



WT500 Homogenezer

Top speed of high 30,000 rpm rate, 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.

- Power input: 500 watt
- Voltage/frequency: 230V50Hz/230V60Hz, 110V50Hz/110V60Hz
- Speed range: 10,000 - 30,000 rpm and circumferential rotor speed up to 36m/sec
- Speed adjustment: continuously variable
- Weight : 9.0 kg
- Housing dimension: 350(L)x300(W)x600H)
- Shaft size: 20mm
- Overload protection
- Safety switch: smooth start of the drive
- CE-conformity
- High quality double rod, solid Aluminium H-stand with strap clamps, two boss heads and safety ring for greater safety and comfort for the user



Drive

Top speed of high 29,000 rpm rate, 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.

- Power input: 500 watt
- Voltage/frequency: 230V/50-60Hz, 110V/50-60Hz
- Speed range: 10,000-29,000 rpm
- Speed adjustment: continuously variable
- Weight : 1,3 kg
- Housing dimension: 70mm x 70mm x 255mm
- Shaft size: 20mm
- Overload protection
- Safety switch: smooth start of the drive
- CE-conformity

Shaft

Flexible configuration of different rotors and stators, make the tool highly adaptive to most applications. The shaft is constructed of quality 316 L stainless steel. Reliable results are assured with extremely high precision and speed. Assembly and disassembly of rotors, stators require no special tool and can be done in a few seconds using only a piece of cloth.

Rotor-stator-principle:

The rotor / stator system consists of a stator fixed to a shaft, enveloping a rotor fixed to the axle. The coaxial slits on the stator, comes with different spacing for size reduction and mixing of substances. The sample's degree of fineness increases as slit spacing decreases.

Process of dispersing:

The material is sucked into 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:

Quick change tools consist 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.

Advantages

- ✓ 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)
- ✓ High quality dispersing tools as standard for better resistance to corrosion (SS 316 L steel)
- ✓ Quick-change-system of the dispersing tools for a short changing time between preparations
- ✓ Viscosities up to 10,000 cps
- ✓ One shaft size
- ✓ High quality lab dispersing unit, at a competitive price!!
- ✓ Two years warranty

Order possibilities:



Standard shaft 1:

Including drive, shaft, axle, PTFE bearing, stator 20mm coarse (S20C) and standard rotor (SR20)
 description: SS20CSR20 ident.nr.: 171020100
 optional: cutter rotor (CR20), mixing rotor (MR20)



Standard shaft 2:

Including drive, shaft, axle, PTFE bearing, stator 20mm fine (S20F) and emulsifying rotor (ER20)
 description: SS20FER20 ident.nr.: 171020200
 optional: cutter rotor (CR20), mixing rotor (MR20)



Standard shaft 3:

Including drive, shaft, axle, PTFE bearing, stator 30mm coarse (S30C) and standard rotor (SR30)
 description: SS30CSR30 ident.nr.: 171020300
 optional: mixing rotor (MR20), cutter rotor (CR30), mixing rotor (MR30)



Standard shaft 4:

Including drive, shaft, axle, PTFE bearing, stator 30mm fine (S30F) and emulsifying rotor (ER30)
 description: SS30FER30 ident.nr.: 171020400
 optional: cutter rotor (CR30), mixing rotor (MR30)



Stirring shaft:

Including drive, shaft, axle, PTFE bearing, stator 40mm coarse (S40C) and mixing-rotor (MR30)
 description: SS40CMR30 ident.nr.: 171020500

With the aid of the stirring shaft SS40CMR30, the quickchange Drive D is quickly converted into a high speed stirrer. Five hundred watts are provided for rapid mixing, for dissolving, for disagglomerating pigment agglomerates for volume of up to 40,000ml.

Industries

- BT - Bio Technology
- F - Food
- P - Pharma
- C - Cosmetic
- M - Medicine
- PC - Petro Chemistry
- PT - Paper & Tissue Industry
- SP - Sewage / Pollution Control
- CI - Ceramic Industry
- CH - Chemical Industry
- PI - Paint Industry
- TI - Tobacco Industry

Applications

1. Emulsions, intensive mixing of w/o and o/w emulsions
2. Suspensions, intensive mixing
3. Coarse crushing of hard solids in liquid
4. High speed mixing without crushing
5. Fragmentation of vegetable, animal and human tissues
6. Dispersing of resins and pigments for paint and lacquer industry



Summary of options:

Drive:	D	171010000
Shaft, Axle, PTFE bearing :	S	171011000
Stators :		
20 coarse (C)	S20C	171042010
20 fine (F)	S20F	171042020
30 coarse (C)	S30C	171043010
30 fine (F)	S30F	171043020
40 coarse (C)	S40C	171044010

Rotors:		
Standard Rotor 20	SR20	171050120
Standard Rotor 30	SR30	171050130
Cutter Rotor 20	CR20	171050220
Cutter Rotor 30	CR30	171050230
Mixing Rotor 20	MR20	171050320
Mixing Rotor 30	MR30	171050330
Emulsifying Rotor 20	ER20	171050120
Emulsifying Rotor 30	ER30	171050130



5mm Shaft

171020600
volume : 0.2-50 ml
suspension fitness(um):10-50
emulsion fitness(um):1-10

Drive



D-500
171010000



Shaft

- Shaft
- Axle
- PTFE Bearing

Stator



S30C
171042010

volume : 10-5000 ml

Stator



S30F
171042020

volume : 10-5000 ml

Stator



S30C
171043010

volume : 100-8000 ml

Stator



S30F
171043020

volume : 100-8000 ml

Stator



S40C
171044010

volume : 1-40 L

Rotors



SR20 171050120
CR20 171050220
MR20 171050320

suspension fitness(um):10-50
emulsion fitness(um):1-10

Rotors



SR30 171050130
CR30 171050230
MR30 171050330
MR20 171050320

suspension fitness(um):5-25
emulsion fitness(um):1-5

Rotors



ER30 171050430
SR30 171050130
CR30 171050230
MR30 171050330

suspension fitness(um):5-25
emulsion fitness(um):1-5

Rotors



ER20 171050420
SR20 171050120
CR20 171050220
MR20 171050320

suspension fitness(um):10-150
emulsion fitness(um):1-10

Rotor



MR30
171050330

High Speed Mixer



Shaft/Order Table

Industry examples	Applications	Material in contact with product	Description of Shaft	Function	Treatable volume* (refer to water) ml	Max. Circum. speed m/s	Diam. of the rotor mm	Diam. of the stator mm	Tool-length mm	Min / Max Emersion depth mm	Ultimate Fineness (in microns)		Max. mohs-grade	Sterilization -all kind of sterilisation possible	Order/ident number
											suspension	emulsion			
R, Cl, PC, SD	3	316 L Stainless steel PTFE	SS20CSR20	dispersing tool for solid/liquid media	10 - 5000	22.7	15	20	220	40 / 175	10 - 50	1 - 30	6	all methods	171020100
SR, M, F, PT, TI	5	316 L Stainless steel PTFE	SS20CCR20	dispersing tool with knives for fibrous/stringy materials	10 - 5000	22.7	15	20	220	40 / 175	10 - 50	1 - 30	6	all methods	171020101
Cl, PI	2	316 L Stainless steel PTFE	SS20CMR20	dispersing tools for solid/liquid media	10 - 5000	22.7	15	20	220	40 / 175	10 - 50	1 - 30	6	all methods	171020102
SP, PL, PT, P	6	316 L Stainless steel PTFE	SS20ER20	dispersing tools for w/o or o/w emulsions	10 - 5000	22.7	15	20	220	40 / 175	10 - 50	1 - 30	6	all methods	171020200
SP, BT, M, F, PT, TI	7	316 L Stainless steel PTFE	SS20PCR20	dispersing tool with knives for fibrous/stringy materials	10 - 5000	22.7	15	20	220	40 / 175	10 - 150	1 - 30	6	all methods	171020201
Cl, C, Pl, F, PT, PC	1	316 L Stainless steel PTFE	SS20FMR20	dispersing tools for solid/liquid media	10 - 5000	22.7	15	20	220	40 / 175	10 - 150	1 - 30	6	all methods	171020202
Cl, F, SP	4	316 L Stainless steel PTFE	SS30CMR20	Stirring shaft	250 - 20,000	34.9	15	30	220	40 / 175	High-speed mixer		6	all methods	171020501
SR, M, F, PT, P	3	316 L Stainless steel PTFE	SS30CSR30	dispersing tools for solid/liquid media	100 - 8,000	34.9	23	30	220	40 / 175	5 - 25	1 - 5	6	all methods	171020300
SR, M, F, PT, P	5	316 L Stainless steel PTFE	SS30CCR30	dispersing tool with knives for fibrous/stringy materials	100 - 8,000	34.9	23	30	220	40 / 175	5 - 25	1 - 5	6	all methods	171020301
Cl, PI	2	316 L Stainless steel PTFE	SS30CMR30	dispersing tools for solid/liquid media	100 - 8,000	34.9	23	30	220	40 / 175	5 - 25	1 - 5	6	all methods	171020302
SP, PL, PT, P	6	316 L Stainless steel PTFE	SS30SR30	dispersing tools for solid/liquid media	100 - 8,000	34.9	23	30	220	40 / 175	5 - 25	1 - 5	6	all methods	171020400
SP, PL, PT, P	7	316 L Stainless steel PTFE	SS30ER30	dispersing tools for w/o or o/w emulsions	100 - 8,000	34.9	23	30	220	40 / 175	5 - 25	1 - 5	6	all methods	171020401
Cl, C, R, FDT, TI	1	316 L Stainless steel PTFE	SS30FMR30	dispersing tools for solid/liquid media	100 - 8000	34.9	23	30	220	40 / 175	5 - 25	1 - 5	6	all methods	171020402
Cl, F, SP	4	316 L Stainless steel PTFE	SS40CMR30	Stirring shaft	1000 - 40,000	34.9	23	40	220	40 / 175	High-speed mixer		6	all methods	171020500

*Important: Vessel depth & form must correspond with water volume