



*Greaves high
technology mixers*



TRIPLE ACTION DISPERSION

High Quality Dispersion Mixing System

LIST NUMBER 400



Unique powder mixing system

The most efficient piece of equipment in the industrial mixing market. The Triple Action Dispenser is designed to process high quality powder in liquid dispersions with greater speed and lower energy consumption. Compared to other processing methods, the machine has a substantially improved performance. This is achieved by using three independent agitators to produce mass flow action, high shear and efficient vessel agitation.

BENEFITS

- » High quality dispersion
- » Eliminates dry powder on the liquid surface
- » Lower energy consumption
- » Greater speed and improved performance
- » High viscosity and specific gravity applications
- » Controllable vortex and powder wetting.

The system is backed by a complete plant design and installation service based on over 80 years experience.

APPLICATIONS

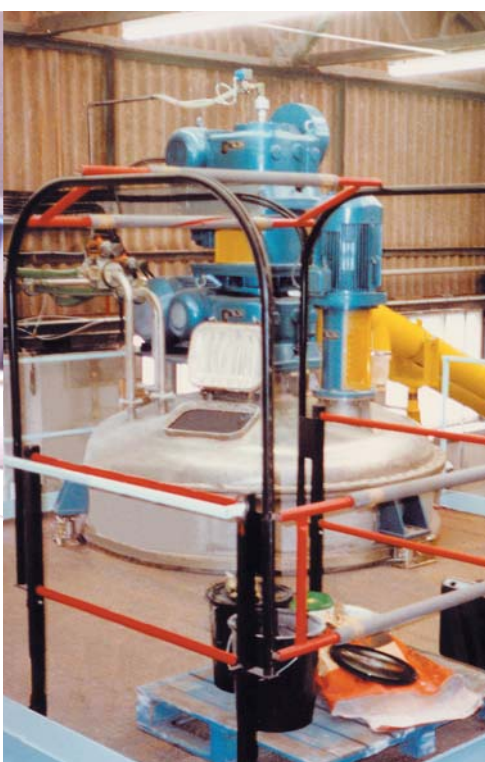
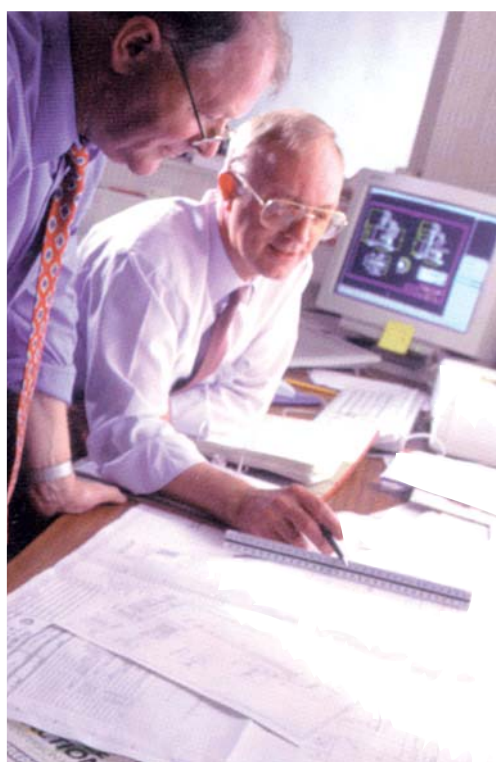
The Triple Action Dispenser is suitable for a wide variety of applications and is currently in use producing:-

- » Adhesives
- » Pharmaceutical Creams
- » Pastes
- » Paints
- » Textured Coatings
- » Wood finishes
- » Printing Ink Pre-mixes
- » Bitumen Coatings
- » Sealants and Mastics
- » Detergents
- » Food Products

Including many other related industries.

CAPABILITIES

Capabilities vary from 350 to 20,000 litres and a vari-batch model is available featuring 25% operating capability. Materials of construction can be carbon steel, or stainless steel and models suitable for pressure or vacuum are available. The High Speed Dispenser's detailed design eliminates the need for height adjustment during operation. This makes it far more suitable for inclusion in automated systems than traditional high shear mixers.



TECHNICAL SPECIFICATION

THREE INDEPENDENT AGITATORS

The Triple Action Dispenser has three independent agitators. These are used to produce a mass flow action, high shear and efficient vessel cleaning:-

1. Mass Action Agitator (Incorporator)

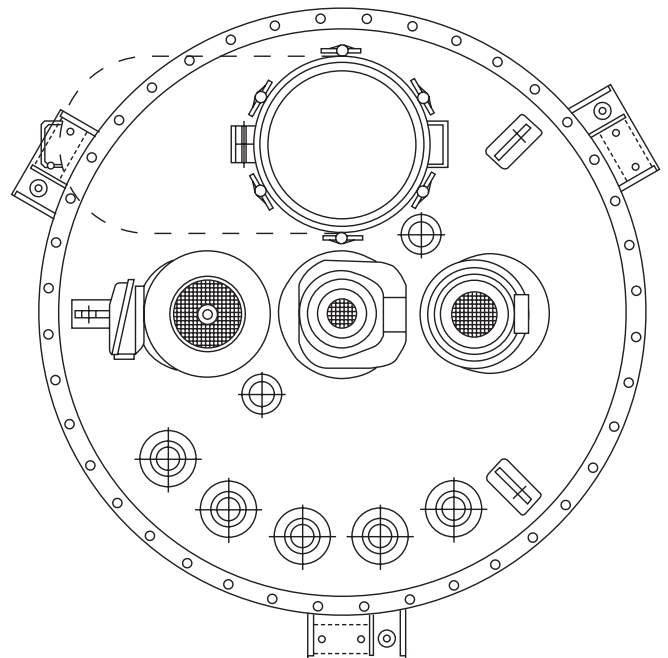
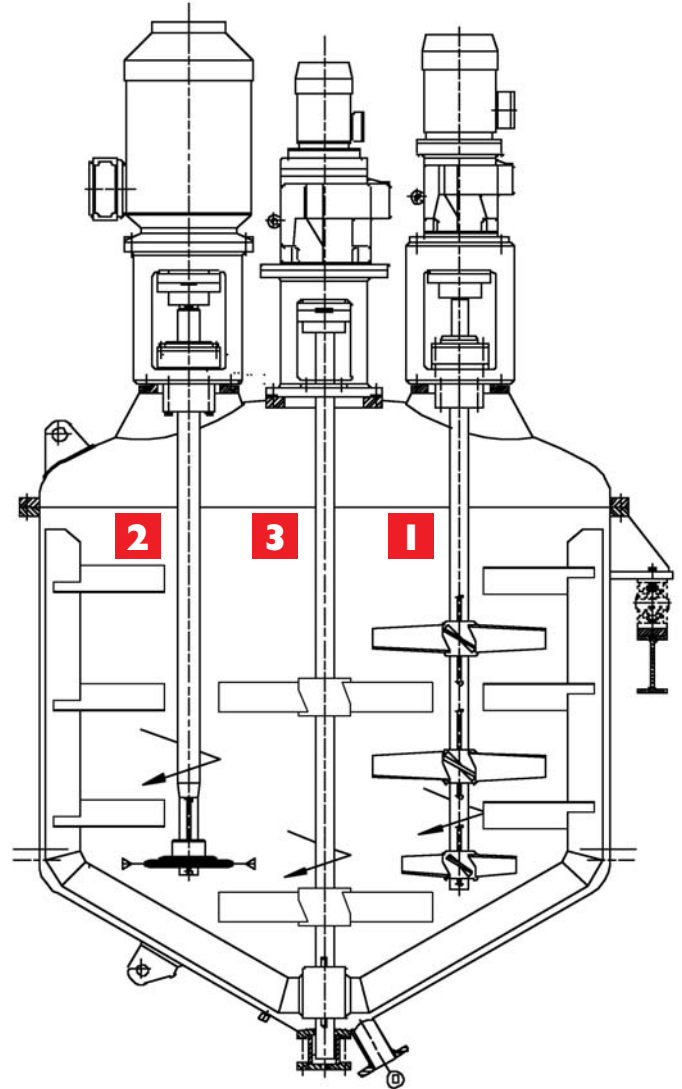
Designed to circulate the vessel contents. The operation produces an initial dispersion and avoids the risks of dry powder on the liquid surface, resulting in 'balling'. High efficiency turbines are frequently adopted for optimum performance.

2. High Shear Blade Dispenser

The shear blade agitator is designed exclusively to produce a high quality dispersion without creating a notable increase in the product temperature. The mass flow agitator produces a continuous flow of material through the high shear zone, resulting in rapid high quality dispersion.

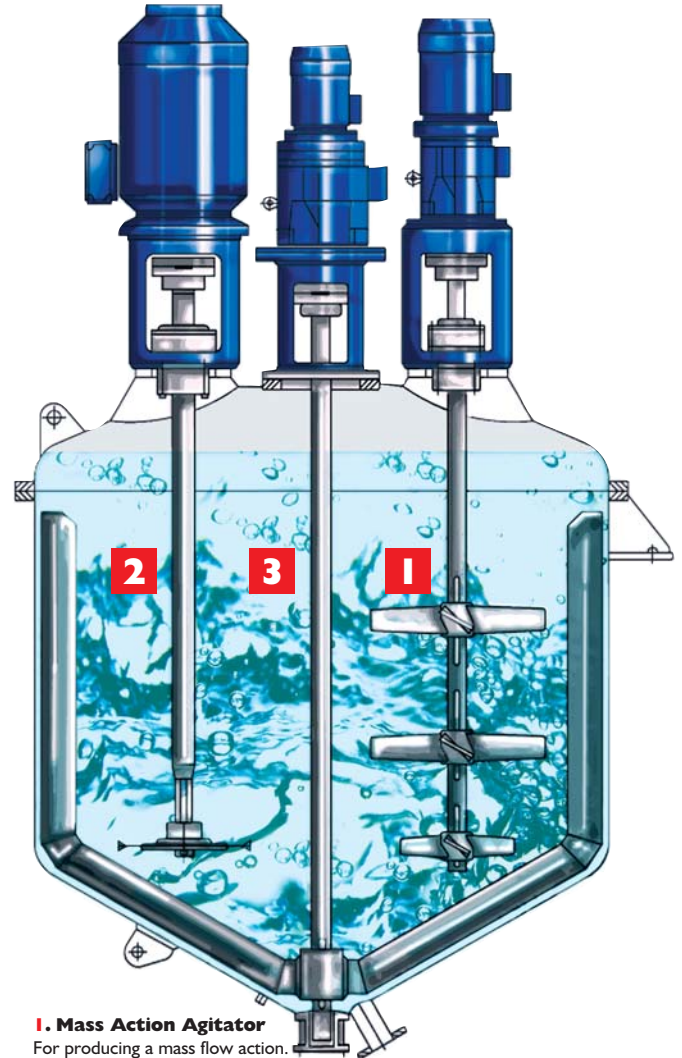
3. Anchor/Side Scraper

Designed to minimise product wall film thickness and improve heat transfer rates, where necessary, together with improving cleanability and enhancing discharge capabilities. When bulk powder handling equipment is fitted, rates of powder addition up to 3 tone/min can be achieved - a considerable increase on the capabilities of other machines.



OPTIONS

The process engineer may have specific requirements and prescribe different types of **shear mixers, or impellers**. Should they be needed, these can be accommodated within the mixing system.



1. Mass Action Agitator

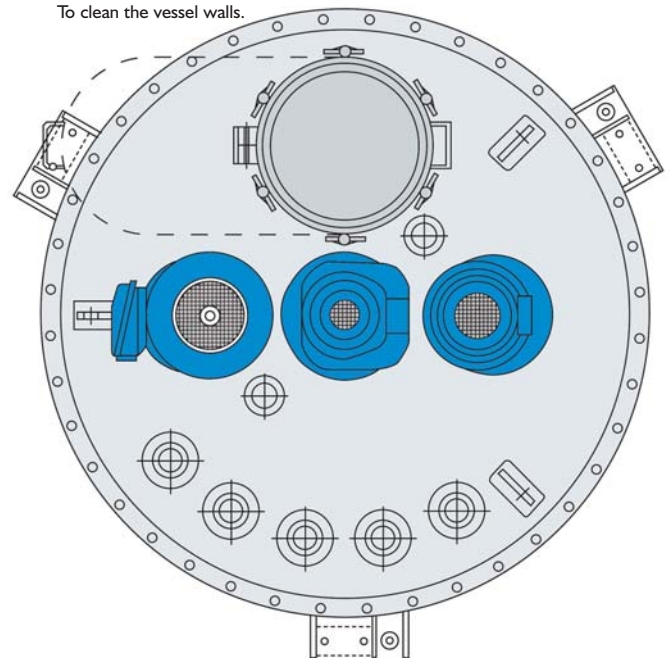
For producing a mass flow action.

2. High Shear Blade Disperser

For efficient high quality dispersion.

3. Side Scraper

To clean the vessel walls.



TANKS

A wide range of facilities are available for the following mixing vessels which include the following benefits:-

1. Simple flat top tank with opening sections and a deep conical base.
2. Dished top tank, with a vari-batch facility including a deep conical base for easy emptying of viscose products.
3. Heating or cooling jackets, to PD5500:2003:Cat - Two application
4. Internal pressure or vacuum to suite individual processing requirements.
5. Construction materials include - Carbon Steel, Stainless Steel, or Special Alloys.



VARI-BATCH

The Vari-Batch facility permits up to a 5/1 turn down production ratio, allowing small batches to be produced with a large mixer.



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