floats / Foams / Other _____

Mixer duty Blend / Storage / Dissolve / Suspend / Emulsify / Disperse / Heating / Gassing / Other _____
 Motor Volts _____ Poles _____ Phase IP _____ Flame Proof _____
 Mixer Entry Top / Side / Bottom / Inline Sealing None / Lip / Packing / Mechanical
 Conditions Pressure _____ kPa Temp _____ deg C
 Material of Construction _____ St. St / MS / Fiberglass / Poly / Concrete



good company
to mix with



please visit us at www.allmixtechnology.com

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