

X4000 batch disperser is equipped with a 1800W high-power motor and has a maximum Volume range of up to 40L. It is specially designed for strict laboratory research and development as well as small-batch production. The dispersion tools with a double-bearing design operates more stably. It combines outstanding driving performance and durability, easily completing various fine process operations such as dispersion, homogenization, emulsification, suspension and mixing. It is a reliable and efficient solution for researchers and engineers.

X4000 Batch Disperser

High Power | Proprietary Wear-resistant Tools | Preferred for Massive Processing



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

- 40 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 (excluding ball bearings)

Quality Assurance

- CE certification; 3-year warranty

Batch Disperser | X4000



Project Name	Technical data
Model	X4000
Order Number	22272.02
Drive Motor	Carbon Brush
Input/output Power	1800/1200W
Speed Range	2500~23500rpm; 6th Gear
Speed Display	Scale Indication
Governor	Microprocessor
Soft Start	Support
Overheat Protection	Support
Overload Protection	Support
Volume range(H ₂ O)	100~40000ml
Maximum Viscosity	6500mPa.s
Maximum Line Speed	40m/s
Blade Diameter	Ø25, 30, 35, 45, 55, 60mm
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	Ø16mm
Arm Length	260mm
Dimensions (Driver)	104 × 95 × 330mm
Weight	5.1kg
Working Environment	5~40°C, ≤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 Dispenser | X4000

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
292503	CBT25/S25S	Ø 25mm/280mm	100~2500ml
293003	CBT25/S30S	Ø 30mm/280mm	100~5000ml
293503	CBT25/S35S	Ø 35mm/280mm	100~6000ml
294503	CBT25/S45S	Ø 45mm/280mm	100~15000ml
295503	CBT25/S55S	Ø 55mm/280mm	200~20000ml
296003	CBT25/S60S	Ø 60mm/280mm	500~30000ml



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.

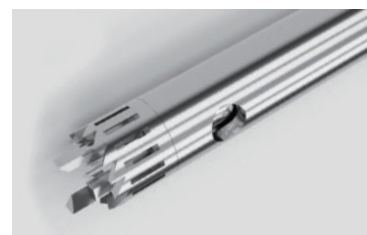
Order No.	Model	Diameter/Length	Volume Range
292504	CBT25/S25W	Ø 25mm/275mm	100~2500ml
293004	CBT25/S30W	Ø 30mm/275mm	100~5000ml
293504	CBT25/S35W	Ø 35mm/275mm	100~6000ml
294504	CBT25/S45W	Ø 45mm/275mm	100~15000ml
295504	CBT25/S55W	Ø 55mm/275mm	200~20000ml
296004	CBT25/S60W	Ø 60mm/275mm	500~30000ml



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
292505	CBT25/S25W+	Ø 25mm/280mm	150~2500ml
293005	CBT25/S30W+	Ø 30mm/280mm	150~5000ml
293505	CBT25/S35W+	Ø 35mm/280mm	150~6000ml
294505	CBT25/S45W+	Ø 45mm/280mm	150~15000ml
295505	CBT25/S55W+	Ø 55mm/280mm	250~20000ml
296005	CBT25/S60W+	Ø 60mm/280mm	500~30000ml

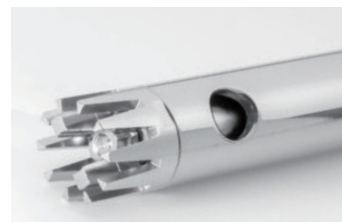


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Fiber Type F

"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
292506	CBT25/S25F	Ø 25mm/275mm	100~2500ml
293006	CBT25/S30F	Ø 30mm/275mm	100~5000ml
293506	CBT25/S35F	Ø 30mm/275mm	100~6000ml
294506	CBT25/S45F	Ø 45mm/275mm	100~15000ml
295506	CBT25/S55F	Ø 55mm/275mm	200~20000ml
296006	CBT25/S60F	Ø 60mm/275mm	500~30000ml



Emulsified Type E

"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
292508	CBT25/S25E	Ø 25mm/270mm	100~2500ml
293008	CBT25/S30E	Ø 30mm/270mm	100~5000ml
293508	CBT25/S35E	Ø 35mm/270mm	100~6000ml
294508	CBT25/S45E	Ø 45mm/270mm	100~15000ml
295508	CBT25/S55E	Ø 55mm/270mm	200~20000ml
296008	CBT25/S60E	Ø 60mm/270mm	500~30000ml



Turbulent type M

Hydrodynamics: stator slant holes & rotor blades make fine eddies—efficient heat transfer, low shear/heat. Removes foam/supernatant particles fast; suits mixing/dissolving medium/high-viscosity samples.

Order No.	Model	Diameter/Length	Volume Range
292509	CBT25/S25M	Ø 25mm/275mm	100~4500ml
293009	CBT25/S30M	Ø 30mm/275mm	100~8000ml
293509	CBT25/S35M	Ø 35mm/275mm	100~10000ml
294509	CBT25/S45M	Ø 45mm/275mm	100~25000ml
295509	CBT25/S55M	Ø 55mm/275mm	200~35000ml
296009	CBT25/S60M	Ø 60mm/275mm	500~40000ml



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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
292513	CBT25/S25H	Ø25mm/290mm	400~5000ml
293013	CBT25/S30H	Ø30mm/290mm	500~7000ml
293513	CBT25/S35H	Ø35mm/290mm	700~10000ml
294513	CBT25/S45H	Ø45mm/295mm	1000~15000ml
295513	CBT25/S55H	Ø55mm/295mm	2000~30000ml

Dissolved type D

Flat-disc serrated rotor: rotating, edge turbulence; high-speed shear/impact/crushing/dispersion. Ideal for medium/high-viscosity materials—fast mixing/dissolving/dispersing/refining.

Order No.	Model	Diameter/Length	Volume Range*
292011	CBT25/S20D	Ø 20mm/270mm	250~2000ml
292511	CBT25/S25D	Ø 25mm/270mm	350~4000ml
293011	CBT25/S30D	Ø 30mm/270mm	500~6000ml
293511	CBT25/S35D	Ø 35mm/270mm	600~8000ml
294011	CBT25/S40D	Ø 40mm/270mm	700~10000ml
294511	CBT25/S45D	Ø 45mm/270mm	800~15000ml
295011	CBT25/S50D	Ø 50mm/270mm	900~20000ml
296011	CBT25/S60D	Ø 60mm/270mm	1000~30000ml

*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
293512	CBT25/S35K	Ø 35mm/300mm	200~1000ml
295612	CBT25/S56K	Ø 56mm/300mm	200~2000ml



Drive

Order Number	Description
22272.02	X4000 driver, AC230V, 50/60Hz, 1800W, includes main unit, arm, wrench, manual, warranty card, certificate



Standard Set

Order Number	Description
21413.02	X4000 driver, CBT25/S45S standard dispersion tool, eST3H+ electric stand
21426.02	X4000 driver, CBT25/S45E emulsifying dispersion tool, eST3H+ electric stand



Disperser stand

Order Number	Description
170220	STH2 double-rod stand, H-type, material: AISI 316L / aluminum alloy, L300 × W340 × H600mm
271131	eST3 electric stand, lifting range: 325–545mm, L290 × W410 × H600mm
272120	eST3H+ electric stand, lifting range: 425–775mm, L350 × W400 × H800mm



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