

## Digital High Speed Homogenizer

TOPLAB INDIA'S Digital High Speed Homogenizer is sleek, sound-insulated casing conceals enough power to safely and quickly handle a variety of applications. Our broad range of dispersing aggregates cover the range from preparing samples to testing product formulas and recipes.



**TL-500D**



TOPLAB TL-500-D is the ideal solution for cost-conscious laboratories. It is able to perform homogenizations with volumes from 10ml to 40000 ml. The electronic control system continuously monitors the speed and automatically adjusts it, keeping it constant with changing viscosity. The speed is easily seen on the large digital display.

Aggregates with a variety of styles and diameters are available to provide optimum particle size reduction when using this drive. There are many different styles of aggregates available from  $\phi 4\text{mm}$  in diameter for volumes down to 0.2 mL to  $\phi 23\text{mm}$  for volumes up to 40000mL. If cross contamination from sample to sample is a concern, we offer single use

### ADVANTAGES:

- 500 Watt motor provides sufficient power and high speed necessary for efficient particle size reduction
- Digital motor speed control from 500 to 30,000 rpm
- Continuously adjustable speeds for better results
- Aggregate tip speeds up to 32 m/s produce the finest particles possible
- Soft start prevents splashing of homogenate from sample vessel
- Thermal fuse for overload protection
- Speed remains constant even when viscosity changes
- Aggregate replacement using one-handed quick-release coupling
- Insulated motor housing keeps motor noise to a safe, approved level
- Triple safety of the drive (overload protection. Smooth start – against jerky work, safety switch)
- High quality dispersing tools as standard for better resistance to corrosion (SS 316 L steel)

### ERGONOMICS:

- Easy operation with an on-off switch and speed control
- Intelligent variable speed control for long equipment life
- Speed stability even with changes in viscosity
- Easy adjustment of motor height
- Switch aggregate quickly with Click & Go coupling
- Easy aggregate clean-up with Easy Clean Design

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### TECHNICAL SPECIFICATION:

<b>Model</b>	<b>TL-500D</b>
<b>Speed Range (rpm)</b>	500 ~ 30000 rpm
<b>Display</b>	Digital LED
<b>Process Volume Range (ml)</b>	10 ml – 40000 ml (40 Liter)
<b>Applicable aggregates</b>	Ø4 ~ Ø23 mm
<b>Motor Type</b>	Brushless motor / AC
<b>Motor Power (W)</b>	500 W
<b>Speed Control</b>	Intelligent variable speed control Knob
<b>Contact Material</b>	316L Stainless Steel / PTFE
<b>Max. Circum. Speed</b>	32 m/Sec
<b>Max. Viscosity</b>	10,000 cps
<b>Noise Emission</b>	66 dB @2500 rpm / 72 dB @30,000 rpm
<b>Protection Class</b>	IP20
<b>Ambient Temperature</b>	0°C~ 50°C
<b>Relative Humidity</b>	80% RH
<b>Dimensions (L x D x H in mm)</b>	157 x 76 x 236 mm
<b>Weight</b>	Approx. 2.0 Kg
<b>Input Power</b>	AC220V, 50/60Hz

### APPLICATIONS:

- Using this drive, a variety of dispersing, homogenising and suspension applications can be realized. Our Application team is looking forward to advice you regarding your application.
- Creation of dispersions and emulsions
- Dispersing of plant, human or animal tissue, resins and pigments
- Solving of solid materials
- Creation of suspensions
- Formulation of lotions, creams and food
- Production of oil-water emulsions
- Sample preparation for subsequent extraction of pharmaceutical agents (API)
- From plant and animal tissue and for API dispersion in pharmaceutical products
- Excellent for quality assurance and quality control

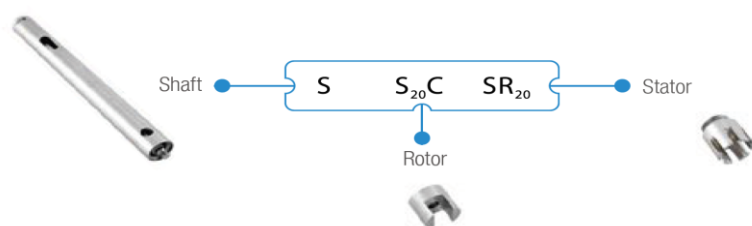
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### Accessories (Rotor /Shafts):

Model/ Order No.	Function / Description	Process Volume	Rotor Diameter	Stator Diameter	Immersion Depth (Min/Max)	Ultimate fineness (in Microns)		Applications
						Suspe nsion	Emul sion	
SS20CSR20	Solid - Liquid Mixing Material	10 -5000ml	15 mm	20 mm	40/170 mm	10 -50	1 -10	P,CI,PC,SP
SS20CCR20	Fibre Material	10 -5000ml	15 mm	20 mm	40/170 mm	10 -50	1 -10	SP,M,F,PT,TI
SS20CMR20	Solid - Liquid Mixing Material	10 -5000ml	15 mm	20 mm	40/170 mm	10 -50	1 -10	CI,PI
SS20FER20	Latices'	10 -5000ml	15 mm	20 mm	40/170 mm	10 -50	1 -10	SP,PI,PT,P
SS20FCR20	Fibre Material	10 -5000ml	15 mm	20 mm	40/170 mm	10 -50	1 -10	SP,BT,M,F,PT,TI
SS20FMR20	Solid - Liquid Mixing Material	10 -5000ml	15 mm	20 mm	40/170 mm	10 -50	1 -10	CI,C,PI,F,PT,PC
SS30CMR20	Stirring paddle Function	250 - 20000ml	15 mm	30 mm	40/170 mm	5-25	1-5	CI,F,SP
SS30CSR30	Solid - Liquid Mixing Material	100 - 8000ml	23 mm	30 mm	40/170 mm	5-25	1-5	SP,M,F,PT,P
SS30CCR30	Fibre Material	10 -8000ml	23 mm	30 mm	40/170 mm	5-25	1-5	SP,M,F,PT,P
SS30CMR30	Solid - Liquid Mixing Material	100 - 8000ml	23 mm	30 mm	40/170 mm	5-25	1-5	CI,PI
SS30FSR30	Solid - Liquid Mixing Material	100 - 8000ml	23 mm	30 mm	40/170 mm	5-25	1-5	SP,PI,PT,P
SS30FER30	Latices'	100 - 8000ml	23 mm	30 mm	40/170 mm	5-25	1-5	SP,PI,PT,P
SS30FMR30	Solid - Liquid Mixing Material	100 - 8000ml	23 mm	30 mm	40/170 mm	5-25	1-5	CI,C,P,F,DT,TI
SS40CMR30	Stirring paddle	1000 - 40000ml	23 mm	40 mm	40/170 mm	High-Speed Mixer		CI,F,SP
Shaft 5	Solid - Liquid Mixing Material	0.2-50ml	4mm	5mm	40/60 mm	10-50	1 -10	BT,M
Shaft 10	Solid - Liquid Mixing Material	1-250ml	9mm	10mm	10/60 mm	10-50	1 -10	BT,M
Shaft 14	Solid - Liquid Mixing Material	100- 1000ml	13mm	14mm	10/60 mm	10-50	1 -10	BT,M

**Note:** BT = Biology; F = Food Industry; P = Pharmaceutical Industry; C = Cosmetic Industry; M = Medical Analysis;  
PC = Petrochemical Industry; PT = Paper Production Industry; SP = Wastewater Analysis; CI = Ceramic Industry;  
CH = Chemical Industry; PI = Paint Industry; TI = Tobacco Industry

### Shaft selection guide for High Speed Homogenizer:



Model No.	Description
WF11-D	Can be extended _at bracket (double rod design)
11045011	Vessel holder with boss head clamp for WF11-D
11045030	Safety ring for stand WF