



**VT300 In-line Shear Pump/Homogenizer**-- Designed as a high speed, high shear mixer and emulsifier for continuous processing, the VT-300 sets the standard for what in-line mechanical mixers should provide. It **emulsifies, homogenizes, dissolving molecular/colloidal, suspends, disperses and disintegrates solids and powder/liquid incorporation.** Each mixer, with its precision engineered rotor/stator generator (1-4 stages), far outperforms conventional mixers, improving quality, product consistency and process efficiency. It is constructed completely of 316SS (internals, housing, shafting and base), its unique dual stage axial and radial heads provide greater throughput and flow, and the shear rates generated insure droplet and **particle size reduction down to 3-5 microns**



VT300 "Dyna-Flyers"  
In-line Homogenizer Pouring Raw materi into Open Tank



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### Features & Specification

Working flow rate (l/h)	30,000 – 185,000 (300 series) 3,000 – 125,000 (310 series)	Operating Environment	0-175°C, 95% rel. humidity
Motor Power(kW)	1.1 -37 - 3 phase Normal or Ex-Proof	Protection class	IP55 (normal motor) EExdellC-T4 with thermistor (Explosion proof motor)
Voltage/ Frequency	380-450V / 50-60Hz	Certified standards	89/336EEC, 72/023/EEC, EMC acc. IEC/EN 61000-6-2 / 3, Safety acc. IEC/EN 61010-2-51, 2006/95/CE, 2004/108/CE, EN 60034-1, EN60204-1
Working Temperature and Pressure Range	Up to 175° C 15 bar	Seal type	Single Seal (150° C) or Double Acting Mechanical Seal (160° C and 15 bar)
Speed range (rpm)	1,000 – 3,000 (300 series) 1,000 - 8,000 -13,000 (310 series)	Warranty	2 years – spare part due to manufacturing defects
Speed control type	110-220V/50-60Hz or 380-415V/60Hz frequency inverter control : 0-6000 rpm	Sterilization Method:	All
Carriage system (optional)	S/S 304 or Mild Steel epoxy coated	pH Range:	2-13
Standard Shaft Length ( mm)	750 - 1650	Suitable for solvents & abrasive substances::	YES
Weight (kg)	60-650	Ultimate Fineness, Suspensions&Emulsion: (µm)	Suspension: 10-15 3-5
		Max Viscosity (mPa)	80,000



"Dyna-Flyers"VT310 In-line with Powder Pouring Safety Bench/ Powder Induced Pipe

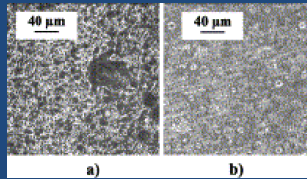
### OUR ADVANTAGES !!

- ✓ **Cost Saving and higher yields by reduce batch time ,improve product Quality & consistency with High Efficiency, High Shear continuous Mixing**
- ✓ **Low Maintenance-No Bushings, Shims or Wear Sleeves**
- ✓ **CIP-able and designed for rapid disassembly for cleaning or inspection**
- ✓ **Safe Operation on Floor Level**
- ✓ **Safe Operation on Floor Level**
- ✓ **Average Droplets of 3-5 Microns...with 98% Distribution Under 5 Microns**
- ✓ **Fully Machined 316SS Housing and S/S Motor ( on request)**

### Why purchase our homogenizer ?

#### \*Excellent Result For Ultimate Fitness

- ✓ Elimination of "Fish Eyes"& "bubbles" within minutes



Before our inline mixer

After our inline mixer

Achievable Suspension fitness(um):10-15,

Achievable Emulsion fitness (um) : 3-5

#### \*Competitive advantages in

#### Versatile Functional Design

High Throughputs from 3,000 up to approx.125'000 l/h.

- ✓ High speed levels and tip speeds up to approx.43 m/s
- ✓ Hygienic and non-seal contacts with product that meets Pharmaceuticals production guidelines!



- ✓ Sterile versions, as well as CIP / SIP, 3A and ATEX(Ex-Proof) versions can be supplied
- ✓ product wetted parts made from high alloyed stainless steel and sealing materials conform with the products.

#### \*Unlimited Customer Support

"Pre-Order Questionnaire" &

"Let's trial Run" programme if you suspect the correct equipment to purchase? Let's you help us by fill in the questionnaire or you can ship us the samples for trial run ! It's totally "FREE"



Dial +1888-312-6992 (tol free for North America, Canada & Putrea Rico) or local line 0173576175 for 7/24 hrs products enquiry online technical support,after sales services and warranty spare parts replacement



# VT300 Shear Pump/Inline Homogenizer- Ordering Information



## Modular "Dyna-Flyers" Inline Homogenizer Systems

Choose from shaft-generator assemblies to create the perfect system for your current application—  
Shaping the homogenizer future !

-Customize your own system by choosing a variable-speed motor and a shaft depending on the viscosity of your sample  
-Quick processing protects your samples from heat damage

-Quickly process volumes flow rate from 30,000 l/h to 185,000l/h

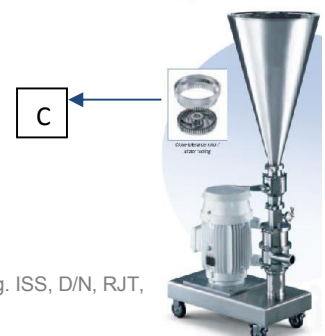
Model :VT300-03~ 50 Type: Vacuum or Pressure Tank with lantern Seal Type: Single ,Double Mech Seal Warranty & Electricity Compliance:



### A . Motor Drive and Technical Data

Built-in variable-speed pulley to lets you adjust speed from 0 to 6,000 rpm. Motors can be mounted on a lantern ( vacuum or pressure type) or direct mount on tank . Maximum generated vacuum at the powder induction is approx. 25 mbar. Capable of operating under pressure up to 16 bar and temperature 175C  
To process higher volumes and viscosity up to 5,000L and 80,00cps.

**What's included:** 3-phase motor ( normal or TEFC, flame proof, ATEX approved), stator and rotor generator set. The 110-120 VAC VFD inverter - US plug; the 220-240 VAC VFD inverter- European plug, User operation Manual, Accessory kit to open the stator rotor generator. All sanitary screw or flange fittings available on request (e.g. ISS, D/N, RJT, SMS, Tri-clamp, etc.)







Model	Order No.	Motor Power(kW)	Application volume flowrate l /h (water)	Speed range(rpm)	Stator Diameter (mm)	Max Tip Speed (m/s)	Inlet / Outlet size (mm)	Weight (kg)
VT300-03	271010000	2.2	Up to 30,000	3,000	38	16	DN32 / DN25	60
VT300-05	271010100	4.1	Up to 45,000	3,000	48	18	DN40 / DN32	75
VT300-10	271010200	7.45	Up to 65,000	3,000	68	23	DN50 / DN40	170
VT300-25	271010300	18.6	Up to 80,000	3,000	98	27	DN65 / DN50	400
VT300-30	271010400	22.37	Up to 130,000	1,500	168	30	DN100 / DN80	450
VT300-50	271010500	37.3	Up to 185,000	1,000	228	38	DN125 / DN100	650
VT310-05~75	271010600~271010900	5 ~ 75	3,000~125,000	1,200~6,000	55~300	18~25	DN40 /DN32 ~DN150 / DN125	65-750

Model :VT310-1.5~ 50 Type: Vertical with Cooling or Heating Chamber Compliance: pharmaceuticals manufacturing equipment's guidelines and standards:- 1.copmplete self drainingscomplies CIP,SIP & 3A standards. 2.Finest surface finished up to Ra 0.4. 3. High-value seal with wear-resistant materials non-contact with products 4. Explosion protected executions according to ATEX 95 guidelines deliverable.







- IH610-05~75 are the vertical type inline homogenizer with propeller driven the flow of product's medium.

Model	Description /Order No.			
	Inline, Function & Accessory Type for Choice			
VT300-SE	 VT300 "Dyna-Flyers" Inline Homogenizer Feeding into material into Open Tank	 VT310 "Dyna-Flyers" Series Inline Shear Pump Homogenizer		
	758710000	758720000	758730000	758740000

### B . Inline System with Accessory Choices

Different standard working chambers such as single (one rotor/stator dispersing generator) and multi-stage (up to three generators),with and without cooling/heating jacket and different piping connections are available (customer specific design on request).For the shaft seal, single or double mechanical seal systems can be chosen and designed to product characteristics (customer specific design incl. cartridge type systems on request). Temperatures : ranging from - 40°C up to 175°C. Safety features such as safety bench to avoid technician to carry heavy beg for easily carry out operations.Solid liquid Injection to induced powder directly to chamber by avoid dusty environment.

Model	Description Stator-Rotor for Replacement			
VT300-AC				
	<b>Shear Sensitive with one tooth row each</b> <ul style="list-style-type: none"> <li>• general mixing applications for sauces, dressings, gels, vitamin drinks,Fruit ,pre-crushing of coarse-grained</li> </ul>	<b>Medium Fine with 2 teeth row each</b> <ul style="list-style-type: none"> <li>• polymer emulsions, extractions</li> <li>• precipitation of solids</li> <li>• desagglomeration</li> <li>• mayonnaise</li> </ul>	<b>Fine with 3 teeth row each</b> <ul style="list-style-type: none"> <li>• ointments, cremes,emulsions</li> <li>• vaccines,polymer emulsions</li> <li>• pigment suspensions</li> <li>• tissue extraction, desagglomeration</li> </ul>	<b>High Fine with 4 teeth row each</b> <ul style="list-style-type: none"> <li>• micro emulsions, micro encapsulation</li> <li>• micro suspensions</li> <li>• metal oxide suspensions</li> </ul>
Order No.	981010000	981020000	981030000	981040000

### C . Optional Stator-Rotor and Accessories Parts

Replacement for stator generators customize your system to your unique processing requirements. Choose from the below interchangeable rotor-stator generators to add to a shaft-generator assembly or replace the worn generators.

Please contact us for more info and quote :

