

HOMOGENIZERS Hand Held, Battery Operated, 145Watt, 0.1-150ml



HF-6-10, HF-8, Superfine Homogenizer

HF-6-10, HF-8 Superfine Homogenizer is good for tissue tearing, cell disruption, protein extraction, medical research etc., and widely used in biochemistry industries and field work.

Model	HF-6-10	HF-8
Motor power	145W	-
Power supply	220V, 50Hz	9.6V (Ni-Cd battery)
Working capacity (H₂O)	0.1-150ml	0.1-60ml
Max. handling viscosity	200CP	100CP
Rotation speed range	5,000-35,000rpm	6,000-25,000rpm
Speed display	Scale display	Scale display
Speed control	Stepless	Stepless
Medium-contact materials	SS316L	SS316L
Shaft sleeve material	PTFE	PTFE
Standard dispersing tools	10G	10G
Ambient temperature	5-40°C	5-40°C
Allowable humidity	80%	80%
Process type	Micro batch	Micro batch
Lifting stand	Optional	Optional
Overall dimension	420×100×50	420×100×50
Gross weight	~0.85kg	~1kg

Features:

- More personalized handheld design.
- Exquisite motor with ultra strong power.
- Min. capacity is as low as 0.1ml.
- Suitable for micro emulsifying and homogenizing.
- Double insulation protection for safety.

* HF-8 is equipped with charge type motor for field work.

Optional Dispersing tools for models HF-6-10 & HF-8:

Model				
	23-005	23-002	23-003	23-004
Working capacity	0.1-5ml	0.2-10ml	1-60ml	30-150ml
Max. handling viscosity	100CP	100CP	100CP	200CP
Max. rotation speed	4m/s	8m/s	10m/s	12m/s
Min./max.immersion depth	15/40	25/45	20/85	20/135
Length of dispersing tool	100	124	150	187
Max. working temperature	120°C	120°C	120°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE

Hand Held, BenchTop, 160Watt, 0.1–250ml **HOMOGENIZERS**

The Homogenizer widely used in fields of Biotechnology, Human & veterinary medicine/clinical medicine, Pharmaceutical industry, Cosmetics industry, Food industry, Petrochemistry, Paint & lacquer industry etc. The material is repeatedly cycled through narrow slits in the stator where it is rapidly sheared and disintegrated by high shear mechanical action. Complete homogenization of tissues (muscle, liver, breast tissue, etc.) is usually achieved in a few seconds. Little, if any, heat is produced during the process.



HOG-160-1/2

Features:

- Easy to hold & light weight for one hand operation.
- Sample Volume Range: 0.1–50 ml or 1–250ml
- Autoclavable stainless steel shafts. Inert to aggressive solutions.
- Autoclavable 316 L stainless steel shafts, inert to aggressive solutions
- All shafts are interchangeable shafts and are easily removed for cleanup.
- High speed motor. Speed control from 8,000 to 30,000rpm.

HOG-160-1/2, Handheld Homogenizer

Use for mixing, emulsification, shredding, or chopping.

Practical answer for small samples.

D-160 is a rotor/stator type hand held tissue homogenizer which can rapidly homogenize, disperse and emulsify samples in 0.1–250ml. During operation, the suspended material is drawn into the core of the homogenizer by a rotor turning at up to 30,000 rpm.



Model	HOG-160-1/2
Power Supply	110-120V/60Hz , 220-240V / 50-60 Hz
Motor Type	Universal motor, 160 Watt
Speed range (rpm)	8,000 – 30,000
Max. Circum. Speed	6.3-14m/sec
Speed control type	Dial knob 6 stage
Working Volume (ml, H₂O)	0.1-50ml(Dispersing shaft DS-160/5) 1-250ml(Dispersing shaft DS-160/10)
Max. Viscosity	5000mPas
Material of Dispersing Shaft	SS 316L stainless steel / PTFE
Dimension LxWxH (mm)	46 x 55 x 230
Weight (kg)	0.6
Noise	72 dB(A)
Operating Environment	0-40°C, 85% rel. humidity
Protection class	IP20

Homogenizers of HOG-160-1/2

Model	Package Include	Power supply
HOG-160-1 (Package 1)	HOG-160 drive, H 370 Stand, DS-160/5 shaft, Dispersing shaft 5mm, for solid/liquid media volumes from 0.1-50ml	110-120V, 50/60Hz
		220-240V, 50/60Hz
HOG-160-2 (Package 2)	HOG-160 drive, H370 Stand, DS-160/10 shaft Dispersing shaft 10mm, for solid/liquid media volumes from 1- 250ml	110-120V, 50/60Hz
		220-240V, 50/60Hz

Model	Description of Dispersing Shaft	Applications / Industry Examples	Treatable Volume (ml)	Max. Circum. Speed (m/sec)	Diam. of the Rotor (mm)	Min/Max Emersion Depth (mm)	Ultimate Fineness (µm)	
							Suspension	Emulsion
DS-160/5	5mm for Solid/ liquid media	Biotechnology, Pharmaceutical industry 0.1ml – 50ml	0.1-50	6.3	5	7/50	10-50	1-10
DS-160/10	10mm for Solid/ liquid media	Biotechnology, Pharmaceutical industry 1ml – 250ml	1-250	14	10	10/120	10-50	1-10

* All kind of sterilisation possible

HandHeld, BenchTop, 250Watt, 0.3–3000ml **HOMOGENIZERS**



HOG-020

Applications:

- Widely used in dispersing various materials.
- Also applied to biology & medical research for skin tissue, cells and so on.
- Fiber, paper, cloth, cosmetic, dye & ink can be applied.
- Water and oil mixing and emulsifying.

Features:

- Digital speed meter display (HOG-022).
- Spring elevator for easy positioning the pole (HOG-022).
- With an overheat protection and fuse safety device (HOG-022).
- Various containers can be used.
- Operating capacity: 0.3m1–3L with the same driver but different homogenizer head choices.
- *Any homogenizer head need be purchased separately. (Photo shown here is for reference only).
- The impeller can be seperated completely and cleaned easily.



HOG-020D



HOG-022

Model	HOG-020	HOG-020D	HOG-022
Digital	NO	YES	YES
Motor	DC 250W		
Speed (rpm)	26,000		20,000
Size (mm)	W200xD315xH500		W310xD270xH690
Weight (kg)	7		10
Power	AC110/220V, 50/60Hz		

	Model	Capacity	Dimension	Application
	GEN-0010	0.3~10 ml	Ø7x130 mm	To homogenized and mix cell tissue in small amount
	GEN-0250	2~250 ml	Ø12x170 mm	To disperse plant and animal tissue, To dispose suspensions and emulsions for homogenizing, mixing & extraction
	GEN-2000	2~2000 ml	Ø20x200 mm	To disperse plant and animal tissue, To dispose suspensions and emulsions for homogenizing, mixing & extraction
	GEN-3000	100~3000 ml	Ø30x250 mm	To disperse organic and inorganic matters for homogenizing, mixing and extraction



HFM-200

HFM-200, High Shear Dispersing Emulsifier

HFM-200 High Shear Dispersing Emulsifier can do dispersing, emulsifying and homogenizing in laboratory. It is economic lab homogenizer and emulsifier for customers with limited budget.

Model	HFM-200
Motor power	200W
Power supply	220V, 50Hz
Working capacity (H2O)	10-1000ml
Max. handling viscosity	8,000CP
Rotation speed range	300-23,000rpm
Speed display	Scale display
Speed control	Stepless
Medium-contact materials	SS304
Shaft sleeve material	PTFE
Standard dispersing tools	10G and 18G
Ambient temperature	5-40°C
Allowable humidity	80%
Process type	Batch
Lifting stand	Yes
Overall dimension	225×328×600
Gross weight	~9kg

Features:

- Superior performance & low cost.
- Convenient & stepless speed control.
- Two interchangeable dispersing tools are available.
- Quick and very easy cleaning.
- Stable and low noise running.



HFM-300

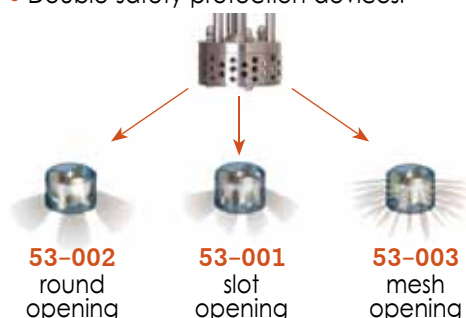
HFM-300, HFM-300D, High Shear Dispersing Emulsifier

HFM-300, HFM-300D High Shear Dispersing Emulsifier can do dispersing, homogenizing and emulsifying for small-scale, high temperature, medium and high viscous materials in laboratory.

Model	HFM-300	HFM-300D
Motor power	300W	300W
Power supply	220V, 50Hz	220V, 50Hz
Working capacity (H2O)	200-10,000ml	200-10,000ml
Max. handling viscosity	5000CP	5000CP
Rotation speed range	300-11,000rpm	300-11,000rpm
Speed display	Scale display	Digital display
Speed control	Stepless	Stepless
Medium-contact materials	SS304	SS304
Shaft sleeve material	Copper alloy	Copper alloy
Ambient temperature	5-40°C	5-40°C
Allowable humidity	80%	80%
Process type	Batch	Batch
Lifting stand	Yes	Yes
Individual speed controller	Yes	Yes
Overall dimension	210×290×675	210×290×675
Gross weight	~13kg	~13kg

Features:

- High performance motor and high torque output.
- Electric lab emulsifier of low cost.
- Precise rotation speed display.
- Three different stators are available.
- Double safety protection devices.



53-002 round opening

53-001 slot opening

53-003 mesh opening



HFA-25

HFA-25D

Features:

- High speed powerful motor for long running time.
- Max. high rotation speed is 28,000rpm and velocity is up to 27m/s.
- Smart modular design for flexible operation and high expansibility.
- Many quick interchangeable dispersing tools for different materials.
- Medium-contact materials are SS316L for sanitation purpose.
- Materials of low to high viscosities can be handled very well.
- High temp. and vacuum/pressurized conditions are workable.

HFA-25, HFA-25D, High Shear Dispersing Emulsifier

HFA-25, HFA-25D High Shear Dispersing Emulsifier can complete many different processes in laboratory, including dispersing, emulsifying, homogenizing and grinding, equipped with different dispersing tools for different applications. It is an integration of high power, versatility, reliability and durability to meet your strict requirements, and proved to be best seller.

Model	HFA-25	HFA-25D
Motor power	500W	720W
Power supply	220V, 50/60Hz	220V, 50/60Hz
Working capacity (H2O)	0.2-7,000ml	0.2-7,000ml
Max. handling viscosity	8,000CP	10,000CP
Rotation speed range (no-load)	10,000-28,000rpm	10,000-26,000rpm
Speed display	Scale display	Digital display
Speed control	Stepless	Stepless
Medium-contact materials	SS316L	SS316L
Shaft sleeve material	PTFE	PTFE
Standard dispersing tools	25F	25F
Ambient temperature	5-40°C	5-40°C
Allowable humidity	80%	80%
Process type	Batch	Batch
Lifting stand	Yes	Yes
Overall dimension	210×290×675	210×290×675
Gross weight	~7.1kg	~7.1kg



HFA-R25

Features:

- Equipped with high speed air motor.
- Suitable for explosive or other dangerous conditions.
- Smart compact structure and modular design.
- Easy operation and very safety running.

HFA-R25, High Shear Dispersing Emulsifier

HFA-R25 High Shear Dispersing Emulsifier is as powerful as HFA-25, and is compatible with HFA-25 dispersing tools. It can also handle organic solvent or other inflammable and explosive materials.

Model	HFA-R25
Motor power	280W
Air consumption	0.5m ³ /min
Ventilation pressure	0-6bar
Working capacity (H2O)	0.2-5,000ml
Max. handling viscosity	5,000CP
Rotation speed range (no-load)	75-19,000rpm
Speed control	Stepless
Medium-contact materials	SS316L
Shaft sleeve material	PTFE
Standard dispersing tools	25F
Ambient temperature	5-40°C
Allowable humidity	80%
Process type	Batch
Lifting stand	Yes
Overall dimension	210×290×675
Gross weight	~5.5kg

HOMOGENIZERS

Optional Dispersing Tools: HFA-25/HFA-25D/HFA-R25

Optional Dispersing tools: (HFA-25, HFA-25D & HFA-R25)

Model	 30-601	 30-801	 31-001	 31-801	 31-802
Working capacity	0.2-10ml	1-60ml	10-150ml	50-1,500ml	50-1,500ml
Max. handling viscosity	100CP	100CP	200CP	2,000CP	2,000CP
Max. rotation speed	6m/s	8m/s	10m/s	19m/s	19m/s
Min./max.immersion depth	25/45	20/85	20/135	35/180	35/180
Pressure proof	No	No	No	No	No
Length of dispersing tool	115	150	200	255	255
Max. working temperature	120°C	120°C	120°C	120°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE
Model	 32-003	 32-004	 32-001	 32-002	 32-501
Working capacity	50-3,000ml	50-3,000ml	50-3,000ml	50-3,000ml	50-5,000ml
Max. handling viscosity	3,000CP	3,000CP	3,000CP	3,000CP	5,000CP
Max. rotation speed	22m/s	22m/s	22m/s	22m/s	27m/s
Min./max.immersion depth	35/180	35/180	40/180	40/180	35/180
Pressure proof	No	No	Yes	Yes	No
Length of dispersing tool	255	255	255	255	258
Max. working temperature	120°C	120°C	180°C	180°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, SIC, FKM	SS316L, SIC, FKM	SS316L, PTFE
Model	 32-502	 32-503	 32-504	 32-507	 32-508
Working capacity	50-5,000ml	100-5,000ml	100-5,000ml	150-7,000ml	150-7,000ml
Max. handling viscosity	5,000CP	5,000CP	5,000CP	8,000CP	8,000CP
Max. rotation speed	27m/s	27m/s	27m/s	35m/s	35m/s
Min./max.immersion depth	35/180	40/180	40/180	65/190	65/190
Pressure proof	No	Yes	Yes	No	No
Length of dispersing tool	258	255	255	263	263
Max. working temperature	120°C	180°C	180°C	120°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, SIC, FKM	SS316L, SIC, FKM	SS316L, PTFE	SS316L, PTFE
Model	 32-509	 32-510	 32-511	 32-512	 32-513
Working capacity	150-7,000ml	100-7,000ml	100-6,000ml	50-3,000ml	50-5,000ml
Max. handling viscosity	8,000CP	8,000CP	8,000CP	5,000CP	5,000CP
Max. rotation speed	35m/s	27m/s	27m/s	27m/s	27m/s
Min./max.immersion depth	65/190	35/180	35/180	35/180	35/180
Pressure proof	No	No	No	No	No
Length of dispersing tool	263	258	258	255	255
Max. working temperature	120°C	120°C	180°C	180°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE

* Customized designs are available according to special demands

HOMOGENIZERS BenchTop, 500Watt, 10ml-8liter

HOG-500, Homogenizer

Philosophy made simple, so easy to handle. Ability to achieve quality results fast. It has the speed and power to emulsify, suspend, cut-up and disrupt to yield accurate results every time. Full flexibility as hand-held, post or wall



mounted, with H-stand or plate-stand support. Top speed of high 10,000-30,000rpm, reduces processing time significantly. Big safety switch for unexpected emergency stop. Smooth motor drive makes working, very safe and comfortable. Additional feature of automatic overload protection increases the life span of the motor. Smooth start also prevents unnecessary spills.

Process of dispersing:

The material is sucked in to the head axially, then accelerated using the rotor's high rpm rate, circumferential or peripheral velocity. The centrifugal acceleration between the outer rotor wall and the inner stator wall propels the material through the stator shearing slits.

Quick-change-system:

MRC tools consists of only a few parts. One shaft, one axle, one Teflon bearing and one rotor stator. No special tools are needed to disassemble. Only requirement is a simple piece of cloth.

Optional Dispersing shaft 5: SS5CSR5. Cat No. 18900117

- Volume 1-50 ml • Max. Circum. Speed 5,8m/sec
- Applications: Dispersing shaft 5mm for solid/liquid media Dispersing of tissue decomposition, clinical & medical diagnostics and suspensions. Suitable for centrifuge products and Eppendorf tubes, centrifugal glasses etc. Diam. 5mm.



Model	HOG-500
Motor type	Universal motor, 500 Watt
Voltage / Frequency	110-120V/60Hz , 220-240V / 50-60 Hz
Speed range (rpm)	10,000 - 30,000
Max. Circum. Speed	22.7-36m/sec
Speed control type	Dial knob 7 stage
Working Volume (ml, H₂O)	10-40000ml (Optional)
Max. Viscosity	10,000mPas
Noise emission(drive only)	< 79 dB(A) at 30,000 rpm
Material of Dispersing Shaft	SS 316L stainless steel / PTFE
Dimension LxWxH (mm)	70 x 70 x 255
Weight (kg)	1.3
Operating Environment	0-40°C, 85% rel. humidity
Protection class	IP20

Features:

- Viscosity up to 10,000 mPas
- Continuously adjustable speeds for better results
- Light-weighted and small-dimensioned for better handling
- Triple safety of the drive, overload protection & Smooth start – against jerky work, safety switch
- 316L steel High quality dispersing tools as standard for better resistance to corrosion
- Quick-change system of the dispersing tools for a short changing time between preparations.

Homogenizers of HOG-500-1/2

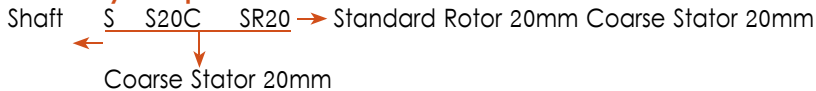
Model	Package Include	Power supply
HOG-500-1 (Package 1)	HOG-500 drive, with dispersing shaft 1 for solid/liquid media & H-600 stand, 10-5000ml	110-120V, 50/60Hz 220-240V, 50/60Hz
HOG-500-2 (Package 2)	HOG-500 drive, with dispersing shaft 2 for W/O or O/W emulsions & H-600 stand, 10-5000ml	110-120V, 50/60Hz 220-240V, 50/60Hz

Model	Description of Dispersing Shaft	Applications / Industry Examples	Treatable Volume (ml)	Max. Circum. Speed (m/sec)	Diam. of the Rotor (mm)	Min/Max Emersion Depth (mm)	Ultimate Fineness (µm)	
							Suspension	Emulsion
DS-500/1	Solid/liquid media	Coarse crushing of hard solids in liquid / Pharma, Petro Industry, Ceramic industry	10-5000	23.5	20	40/175	10-50	1-10
DS-500/2	W/O or O/W emulsions	Emulsions, intensive mixing of w/o & o/w emulsions. Dispersing of resins & pigments for paint & lacquer industry / Sewage/Pollution Control, Paint Industry, Paper & Tissue Industry, Pharmaceutical industry	10-5000	23.5	20	40/175	10-50	1-10

* All kind of sterilisation possible

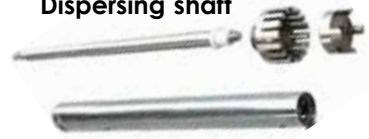
Generators for HOG-500 **HOMOGENIZERS**

Summary of Options:



- Material used for shaft is high grade fine 316L stainless steel and PTFE for seal
- Dispersing shaft consists of shaft tube, axle, PTFE seal, a rotor and a stator.

Components of Dispersing shaft



Stators:



18900118
S20C Stator
20 coarse (C)



18900119
S20F Stator
20 fine (F)



18900120
S30C Stator
30 coarse (C)



18900121
S30F Stator
30 fine (F)



18900122
S40C Stator
40 coarse (C)

Rotors:



18900123
SR20 Rotor
Standard 20



18900124
SR30 Rotor
Standard 30



18900125
CR20 Rotor
Cutter rotor 20



18900126
CR30 Rotor
Cutter rotor 30



18900127
MR20 Rotor
Mixing rotor 20



18900128
MR30 Rotor
Mixing rotor 30



18900129
ER20 Rotor
Emulsifying rotor 20



18900130
ER30 Rotor
Emulsifying rotor 30

Model	Description of Shaft	Applications / Industry Examples	Treatable Volume (ml) (H ₂ O)	Max. Circum. Speed (m/sec)	Diam. of the Rotor (mm)	Min/Max Emersion Depth (mm)	Ultimate Fineness (µm)	
							Suspension	Emulsion
18900118/18900125	Dispersing tool with knives for brous/stringy materials	Fragmentation of vegetable, animal and human tissues / Sewage/Pollution Control, Pharma, Food, Paper & Tissue, Tobacco Industry	10-5000	23.5	20	40/175	10-50	1-10
18900118/18900127	Solid/ liquid media	Suspensions, intensive mixing / Ceramic Industry, Paint Industry	10-5000	23.5	20	40/175	10-50	1-10
18900119/18900125	Dispersing tool with knives for brous/stringy materials	Fragmentation of vegetable, animal and human tissues / Sewage/Pollution Control, Bio Technology, Pharma, Food, Paper & Tissue, Tobacco Industry	10-5000	23.5	20	40/175	10-150	1-10
18900119/18900127	Solid/ liquid media	Emulsions, intensive mixing of w/o & o/w emulsions / Ceramic, Cosmetic, Paint, Food, Paper & Tissue, Petro Chemistry Industry	10-5000	23.5	20	40/175	10-150	1-10
18900120/18900124	Solid/ liquid media	Coarse crushing of hard solids in liquid / Sewage/Pollution Control, Pharma, Food, Paper & Tissue, Petro Chemistry Industry	100-8000	36.1	30	40/175	5-25	1-5
18900120/18900126	Dispersing tool with knives for brous/stringy materials	Fragmentation of vegetable, animal and human tissues / Sewage/Pollution Control, Pharma, Food, Paper & Tissue, Pharma Industry	100-8000	36.1	30	40/175	5-25	1-5
18900120/18900128	Solid/ liquid media	Suspensions, intensive mixing / Ceramic Industry, Paint Industry	100-8000	36.1	30	40/175	5-25	1-5
18900121/18900124	Solid/ liquid media	Dispersing of resins and pigments for paint and lacquer industry / Sewage/Pollution Control, Paint Industry, Paper & Tissue, Pharma Industry	100-8000	36.1	30	40/175	5-25	1-5
18900121/18900130	W/O or O/W emulsions	Emulsions, intensive mixing of w/o and o/w emulsions. Dispersing of resins and pigments for paint & lacquer industry / Sewage/Pollution Control, Paint Industry, Paper & Tissue, Pharma Industry	100-8000	36.1	30	40/175	5-25	1-5
18900121/18900128	Solid/ liquid media	Emulsions, intensive mixing of w/o and o/w emulsions / Sewage/Pollution Control, Cosmetic, Pharma, Tobacco Industry	100-8000	36.1	30	40/175	5-25	1-5
18900120/18900127	Stirring Shaft	High speed mixing without crushing / Ceramic, Food, Sewage/Pollution Control Industry	250-20000	36.1	30	40/175	High-Speed Mixer	
18900122/18900128	Stirring Shaft	High speed mixing without crushing / Ceramic, Food, Sewage/Pollution Control Industry	1000-40000	36.1	30	40/175	High-Speed Mixer	

* All kind of sterilisation possible



HFA-30, High Shear Dispersing Emulsifier

HFA-30 High Shear Dispersing Emulsifier has higher velocity and can complete dispersing, homogenizing, emulsifying and mixing better and more efficiently. The maximum working capacity is 10L.

Model	HFA-30
Motor power	1,050W
Power supply	220V, 50/60Hz
Working capacity (H2O)	150-10,000ml
Max. handling viscosity	8,000CP
Rotation speed range	10,000-30,000rpm
Speed display	Scale display
Speed control	Stepless
Medium-contact materials	SS316L
Shaft sleeve material	PTFE
Standard dispersing tools	30G
Ambient temperature	5-40°C
Allowable humidity	80%
Lifting stand	IP20
Lifting stand	Yes
Overall dimension	210×290×675
Gross weight	~7.5kg

Features:

- High speed powerful motor ensures good and stable effect.
- The high velocity ensures more uniform products in shorter process time.
- High viscosity materials can be handled very well due to high torque.
- Different dispersing tools including HFA-25 tools are interchangeable.
- Modular structure design and very easy operation.

Optional Dispersing tools:

Model				
	33-001	33-002	33-004	33-005
Working capacity	150-10,000ml	150-10,000ml	200-10,000ml	200-10,000ml
Max. handling viscosity	5,000CP	5,000CP	5,000CP	5,000CP
Max. rotation speed	37m/s	37m/s	37m/s	37m/s
Min./max.immersion depth	35/200	35/200	45/220	45/220
Length of dispersing tool	278	278	295	295
Max. working temperature	120°C	120°C	180°C	180°C
Pressure proof	No	No	Yes	Yes
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, SIC, Ceramics FKM	SS316L, SIC, Ceramics FKM

HOMOGENIZERS BenchTop, 1800Watt, 1-20liter



HFA-40, High Shear Dispersing Emulsifier

HFA-40 High Shear Dispersing Emulsifier has higher velocity and can complete dispersing, homogenizing, emulsifying and mixing better and more efficiently. The maximum working capacity is 15L.

Model	HFA-40
Motor power	1,800W
Power supply	220V, 50/60Hz
Working capacity (H2O)	500-15,000ml
Max. handling viscosity	8,000CP
Rotation speed range	2,500-23,000rpm
Speed display	Scale display
Speed control	Stepless control
Medium-contact materials	SS316L
Shaft sleeve material	PTFE
Standard dispersing tools	40SM
Ambient temperature	5-40°C
Allowable humidity	80%
Lifting stand	IP20
Lifting stand	Yes
Overall dimension	250×350×860
Gross weight	~12kg

Features:

- High speed powerful motor ensures good and stable effect.
- The high velocity ensures more uniform products in shorter process time.
- High viscosity materials can be handled very well due to high torque.
- Different dispersing tools are interchangeable.
- Modular structure design and very easy operation.

Optional Dispersing tools:

Model			
	34-001	34-003	34-002
Working capacity	1,000-20,000ml	1,000-20,000ml	1,000-20,000ml
Max. handling viscosity	4,000CP	3,500CP	3,000CP
Max. rotation speed	40m/s	40m/s	40m/s
Min./max.immersion depth	65/265	65/265	65/265
Length of dispersing tool	390	390	390
Max. working temperature	120°C	120°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE

BenchTop, 750Watt, 5-30liter **HOMOGENIZERS**



HFA-60, High Shear Dispersing Emulsifier (with electric lifting)

HFA-60 High Shear Dispersing Emulsifier can complete efficiently stirring, dispersing, homogenizing, emulsifying, strong mixing, powder/liquid dispersing and mixing etc. It is pilot scale equipments, and good for simulating production from small scale to industrial scale.

Features:

- The maximum working capacity is as high as 30L.
- Interchangeable dispersing tools can meet different process requirements.
- Speed control is part of integrated control system for the whole equipment.
- Electric lifting is standard and hydraulic lifting alternative.
- Foundation for process test and big production model selection.



Model	HFA-60
Motor power	750W
Power supply	220V, 50Hz
Working capacity (H2O)	5-30L
Max. handling viscosity	5,000CP
Rotation speed range	300-6,000rpm
Speed display	Digital display
Speed control	Variable speed control
Medium-contact materials	SS316L
Shaft sleeve material	PTFE
Standard dispersing tools	60F
Ambient temperature	5-40°C
Allowable humidity	80%
Lifting stand	IP54
Variable frequency drive	Yes
Overload protection	Yes
Process type	Batch
Lifting stand	Electric lifting is standard
Lifting stand material	SS304, carbon steel coating
Lifting range	350
Overall dimension	500×400×915
Gross weight	~35kg
Optional dispersing tools	Refer to Optional Dispersing Tools
Optional lifting stand	Manual lifting stand

HOMOGENIZERS

Optional Dispersing Tools: HFA-40/HFA-60

- Optional Dispersing tools:**
- **96-001/002/003** – Different teeth of the dispersing tool
 - **96-004/005/006** – The dispersing is equipped with a mechanical seal. which makes it suitable in a closed vessel, e.g. FISCO system
 - **96-007/008/009/010** – There are round openings on the stator of the dispersing tool to offer shear force while mixing
 - **96-011** – Dispersing tool has a specially designed tube fixed onto the stator. When PJ works, a vacuum is created in the center of the rotor, thus sucks the powder directly into the liquid body efficiently.

Model	 96-001	 96-002	 96-003	 96-004	
Working capacity	5-30L	5-30L	5-30L	5-30L	
Max. handling viscosity	5,000CP	5,000CP	5,000CP	5,000CP	
Max. rotation speed	6,000rpm	6,000rpm	6,000rpm	6,000rpm	
Min./max.immersion depth	55/260	55/260	70/290	70/290	
Length of dispersing tool	362	362	362	362	
Max. working temperature	120°C	120°C	120°C	180°C	
Pressure proof	Yes	Yes	Yes	Yes	
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	
Model	 96-005	 96-006	 96-007	 96-008	
Working capacity	5-30L	5-30L	5-30L	5-30L	
Max. handling viscosity	5,000CP	5,000CP	8,000CP	8,000CP	
Max. rotation speed	6,000rpm	6,000rpm	6,000rpm	6,000rpm	
Min./max.immersion depth	70/290	55/260	55/260	55/260	
Length of dispersing tool	362	362	362	362	
Max. working temperature	180°C	180°C	120°C	180°C	
Pressure proof	Yes	Yes	Yes	Yes	
Medium-contact materials	SS316L, SIC, FKM	SS316L, SIC, FKM	SS316L, PTFE	SS316L, SIC, FKM	
Model	 96-009	 96-010	 96-011	 96-012	 96-013
Working capacity	5-30L	5-30L	5-30L	5-30L	5-30L
Max. handling viscosity	8,000CP	8,000CP	2,000CP	2,000CP	2,000CP
Max. rotation speed	6,000rpm	6,000rpm	6,000rpm	4,000rpm	1,500rpm
Min./max.immersion depth	55/260	55/260	55/260	55/260	55/260
Length of dispersing tool	362	362	362	362	362
Max. working temperature	120°C	120°C	120°C	180°C	180°C
Pressure proof	No	No	No	No	No
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE

BenchTop, 1500Watt, 10-50liter **HOMOGENIZERS**



Electric lifting



Manual lifting

HFA-90

HFA-90, High Shear Dispersing Emulsifier (with electric lifting)









HFA-90 high shear dispersing emulsifier can complete efficiently stirring, dispersing, homogenizing, emulsifying, strong mixing, powder/liquid dispersing and mixing etc. It is specially designed for pilot, production intimation and small scale production.

Features:

- The maximum working capacity is as high as 50L.
- Standard dispersing tool is interlocked claw type.
- Interchangeable dispersing tools can meet different process requirements.
- Speed control is part of integrated control system for the whole equipment.
- Electric lifting is standard and hydraulic or manual lifting optional.

Model	HFA-90
Motor power	1500W
Power supply	220V, 50Hz
Working capacity (H2O)	10-50L
Max. handling viscosity	8000CP
Rotation speed range	600-3600rpm
Speed display	Digital display
Speed control	Variable speed control
Medium-contact materials	SS316L
Shaft sleeve material	PTFE
Standard dispersing tools	90F
Ambient temperature	5-40°C
Allowable humidity	80%
Lifting stand	IP54
Variable frequency drive	Yes
Overload protection	Yes
Process type	Batch
Lifting stand	Electric lifting is standard
Lifting stand material	SS304, carbon steel coating
Lifting range	400
Overall dimension	710×550×1060
Gross weight	~50kg
Optional dispersing tools	Refer to Optional Dispersing Tools
Optional lifting stand	Hydraulic lifting, Manual lifting stand

Optional Dispersing tools: (Manual lifting)

Model				
	99-003	99-004	99-007	99-010
Working capacity	10-50L	10-50L	10-50L	10-50L
Max. handling viscosity	5,000CP	8,000CP	5,000CP	8,000CP
Max. rotation speed	3,600rpm	3,600rpm	3,600rpm	3,600rpm
Min./max.immersion depth	50/335	50/335	50/335	50/335
Length of dispersing tool	457	457	457	457
Max. working temperature	120°C	120°C	120°C	120°C
Medium-contact materials	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE	SS316L, PTFE
Model				
	99-009	99-008	99-005	99-006
Working capacity	10-50L	10-50L	10-50L	10-50L
Max. handling viscosity	2,000CP	2,000CP	8,000CP	8,000CP
Max. rotation speed	1,500rpm	3,000rpm	3,600rpm	3,600rpm
Min./max.immersion depth	50/335	50/335	50/335	50/335
Length of dispersing tool	457	457	457	457
Max. working temperature	120°C	120°C	120°C	120°C
Medium-contact materials	SS316L, SIC, FKM	SS316L, SIC, FKM	SS316L, PTFE	SS316L, SIC, FKM

BenchTop, 550/1500Watt, 3-10/20liter **HOMOGENIZERS**



HMS-1

HMS-1, HMS-2, High Shear Dispersing Emulsifier

HMS-1, HMS-2 High Shear Dispersing Emulsifier can complete dispersing, homogenizing, emulsifying and mixing, and meet requirements of high temperature, corrosion proof and hygiene. The whole equipment is originally imported from Germany.

Model	HMS-1	HMS-2
Motor power	550W	1,500W
Power supply	220V, 50/60Hz	220V, 50/60Hz
Rotation speed range	600-6,000rpm	600-3000rpm
Speed display	Digital display	Digital display
Speed control	Variable speed control	Variable speed control
Working capacity (H2O)	300ml-10,000ml	300ml-20,000ml
Standard dispersing tools	High shear dispersing tool	High shear dispersing tool
Optional dispersing tools	Optional dispersing tools	Optional dispersing tools
Medium-contact materials	SS316L	SS316L
Variable frequency drive	Yes	Yes
Lifting stand	Electric lifting stand	Electric lifting stand
Gross weight	~40kg	~50kg

Features:

- Bearingless dispersing system means pollution free.
- Easy cleaning and in line with GMP Regulations.
- Rotation speed is stable, adjustable and readable.
- Compact and functional design, convenient operation.
- Electrical lifting stand is available for flexibility.

Optional Dispersing Tools:



Inline, 500/1050Watt, 1-15/30liter/min **HOMOGENIZERS**



HF-22Z

HF-22Z, HF-30Z, Inline High Shear Dispersing Emulsifier

HF-22Z, HF30Z High Shear Dispersing Emulsifier can complete inline dispersing, emulsifying, homogenizing and mixing in laboratory. It can handle materials by circulations to get finer and more uniform products.

Model	HF-22Z	HF-30Z
Motor power	500W	1,050W
Power supply	220V, 50/60Hz	220V, 50/60Hz
Flow rate range (H2O)	1-15L/min	1-30L/min
Max. handling viscosity	1,000CP	1,000CP
Rotation speed range	10,000-28,000rpm	10,000-30,000rpm
Max. working temperature	120°C	120°C
Speed display	Scale display	Scale display
Speed control	Stepless	Stepless
Medium-contact materials	SS316L, FKM	SS316L, FKM
Standard working chamber	Stainless steel chamber	Stainless steel chamber
Standard generator	20DG	25DG
Mechanical seal Materials	SiC, FKM, ceramics	SiC, FKM, ceramics
Inlet/outlet size	14 (hose connection)	14 (hose connection)
Process type	Inline	Inline
Working table material	SS304	SS304
Overall dimension	477×120×122	665×120×135
Gross weight	~6kg	~7kg

Features:

- Efficient dispersing and homogenizing without dead corners.
- High power motor originally imported from Germany.
- Special designed stator/rotor generates super high shear force.
- Can intimate inline or batch circulation processes in laboratory.
- Stainless steel and glass jacketed working chamber are optional.

Optional Working Chamber:



32-203

stainless steel jacketed chamber

32-202

glass chamber

HOMOGENIZERS Inline, 1500/1800/2200Watt



HFDC-1-40, HFDC-1-60, Inline High Shear Dispersing Emulsifier

HFDC-1-40, HFDC-1-60 Inline High Shear Dispersing Emulsifier can very easily complete inline dispersing, emulsifying, homogenizing and so on. These pilot inline equipments can provide adequate data as basis for industrial production.

Model	HFDC-1-40	HFDC-1-60
Motor power	1,800W	1,500W
Power supply	220V, 50Hz	220V, 50Hz
Max. flow rate (H2O)	25L/min	30L/min
Rotation speed range	12,000-15,000rpm	300-6,000rpm
Max. working temperature	120°C	120°C
Speed display	Digital display	Digital display
Speed control	Variable speed control	Variable speed control
Medium-contact materials	SS316L, FKM	SS316L, FKM
Standard working chamber	Without jacket	Without jacket
Standard generator	4G	4G
Seal type	Mechanical seal	Mechanical seal
Inlet/outlet size	DN15/DN10 (clamp connection)	DN20/DN15 (clamp connection)
Process type	Inline	Inline
Overall dimension	460×160×265	560×220×340
Lifting stand	IP54	IP54

Features:

- Compact equipment design and long time stable running.
- Single interlocked claw type stator/rotor in working chamber.
- Can intimate inline or batch circulation processes in pilot scale.
- Rotation speed can be adjusted by variable frequency drive.
- Homogenized with narrow and small particle size distribution.
- It is hygienic and in line with sanitation requirements.



HFDC-3-40, HFDC-3-60, Inline High Shear Dispersing Emulsifier

HFDC-3-40, HFDC-3-60 Inline High Shear Dispersing Emulsifier can very easily complete inline dispersing, emulsifying, homogenizing and so on. These pilot equipments can intimate inline or batch circulation processes and thus provide adequate data as basis for industrial production.

Model	HFDC-3-40	HFDC-3-60
Motor power	1,800W	2,200W
Power supply	220V, 50Hz	220V, 50Hz
Max. flow rate (H2O)	15L/min	25L/min
Rotation speed range	12,000-18,000rpm	300-6,000rpm
Max. working temperature	120°C	120°C
Speed display	Digital display	Digital display
Speed control	Variable speed control	Variable speed control
Medium-contact materials	SS316L, FKM	SS316L, FKM
Standard working chamber	Without jacket	Without jacket
Standard generator	2G/2M/2F	2G/2M/2F
Seal type	Mechanical seal	Mechanical seal
Inlet/outlet size	DN15, DN10 (clamp connection)	DN20, DN15 (clamp connection)
Process type	Inline	Inline
Overall dimension	500×160×265	680×220×340
Lifting stand	IP54	IP54

Features:

- Equipped with special designed high power motor.
- Three-stage stator/rotor precisely fitted for working.
- Stator/rotor has different combining forms upon requests.
- Rotation speed can be adjusted by variable frequency drive.
- Homogenized with narrower and smaller particle size distribution.
- It is hygienic and in line with sanitation requirements.

HOMOGENIZERS Spin-Mix

HOG-08/09/10, Homogenizers Spin-Mix

Homogenizer can be widely used in mixing and dispersing, emulsifying for Medicine, foods, Cosmetics, Industrial products.



Features:

There are many uses for homogenizer as following different fields:

- Chemical: Dyestuff, pigment, additive .. etc.
- Medical: Biochemistry, virus, bacteria, yeast .. etc.
- Pharmacy: Medicine test, vakzin, syrup .. etc.
- Food: Trial, study check.
- Others: Magneted chemical tape analysis, silicone .. etc.

Optional Tank Sets:



COTR-100
30~100ml



COTR-200
60~200ml



COTR-500
100~500ml



COTR-1000
500~1000ml

Model	HOG-08	HOG-09	HOG-011
Motor	100W	250W	150W High Frequency Motor
Max. Rotational Speed	18,000rpm	15,000rpm	18,000rpm
Capacity	30~1,000ml	30~1,000ml	30~1,000ml
Timer	15 min or Continuous running	15 min or Continuous running	1~60min or Continuous running
Dimensions(mm)	W250×D250×H396	W250×D250×H396	W250×D250×H413
Weight	6kg	8kg	8kg
Control System	Thyristor Control System	Thyristor Control System	Inverter Control System
Power Source	AC100V 50/60Hz 3A	AC100V 50/60Hz 6A	AC100V 50/60Hz 5A



HOG-24

Typical Samples:

- Human, animal, plant cells
- Micro-organisms
- Soil and sediments
- Swabs and feces
- Drugs, polymers, lotions, etc.

Sample Preparations:

As heat generated by grinding process will make part of sample tissue damaged, we recommend:

- After putting the sample into the sample tube, please preserve the sample for 6-12 hours at low temperature (below -60°C degree)
- Then take out for grinding to make the effects achieve the best.

Overview of the HOG-24 Procedure:

- Prepare lysis tube



- Process about 30 seconds



- Centrifuge to pellet debris about 1 minute



- Transfer cleared lysate



HOG-24, Homogenizer

Fast, effective and reproducible homogenization of a wide range of samples, including hard to lyse tissues and cells. It also holds extraordinary powerful for the processing of even impact resistant samples such as bones or cartilage. The HOG-24 is an ideal solution for releasing DNA, RNA, Proteins, Enzymes, etc. from very tough samples while still retaining molecular integrity.

Features:

- "3D Rotating High Speed Motion" for quick disruption of those fibrous tissues and resistant cells
- 50 programmable memory settings and user optional condition settings
- A wide range of rotation speed settings from 4.0 m/s to 7.0 m/s, increment 0.05 m/s
- Brushless motor realizing no brush particle generation and no brush replacement
- Easy to remove sample tube holder and easy to fix sample tubes
- Easy to monitor the disruption process through the clear lid
- Simultaneously homogenize either 24x2.0ml/1.5ml/0.5ml or 12x5ml tubes
- Disposable tubes ensure no threat of cross-contamination
- Most samples can be processed in 35 sec. or less.



Model	HOG-24
Speed Range	4.0m/s - 7.0m/s (in steps of 0.05m/s)
Cycle Duration	1-90s (in steps of 1s)
Pause Time	0-2 minutes
Acceleration	≤2 sec. to max. speed
Deceleration	≤2 sec. to stop
Programmable	50 Saved Programs
Number of Cycles	10
Display	O-LED, High light and no visual angle limit
Number of Samples	1-24 samples
Running Noise	< 68db
Weight	25kg
Dimensions (WxDxH)	280mm x 360mm x 385mm

Code	Description
301-13010-00	HOG-24 AC 1 00-240V 50/60Hz
301-13011-01	Rotor for 24x2.0ml
301-13011-02	Rotor for 12x5.0ml
301-13011-11	Grind tube with 1.4mm Silica beads
301-13011-12	Grind tube with 2.8mm Silica beads
301-13011-13	Grind tube with 3mm Metal beads
301-13011-14	Grind tube with 0.7mm Garnet beads
301-13011-15	Grind tube with 0.15mm Carbide beads
301-13011-16	Grind tube with 0.25mm Carbide beads
301-13011-17	Grind tube with 0.1 mm Glass beads
301-13011-18	Grind tube with 0.5mm Glass beads