

Series-CB dispersion tools feature a double-bearing structure. A rolling bearing is added at the upper end of the shaft center and a PTFE or bronze alloy shaft sleeve is available at the lower end. This design significantly enhances concentricity, improves operational stability and strength under high loads, while reducing bushing wear and extending service life.

Series-CB (Ø25-65mm)

Double bearing design | Smooth operation | Extra-long lifespan



Modular structure

- Modular design, with a single dispersion shaft, allows for the arbitrary combination of various types of dispersion tools, saving costs

Double bearing design

- High concentricity, stable and reliable operation, reduced wear of the bushing, and extended service life
- Special Polyflon™ PTFE bushings, featuring excellent wear resistance and chemical stability
- Optional Sleeve-Alloy™ alloy bushings are available, which are maintenance-free and meet the requirements of high-speed operation

High-precision craftsmanship

- Stringent and demanding manufacturing processes ensure outstanding performance, highly consistent tolerances and reliable quality
- Made of sanitary-grade stainless steel 316L and treated with electrolytic passivation, it is endowed with excellent corrosion resistance
- The inner and outer surfaces have been subjected to physical and electrolytic composite polishing, resulting in high surface finish, easy cleaning and no residue of materials

Diversification

- Multiple types are available (standard, sawtooth, fiber, emulsification, turbulence, dissolution, etc.) to meet the processing requirements of different samples
- Multiple diameters are available (Ø 25 –65mm), and processing capacities range from 100ml to 50L

Disinfection and sterilization

- Some of them are resistant to chemical sterilization, moist heat sterilization and dry heat sterilization (except rolling bearings)

Dispersion Tools | Series-CB 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.

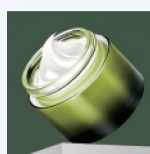
- Food homogenization and crushing, such as meat, vegetables, grains, etc
- Roots, stems, leaves or tobacco of plants, etc
- Dispersion shearing or component extraction of animal tissues
- Cosmetics preparation, emulsification of creams, ointments, oils and water
- Homogenize and crush hard and brittle tablets
- Tablet coating homogenization and pulverization
- Cell depolymerization and DNA analysis
- Dispersion and crushing of pigments, inks, coatings and energy slurries
- Dispersion of petroleum derivatives (such as asphalt)



Pharmaceuticals



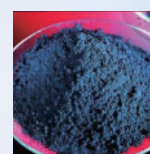
Food



Daily Chemicals



New Material



New Energy

Model	CBT25/S25S	CBT25/S30S	CBT25/S35S	CBT25/S45S	CBT25/S55S	CBT25/S60S
Order No.	292503	293003	293503	294503	295503	296003
Volume Range (H ₂ O)ml	100-2500	100-5000	100-6000	100-15000	200-20000	500-30000
Stator Diameter mm	Ø25	Ø 30	Ø 35	Ø 45	Ø 55	Ø 60
Stator And Rotor Clearance mm	0.25	0.25	0.30	0.30	0.30	0.30
Particle Size of Suspension mm	15-50	15-50	30-80	40-100	40-100	40-100
Emulsion Particle Size mm	5-20	5-20	5-25	10-30	10-30	10-30
Maximum Rotational Speed rpm	25000	25000	25000	25000	25000	25000
Maximum Linear Velocity m/s	22.3	28.8	35.3	48.4	61.5	66.8
Immersion Depth ≥mm	40-235	40-235	40-235	40-235	40-235	40-235
Effective Length mm	270	270	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13	2-13	2-13

Dispersion Tools | Series-CB 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.

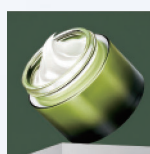
- Roots, stems, leaves or tobacco of plants, etc
- Dispersion shearing or component extraction of animal tissues
- Food homogenization, such as vegetables, fruits, grains, etc
- Cosmetics preparation, emulsification of creams, ointments, oils and water
- Tablet coating homogenization and pulverization
- Textile products, tissues, non-woven fabrics and other fibrous materials
- Preparation of pigments, inks, coatings and energy slurries



Pharmaceuticals



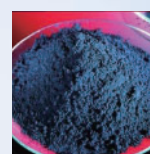
Food



Daily Chemicals



New Material



New Energy

Model	CBT25/S25W	CBT25/S30W	CBT25/S35W	CBT25/S45W	CBT25/S55W	CBT25/S60W
Order No.	292504	293004	293504	294504	295504	296004
Volume Range (H ₂ O)ml	100-2500	100-5000	100-6000	100-15000	200-20000	500-30000
Stator Diameter mm	Ø 25	Ø 30	Ø 35	Ø 45	Ø 55	Ø 60
Stator And Rotor Clearance mm	0.25	0.25	0.30	0.30	0.30	0.30
Particle Size of Suspension mm	15-50	15-50	30-80	40-100	40-100	40-100
Emulsion Particle Size mm	5-20	5-20	5-25	10-30	10-30	10-30
Maximum Rotational Speed rpm	25000	25000	25000	25000	25000	25000
Maximum Linear Velocity m/s	22.3	28.8	35.3	48.4	61.5	66.8
Immersion Depth ≥mm	40-235	40-235	40-235	40-235	40-235	40-235
Effective Length mm	270	270	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13	2-13	2-13

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.

- Roots, stems, leaves or tobacco of plants, etc
- Dispersion shearing or component extraction of animal tissues
- Food homogenization, such as vegetables, fruits, grains, etc
- Homogenize and crush hard and brittle tablets
- Tablet coating homogenization and pulverization
- Textile products, tissues, non-woven fabrics and other fibrous materials



Pharmaceuticals



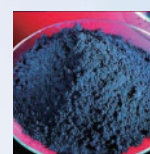
Food



Daily Chemicals



New Material



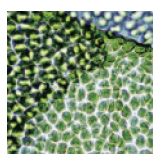
New Energy

Model	CBT25/S25W+	CBT25/S30W+	CBT25/S35W+	CBT25/S45W+	CBT25/S55W+	CBT25/S60W+
Order No.	292505	293005	293505	294505	295505	296005
Volume Range (H ₂ O)ml	150-2500	150-5000	150-6000	150-15000	250-20000	500-30000
Stator Diameter mm	Ø 25	Ø 30	Ø 35	Ø 45	Ø 55	Ø 60
Stator And Rotor Clearance mm	0.25	0.25	0.30	0.30	0.30	0.30
Particle Size of Suspension mm	15-50	15-50	30-80	40-100	40-100	40-100
Emulsion Particle Size mm	5-20	5-20	5-25	10-30	10-30	10-30
Maximum Rotational Speed rpm	25000	25000	25000	25000	25000	25000
Maximum Linear Velocity m/s	22.3	28.8	35.3	48.4	61.5	66.8
Immersion Depth ≥mm	40-235	40-235	40-235	40-235	40-235	40-235
Effective Length mm	275	275	275	275	275	275
Limit Temperature	180℃	180℃	180℃	180℃	180℃	180℃
PH Range	2-13	2-13	2-13	2-13	2-13	2-13

Dispersion Tools | Series-CB 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.

- Pretreatment of animal and plant tissues
- Food homogenization, such as meat, root vegetables, etc
- Tissue paper and textile fiber processing
- Homogenization of tobacco leaves



Plant Tissues



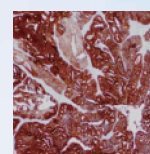
Food



Pharmaceuticals



New Material



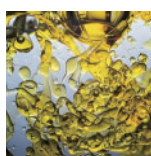
Animal Tissues

Model	CBT25/S25F	CBT25/S30F	CBT25/S35F	CBT25/S45F	CBT25/S55F	CBT25/S60F
Order No.	292506	293006	293506	294506	295506	296006
Volume Range (H ₂ O)ml	100-2500	100-5000	100-6000	100-15000	200-20000	500-30000
Stator Diameter mm	Ø 25	Ø 30	Ø 35	Ø 45	Ø 55	Ø 60
Stator And Rotor Clearance mm	0.25	0.25	0.30	0.30	0.30	0.30
Particle Size of Suspension mm	15-50	15-50	30-80	40-100	40-100	40-100
Emulsion Particle Size mm	5-20	5-20	5-25	10-30	10-30	10-30
Maximum Rotational Speed rpm	25000	25000	25000	25000	25000	25000
Maximum Linear Velocity m/s	22.3	28.8	35.3	48.4	61.5	66.8
Immersion Depth ≥mm	40-235	40-235	40-235	40-235	40-235	40-235
Effective Length mm	270	270	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13	2-13	2-13

Dispersion Tools | Series-CB Emulsified E

Single/multi-row toothed stator & multi-tooth rotor: finer shear, smaller droplets. Fits low-viscosity fine-particle solutions—especially oil-water mixes—for dispersing/dissolving/mixing/emulsifying/homogenizing; uniform distribution, long stability.

- Preparation of cosmetics, microemulsions or essences
- Biopharmaceutical injection suspensions, vaccines, etc
- Preparation of soluble powders for beverages (tea, coffee, milk)
- Preparation of pigments, inks and paints
- Preparation of biodiesel



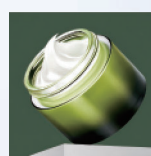
Oil-Water



Pharmaceuticals



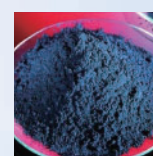
Milk



Daily Chemicals



New Material



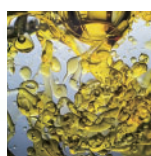
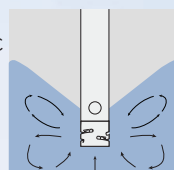
New Energy

Model	CBT25/S25E	CBT25/S30E	CBT25/S35E	CBT25/S45E	CBT25/S55E	CBT25/S60E
Order No.	292508	293008	293508	294508	295508	296008
Volume Range (H ₂ O)ml	100-2500	100-5000	100-6000	100-15000	200-20000	500-30000
Stator Diameter mm	Ø 25	Ø 30	Ø 35	Ø 45	Ø 55	Ø 60
Stator And Rotor Clearance mm	0.25	0.25	0.30	0.30	0.30	0.30
Particle Size of Suspension mm	15-50	15-50	30-80	40-100	40-100	40-100
Emulsion Particle Size mm	5-20	5-20	5-25	10-30	10-30	10-30
Maximum Rotational Speed rpm	25000	25000	25000	25000	25000	25000
Maximum Linear Velocity m/s	22.3	28.8	35.3	48.4	61.5	66.8
Immersion Depth ≥mm	40-235	40-235	40-235	40-235	40-235	40-235
Effective Length mm	270	270	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13	2-13	2-13

Dispersion Tools | Series-CB 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.

- Suspension treatment of soluble powders of flavorings
- Mixing and dissolving of cosmetic powder, cream and base cream
- Biopharmaceutical injection suspensions, vaccines, etc
- Preparation of pigments, inks and paints
- Preparation of gel and biodiesel
- Mix food paste, oyster sauce and xanthan gum



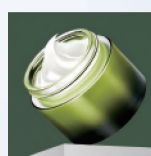
Oil-Water



Pharmaceuticals



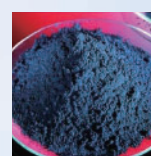
Milk



Daily Chemicals



New Material



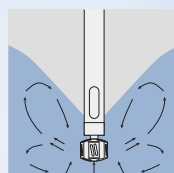
New Energy

Model	CBT25/S25M	CBT25/S30M	CBT25/S35M	CBT25/S45M	CBT25/S55M	CBT25/S60M
Order No.	292509	293009	293509	294509	295509	296009
Volume Range (H ₂ O)ml	100-4500	100-8000	100-10000	100-25000	200-35000	500-40000
Stator Diameter mm	Ø 25	Ø 30	Ø 35	Ø 45	Ø 55	Ø 60
Stator And Rotor Clearance mm	0.25	0.25	0.30	0.30	0.30	0.30
Particle Size of Suspension mm	15-50	15-50	30-80	40-100	40-100	40-100
Emulsion Particle Size mm	5-20	5-20	5-25	10-30	10-30	10-30
Maximum Rotational Speed rpm	25000	25000	25000	25000	25000	25000
Maximum Linear Velocity m/s	22.3	28.8	35.3	48.4	61.5	66.8
Immersion Depth ≥mm	40-235	40-235	40-235	40-235	40-235	40-235
Effective Length mm	270	270	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13	2-13	2-13

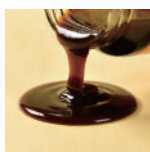
Dispersion Tools | Series-C Honeycomb Type H

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.

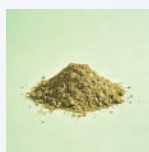
- Biopharmaceutical injection suspensions, vaccines, etc
- Mix food paste, oyster sauce and xanthan gum
- Preparation of soluble powders for beverages (tea, coffee, milk)
- Suspension and stable dispersion of fragrances and powders
- Emulsification and refinement processing of base creams and lotions
- Preparation of pigments, inks and paints
- Preparation of gel and biodiesel



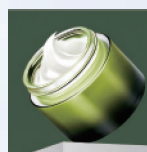
Pharmaceuticals



Food



Additive



Face Cream



Ink

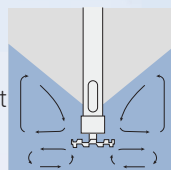
Model	CBT25/S25H	CBT25/S30H	CBT25/S35H	CBT25/S45H	CBT25/S55H
Order No.	292513	293013	293513	294513	295513
Volume Range (H ₂ O)ml	400-5000	500-7000	700-10000	1000-15000	2000-30000
Rotor Diameter mm	Ø25	Ø30	Ø35	Ø45	Ø55
Particle Size of Suspension mm	50-80	50-80	50-80	50-80	50-80
Maximum Rotational Speed rpm	20000	20000	20000	15000	15000
Maximum Linear Velocity m/s	26.20	31.4	36.7	35.3	43.2
Immersion Depth ≥mm	65-250	65-250	65-250	70-255	70-255
Effective Length mm	290	290	290	295	295
Limit Temperature	180°C	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13	2-13

*The maximum rotational speed depends on the viscosity of the material.
The values in the table are based on water as the reference.

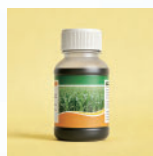
Dispersion Tools | Series-CB Dissolved Type D

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

- Mixing and dissolving of beverages, fruit juices and dairy products
- Biopharmaceutical injection suspensions, vaccines, etc
- Preparation of pigments, inks and paints/varnishes, and biodiesel
- Mixing and dissolving of cosmetic lotions, powders and creams
- A mixture of food paste, oyster sauce, molasses and xanthan gum
- Medical gels and other pastes



Ink



Pesticide



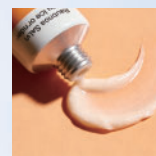
Battery Slurry



Chemistry



Milk



Pharmaceuticals

Model	CBT25/S20D	CBT25/S25D	CBT25/S30D	CBT25/S35D
Order No.	292011	292511	293011	293511
Volume Range (H ₂ O)ml	250–2000	350–4000	500–6000	600–8000
Rotor Diameter mm	Ø20	Ø25	Ø30	Ø35
Particle Size of Suspension mm	30–50	30–50	30–50	30–50
Emulsion Particle Size mm	10–40	10–40	10–40	10–40
Maximum Rotational Speed rpm	20000	20000	20000	20000
Maximum Linear Velocity m/s	20.9	26.2	31.4	36.7
Immersion Depth ≥mm	50–230	50–230	50–230	50–230
Effective Length mm	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C
PH Range	2–13	2–13	2–13	2–13

Dispersion Tools | Series-CB Dissolved Type D

Model	CBT25/S40D	CBT25/S45D	CBT25/S50D	CBT25/S60D
Order No.	294011	294511	295011	296011
Volume Range (H ₂ O)ml	700-10000	800-15000	900-20000	1000-30000
Rotor Diameter mm	Ø40	Ø45	Ø50	Ø60
Particle Size of Suspension mm	30-50	30-50	30-50	30-50
Emulsion Particle Size mm	10-40	10-40	10-40	10-40
Maximum Rotational Speed rpm	20000	15000	15000	15000
Maximum Linear Velocity m/s	41.9	35.3	39.3	47.1
Immersion Depth ≥mm	50-230	50-230	50-230	50-230
Effective Length mm	270	270	270	270
Limit Temperature	180°C	180°C	180°C	180°C
PH Range	2-13	2-13	2-13	2-13

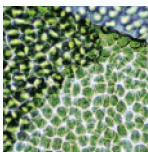
*The volume range is based on low-viscosity samples. For rotor diameter selection, please refer to the "Selection Table for Dissolved Type".

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.

- Roots, stems, leaves or tobacco of plants, etc
- Dispersion shearing or component extraction of animal tissues
- Food homogenization, such as vegetables, fruits, grains, etc
- Homogenize and crush hard and brittle tablets
- Tablet coating homogenization and pulverization



Food



Plant



Chemical Industry



New Material



Pharmaceuticals

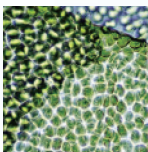
Model	CBT25/S35K	CBT25/S56K
Order No.	293512	295612
Volume Range (H ₂ O)ml	200-1000	200-2000
Stator Diameter mm	Ø 35	Ø 56
Particle Size of Suspension mm	100-250	100-250
Emulsion Particle Size mm	50-100	50-100
Maximum Rotational Speed rpm	25000	25000
Maximum Linear Velocity m/s	45.8	73.3
Immersion Depth ≥mm	90-275	90-275
Effective Length mm	300	300
Limit Temperature	180℃	180℃
PH Range	2-13	2-13

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.

- Roots, stems, leaves or tobacco of plants, etc
- Dispersion shearing or component extraction of animal tissues
- Food homogenization, such as vegetables, fruits, grains, etc
- Homogenize and crush hard and brittle tablets
- Tablet coating homogenization and pulverization



Food



Plant



Chemical Industry



New Material



Pharmaceuticals

Model	CBT25/S35K	CBT25/S56K
Order No.	293512	295612
Volume Range (H ₂ O)ml	200-1000	200-2000
Stator Diameter mm	Ø 35	Ø 56
Particle Size of Suspension mm	100-250	100-250
Emulsion Particle Size mm	50-100	50-100
Maximum Rotational Speed rpm	25000	25000
Maximum Linear Velocity m/s	45.8	73.3
Immersion Depth ≥mm	90-275	90-275
Effective Length mm	300	300
Limit Temperature	180℃	180℃
PH Range	2-13	2-13