

## Ultramix

The Silverson Ultramix is designed for applications which are beyond the capabilities of a conventional agitator or stirrer but do not necessarily require the intense high shear of a Silverson rotor/stator mixer.

### **The advantages**

- Ultra sanitary design - single-shaft, single-piece mixing head.
- Designed for Clean-In-Place (CIP) with Sterilize-In-Place (SIP) as an option.
- Full compliance with 3-A TPV (Third Party Verification), USDA and cGMP requirements.
- Rapid incorporation of large volumes of powders.
- Excellent in-tank movement, even when processing high viscosity mixes.
- Low maintenance - no wearing parts or bushings.
- Reduced power requirement.
- Suitable for aggressive chemical service to the most demanding sanitary requirements.

### **Materials of construction**

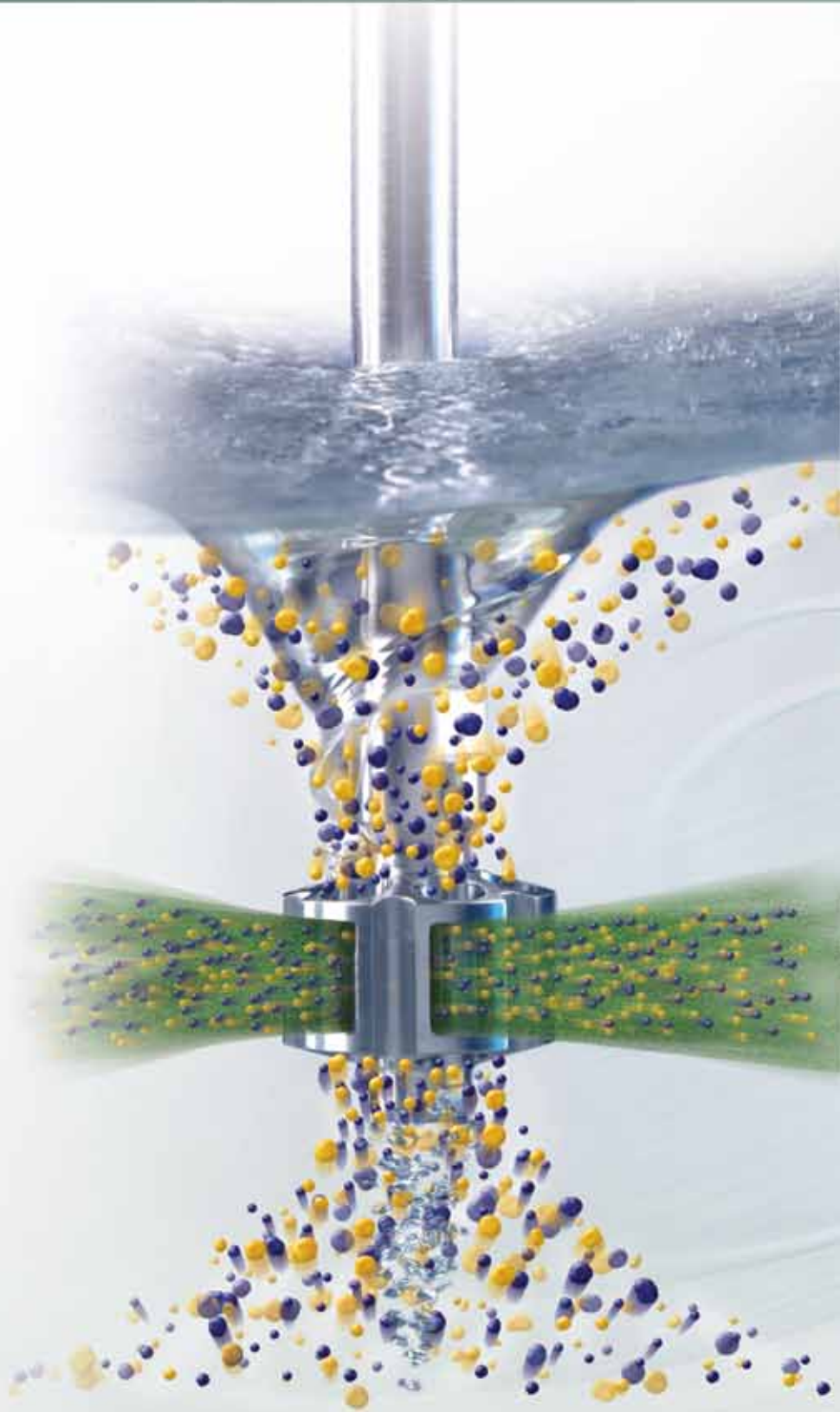
All wetted parts are in 316L stainless steel. Special materials on request.

### **Motor specifications**

TEFC, washdown duty and explosion proof motors are available as standard.

### **Mounting**

Stainless steel flange fitting as standard. Stand mounting is available for some models.

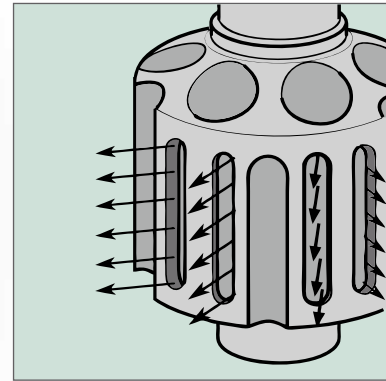


# How the Ultramix works



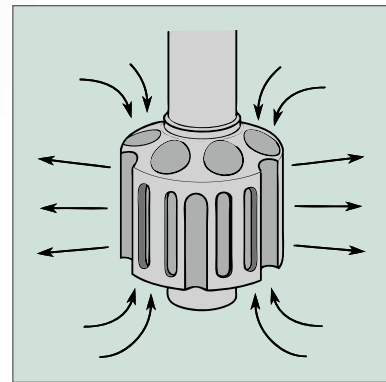
## Stage 1

As the mixer rotates at high speed, the propulsion grooves on the outside of the mixing head project the surrounding product outwards, creating an area of low pressure outside the head. This draws product from within the mixing head through the radial slots to the outside.



## Stage 2

The material is subjected to a shearing action as it passes through the slots and is projected back into the body of the mix with great force. Fresh material is simultaneously sucked in through the holes in the top and bottom of the mixing head, setting up a vigorous flow pattern throughout the vessel.



## Mixing Station

The Ultramix is ideal for mixing in problematic containers such as IBCs and Tote Bins - the highly efficient in-tank movement provided by the small diameter workhead overcomes the problems often encountered with difficult vessel geometry. Silverson offers a "Mixing Station" for this type of application equipped with a range of features and options:

- Electric raise and lower mechanism.
- Guarded shaft.
- Vessel proximity sensor and height interlock.
- Optional safety interlocked cage.
- A special hopper allowing powder to be fed directly into the container can be offered for some applications.

