



Power Shear Mixers has over 30 years experience in the consultancy and manufacture of fluid mixing machines and in particular high shear mixers.

The Company prides itself on maintaining long standing relationships with old customers and offers new customers close co-operation for engineering solutions for their own mixing application.

#### **Power Shear offers customers:**

- High Shear Mixers
- Turbine mixers
- All stainless steel mixers
- Mixer Lift units
- Mixing vessels
- Complete mixing Solutions

Sales engineers and demonstration mixers are available.

## **Stainless Steel High Shear Mixers**

Power Shear Mixers offers a a range of custom built designed high shear mixers and agitator type to which are constructed from stainless steel 316L/304 grade materials including bottom entry mixers, inline mixers & Stainless steel vessels.

Please see these pages separately.

All stainless is polished to specification of industry. Also options include stainless steel IP66 electric motors and gearboxes. Atex design machines available.

These machines suit the pharmaceutical, cosmetic and food production industries.

Applications within these industries sometimes are not straight forward and need thought and that is why Power shear mixers would like to offer its mixer design experience for your mixing application.

# **Abrasive Mixers (S Type)**

The s-type range of machines are ideal for high shear mixing on more abrasive applications, ie for the ceramic industry, mixing colours into base glazes or just general agitation of containers before further use.

Other applications include abrasive chemicals, industrial metal polishing compositions, clays and also pharmaceutical uses.

The s-type mixer is designed and engineered so that the mixing drive shaft is carried through a bearing within a housing, calculated to give the maximum rigidity to the shaft without excessive flexing, increased efficiency is given to the shaft by even pressure build up within the rota stator system, acting like a fluid bearing.





## Non Abrasive Mixers (L Type)

L-type Powershear range of mixers are designed to work on the not so abrasive mixes in the low to high range of viscosities.

Using a bottom bearing mixing shaft support allows for very close tolerance between rota stator system to give intensive shearing.

Quick interchangeable twin stator with combination of holes, slots and emulsor meshes ensures materials are given 1 or 2 stage shear mixing, without removing machines from vessels to change stator.

Flow control enables flow adjustment, and ensures short mixing times.

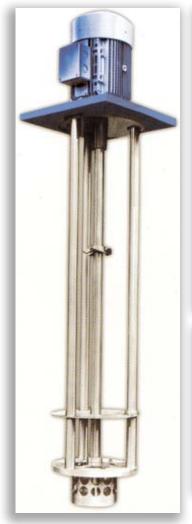
Mixing capacities from 10 litres to 100,000 litres, depending upon viscosities.

#### **Bottom Entry Mixers**

UNBE Powershear range are designed to work in close proximity with anchor, gate, turbine, propellor and contra-rotating mixers giving maximum shear forces on material being mixed. Pulling from the heart and bottom of the material, eliminating dead areas of flow.

The upstanding design allows anchor or contrarotating mixing blades to run very close to the two or three frame arm supports, reducing the doughnut ring effect that is created by larger gaps in sweeping blades, and effectively improving heating/cooling effect where jacketed vessels are employed.

They also help for efficient c.i.p on wash down at the conclusion of batch cycle.











#### **In-Line**

Inline mixing with the unique single rotor system that shears with a positive no by-pass stator ensuring excellent intensive mixing on a continuous basis, with the addition of any number of components to produce excellent smooth emulsions, dispersions, precipitations, creams, blendings etc.

A range of interchangeable stators are offered to suit various applications. Construction is such that removal and interchange of stators, is very quick and easy. There is no need to remove motor from mixing unit.

The design is such that once primed the online mixer will self pump without the assistance of an additional pump. If in the case, the flow rate proves excessive, flow control can be obtained by the utilisation of a restrictor valve to the discharge side of the mixer, without adverse effect to the machine's performance.





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## **Bespoke Solutions**

Power Shear Mixers can offer a customer a complete mixer project of

- High shear mixer
- Turbine Mixer
- Inline mixer
- Bottom entry mixer
- Stainless steel mixing vessel
- Mixer Lift unit

#### **All in-house**

We understand that consistency of build/quality/delivery time and project management are very crucial to a mixer installation project, so if it is undertaken by one company the objectives and understandings are more clearer for Power Shear and the customer.



