

X3000 batch disperser is equipped with a 1050W motor, featuring high torque and a rotational speed ranging from 3,500 to 25,000 rpm. It can handle a single batch of up to 10 liters. Its powerful performance, reliable quality and flexible application make it an ideal tool for sample preparation and process exploration in laboratory analysis and R&D centers. It not only enhances the efficiency of research and development, but also provides a solid guarantee for the accuracy and repeatability of experimental results.

X3000 Batch Disperser

Surging Power | Drive a Variety of Tools | First Choice for R&D Work



Outstanding Quality

- High-performance motor, powerful, efficient and more durable
- Low excitation impedance, low heat generation during long-term operation

Speed

- Load constant speed tech, dynamic viscosity compensation for stable speed
- Wide speed range for low & high-speed homogenization

Safety

- Soft start ensures smooth start-up and motor protection
- PTC temperature monitoring, motor overheat protection, safe and reliable
- ClickLock quick-plug interface makes it convenient and fast to install tools

Dispersion Tools

- 50 types of tools to meet the needs of diverse samples (standard /serrated /fiber /turbulent /emulsified , etc.)
- Specially made Polyflon™ PTFE shaft sleeve, excellent wear resistance and chemical stability
- Resistant to chemical, steam and dry heat sterilization

Quality Assurance

- CE certification; 3-year warranty

Batch Dispenser | X3000



Project Name	Technical data
Model	X3000
Order Number	22271.02
Drive Motor	Carbon Brush
Input/output Power	1050/660W
Speed Range	3500~25000rpm; 6th Gear
Speed Display	Scale Indication
Governor	Microprocessor
Soft Start	Support
Overheat Protection	Support
Overload Protection	Support
Volume range(H ₂ O)	0.5~10000ml
Maximum Viscosity	5000mPa.s
Maximum Line Speed	35m/s
Blade Diameter	Ø 5, 7, 10, 12, 14, 18, 20, 25, 30, 35mm
No-load Noise	75dB (A)
Sample-contacting Material	AISI 316L/PTFE
Contact With Sample Solution PH	2~13
Processing Type*	Batch/Continuous Type
Arm Diameter	Ø 16mm
Arm Length	210mm
Dimensions (Driver)	75×95×310mm
Weight	2.5kg
Working Environment	5~40℃, ≤85%RH
Rated Voltage	AC 220~240V, 50/60Hz
Protection Level	IP 20

*Optional flow device: continuous sample processing



Pharmaceuticals



Biology



Food



Chemical Coatings



Daily Chemicals



New Material



New Energy

Batch Disperser | X3000

Standard Type S

Special geometric stator, paddle/double-toothed blade rotor, large vortex, uniform sample dispersion. Applicable to shearing, dispersing, dissolving, mixing and homogenizing most samples.

Order No.	Model	Diameter/Length	Volume Range
130511	T5S	Ø 5mm/80mm	0.5~10ml
130711	T7S	Ø 7.8mm/110mm	0.5~50ml
131011	T10S	Ø 10mm/120mm	1~100ml
131211	T12S	Ø 12mm/120mm	1.5~200ml
131411	T14S	Ø 14mm/160mm	5~500ml
131811	T18S	Ø 18mm/160mm	10~1500ml
232071	CT20/S20S	Ø 20mm/190mm	10~2000ml
232571	CT20/S25S	Ø 25mm/190mm	15~2500ml
233071	CT20/S30S	Ø 30mm/190mm	30~5000ml
233571	CT20/S35S	Ø 35mm/190mm	50~6000ml



Serrated Type W

Sawtooth and slotted stator, double-toothed blade rotor, high shear force. Applicable to shearing, dispersion, mixing and homogenization of most samples, especially animal and plant tissues and fine fiber samples.

Order No.	Model	Diameter/Length	Volume Range
130521	T5W	Ø 5mm/80mm	0.5~5ml
130721	T7W	Ø 7.8mm/110mm	0.5~50ml
131021	T10W	Ø 10mm/120mm	1~100ml
131221	T12W	Ø 12mm/120mm	1.5~200ml
131421	T14W	Ø 14mm/160mm	5~500ml
131821	T18W	Ø 18mm/160mm	10~1500ml
232073	CT20/S20W	Ø 20mm/190mm	10~2000ml
232573	CT20/S25W	Ø 25mm/190mm	15~2500ml
233073	CT20/S30W	Ø 30mm/190mm	30~5000ml
233573	CT20/S35W	Ø 35mm/190mm	50~6000ml



Pre-cut Type W+

The stator adopts a serrated and strip-shaped hole design, and the double-tooth rotor protrudes, providing a large shear force. Applicable to crushing, shearing, mixing and component extraction of animal, plant, fiber and large particle samples with diameters larger than the rotor.

Order No.	Model	Diameter/Length	Volume Range
232074	CT20/S20W+	Ø 20mm/195mm	10~2000ml
232574	CT20/S25W+	Ø 25mm/195mm	15~2500ml
233074	CT20/S30W+	Ø 30mm/195mm	30~5000ml



Batch Disperser | X3000

Fiber Type F

"V"-tooth stator prevents soft/filamentous fibers entangling in dispersion tools. Suits shearing/homogenizing high-fiber samples, stirring/mixing/dissolving high-viscosity ones.

Order No.	Model	Diameter/Length	Volume Range
131431	T14F	Ø 14mm/160mm	5~500ml
131831	T18F	Ø 18mm/160mm	10~1500ml
232075	CT20/S20F	Ø 20mm/190mm	10~2000ml
232575	CT20/S25F	Ø 25mm/190mm	15~2500ml
233075	CT20/S30F	Ø 30mm/190mm	30~5000ml
233575	CT20/S35F	Ø 35mm/190mm	50~6000ml



Emulsified Type E

Single/multi-row tooth stators & multi-tooth rotors, finer shearing, smaller droplets. Applicable to the dispersion, dissolution, mixing, emulsification and homogenization of low-viscosity fine particle solutions. Especially the oil-water mixture, uniform distribution and long-term stability.

Order No.	Model	Diameter/Length	Volume Range
232078	CT20/S20E	Ø 20mm/190mm	10~2000ml
232578	CT20/S25E	Ø 25mm/190mm	15~2500ml
233078	CT20/S30E	Ø 30mm/190mm	30~5000ml
233578	CT20/S35E	Ø 35mm/190mm	50~6000ml



Turbulent Type M

Fluid mechanics design, stator inclined holes and moving blades form good vortices, efficient heat transfer, low shear and heat. Quickly remove foam and supernatant particles. Applicable to mixing and dissolving medium and high viscosity samples.

Order No.	Model	Diameter/Length	Volume Range
131441	T14M	Ø 14mm/160mm	5~600ml
131841	T18M	Ø 18mm/160mm	10~1800ml
232079	CT20/S20M	Ø 20mm/190mm	10~3500ml
232579	CT20/S25M	Ø 25mm/190mm	15~4500ml
233079	CT20/S30M	Ø 30mm/190mm	30~8000ml
233579	CT20/S35M	Ø 35mm/190mm	50~10000ml



Honeycomb Type H

It adopts a biomimetic honeycomb-shaped design, composed of multiple precise unit holes, which increases the dispersion area. It can generate a strong fluid effect, forming a dense shear zone, enabling the samples to reach a uniform dispersion state within a short period of time. It is suitable for the pre-treatment of most samples, and is particularly suitable for the dispersion treatment of samples with medium to high viscosity, agglomerated particles, and multiphase mixtures.

Order No.	Model	Diameter/Length	Volume Range
232592	CT20/S25H	Ø 25mm/220mm	400~5000ml
233092	CT20/S30H	Ø 30mm/220mm	500~7000ml
233592	CT20/S35H	Ø 35mm/220mm	700~10000ml



Batch Disperser | X3000

Dissolved Type D

Flat plate serrated rotor: During rotation, there is edge turbulence. High-speed shearing crushing, dispersion, influence. Applicable to rapid mixing, dissolution, dispersion and refining of medium and high viscosity materials.

Order No.	Model	Diameter/Length	Volume Range*
232091	CT20/S20D	Ø 20mm/200mm	250~2000ml
232591	CT20/S25D	Ø 25mm/200mm	350~4000ml
233091	CT20/S30D	Ø 30mm/200mm	500~6000ml
233591	CT20/S35D	Ø 35mm/200mm	600~8000ml
234091	CT20/S40D	Ø 40mm/200mm	700~10000ml
234591	CT20/S45D	Ø 45mm/200mm	800~15000ml

*The volume range is based on low-viscosity samples. For rotor diameter selection, please refer to the "Selection Table for Dissolved Type".



Broken Type K

Four-edge cross design (2-up/2-down), sharp edges, high-speed cutting, crushing, stirring and mixing. Applicable to strong crushing and homogenization of block and large particle samples. And it can efficiently mix liquid-liquid, dissolve and destroy cells.

Order No.	Model	Diameter/Length	Volume Range
233590	CT20/S35K	Ø 35mm/215mm	200~1000ml
235690	CT20/S56K	Ø 56mm/215mm	200~2000ml



Batch Disperser | X3000 Accessories

Drive

Order Number	Description
22271.02	X3000 drive, AC230V, 50/60Hz, 1050W, includes main unit, arm, wrench, manual, warranty card, certificate

Standard Set

Order Number	Description
21312.02	X3000 driver, CT20/S25W serrated tool, STL2 double-rod stand, DC150 container clip, SR2 safety ring
21323.02	X3000 driver, CT20/S35E emulsifying tool, eST3 electric stand

Disperser stand

Order Number	Description
170210	STL2 double-rod stand, L-type, material of AISI316L/ aluminum alloy, dimensions L200 × W310 × H600mm
170220	STL2 double-rod stand, H-type, made of AISI316L/ aluminum alloy, with dimensions L300 × W340 × H600mm
271131	eST3 electric stand, with a lifting range of 325–545mm and dimensions of L290 × W410 × H600mm

Accessories

Order Number	Description
273031	DC150 universal clamp: nylon strap, clamping range Ø 50–150mm, for beakers/flasks
175020	SR2 safety positioning ring: stainless steel, fits double-rod stand
174015	LP15 container lift: 150 × 150mm, stainless steel, with anti-slip pad
174020	LP20 container lift: 200 × 200mm, galvanized steel, with anti-slip pad
174030	LP30 container lift: 300 × 300mm, stainless steel, with anti-slip pad



Retain technical modifications

More accessories available at our website: www.disrad.com