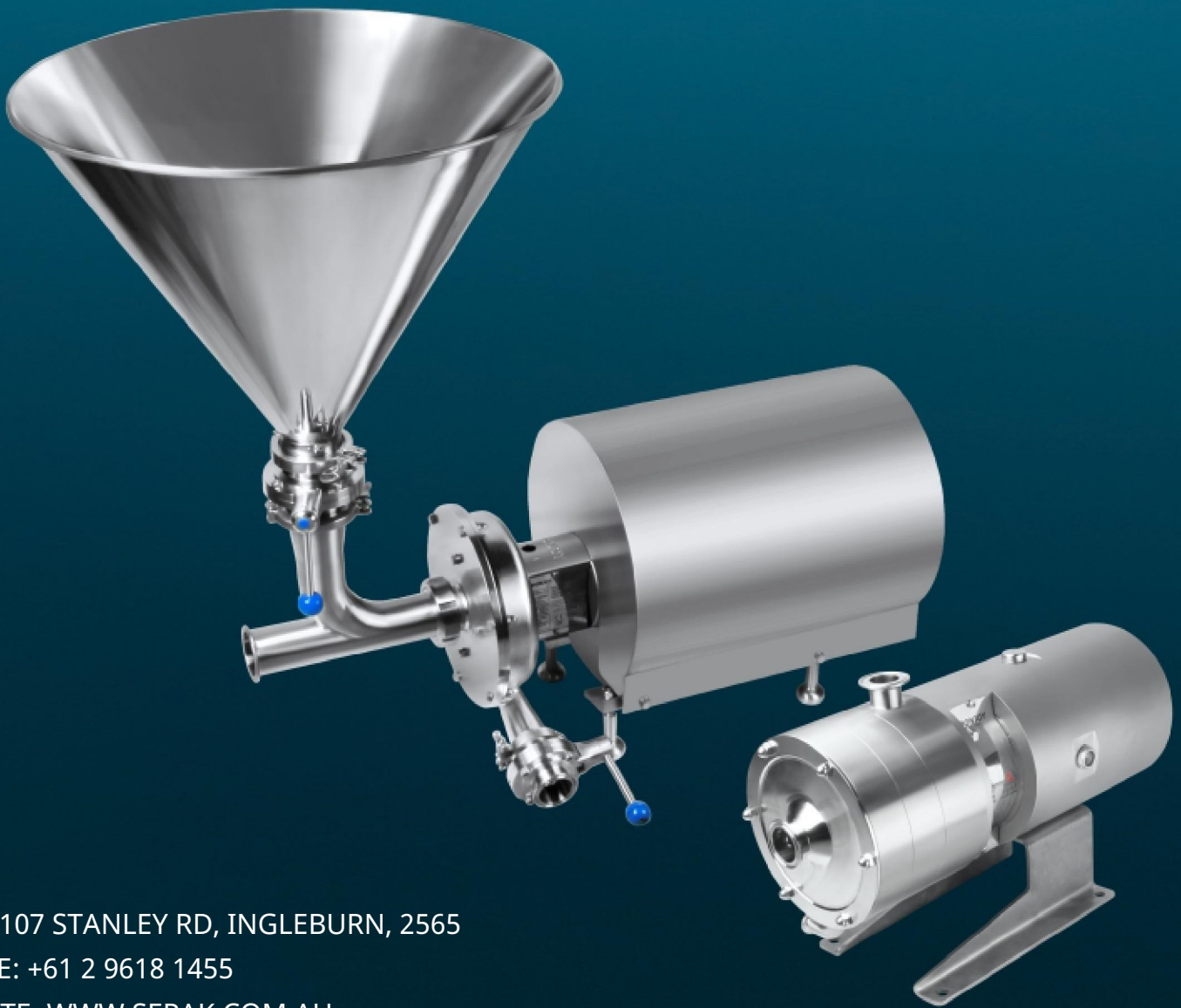


SEPAK

INDUSTRIES PTY LTD

www.sepak.com.au

Emulsifying homogenizing pump series



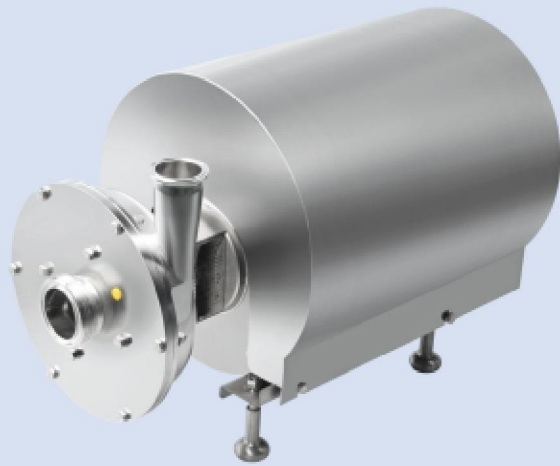
1/105-107 STANLEY RD, INGLEBURN, 2565

PHONE: +61 2 9618 1455

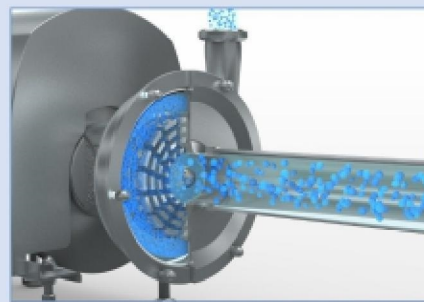
WEBSITE: WWW.SEPAK.COM.AU

EMAIL: SALES@SEPAK.COM.AU

JZ1 series single stage emulsifying homogenizing pump



Solutions for high-efficiency, dispersion, cut, refinement, smash, emulsification, mixing, homogenization, high purity

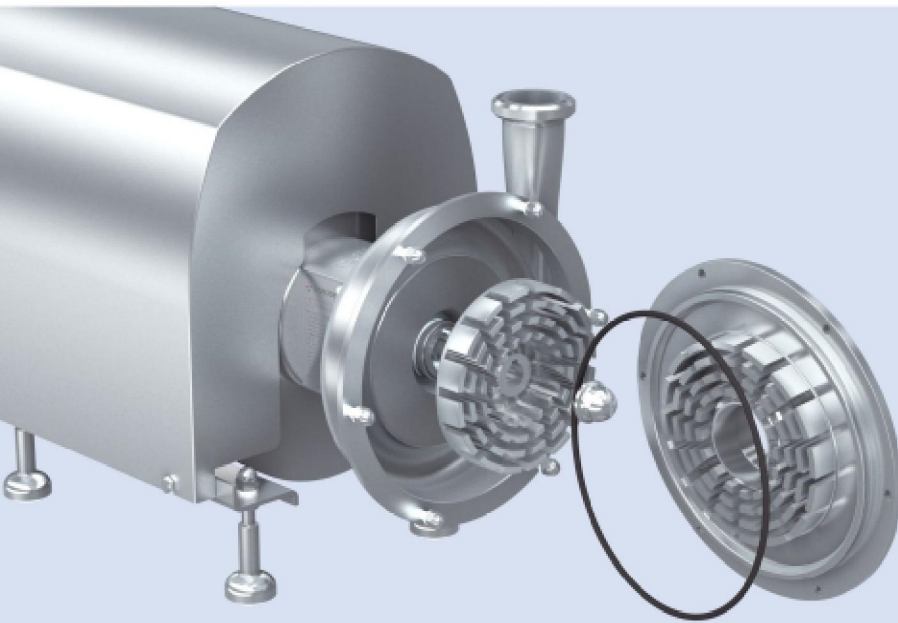


JZ1 series is emulsifying homogenizing pump that could be operated for continuous production, and is composed of stator and rotor. The processed media will be operated through 6–10 layers stators and rotors, and then be dispersed, cut, refined, smashed, emulsified, mixed etc. step by step. Compared with traditional manufacturing technique, this pump is more easier, convenient and optimized, which has improved production efficiency and promoted media quality. It's mainly used in the industry of food, beverage, pharmacy, health protection, fine, chemistry, coating, pesticide, daily chemical, papermaking, etc.

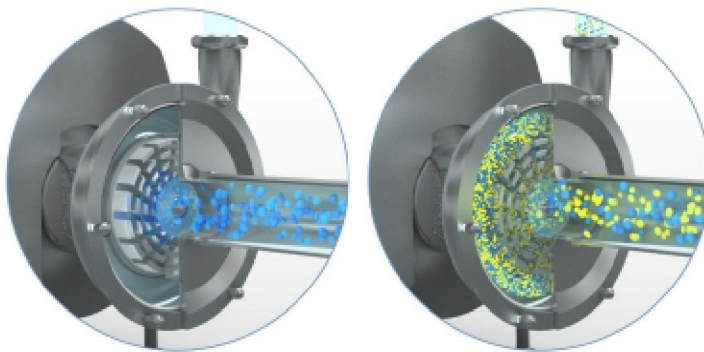
Technical Specifications

Max flow rate	40m ³ /h
Max power	45KW
Max temperature	-20°C to 140°C
Media refinement	≤ 60 GRIT (= 300 μ m) ≤ 60目(≈ 300 μ m)
Material	304 /316L, 1.431/1.4404, ASME BPE 316L, 1.4435 NB2 Fe ≤ 0.5%
Surface treatment	≤ Ra0.8 μ m, ≤ Ra0.6 μ m, ≤ Ra0.4 μ m
Mechanical seal	Single and double mechanical seals
Mechanical seal combination	See configuration table
Inlet/Outlet connection	Thread, clamp, flange, Aseptic flange
Certification	3-A-02-11(N.O.1579); MD/06/42-EC (N.O.70521616101-00); FDA 177.2600; USP CLASS-II; EG/VO1935/2004;

JZ1 series single stage emulsifying homogenizing pump



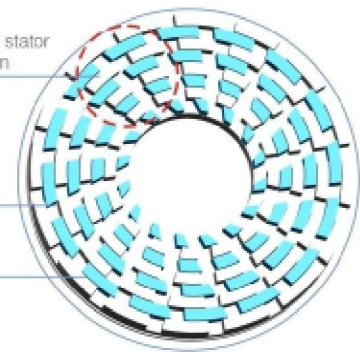
Very simple maintenance,
no special tools required, no
professionals required



The gap between the stator
and the rotor is 0.5mm

Stator

Rotor



Technical Advantages

- Maintenance disassembly and installation can be completed without professional staff and special tools.
- Initial use of installation debugging, even if a short reverse rotation will not be damaged.
- Impeller and shaft are connected by keyway; impeller and mechanical seal rotating ring are connected by pin; mechanical seal static ring and pump body are connected by special-shaped flange.
- Compatible with single and double machine seal, only need to change machine seal.

JZ1 series emulsifying homogenizing pump connection



Hand wheel nut



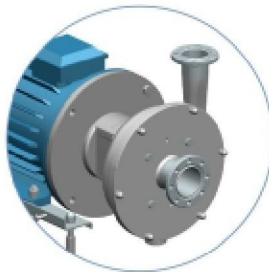
Union nut inlet / outlet



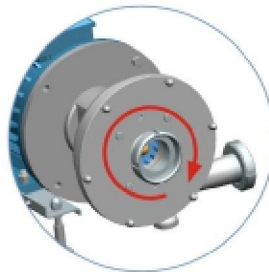
Threaded inlet / outlet



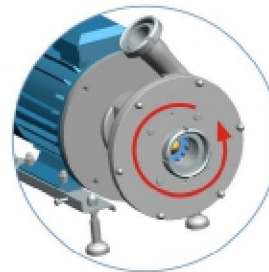
Clamp inlet/outlet



Aseptic Flange (DIN 11864)
Inlet/Outlet



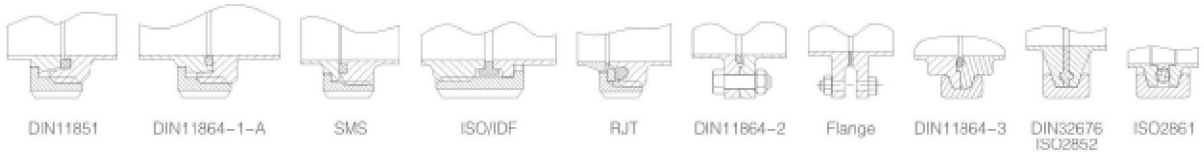
90°0° inclined outlet



90°135° inclined outlet

Pump Inlet/outlet Connection Standard

Connection: Thread, Clamp, Flange, Aseptic flange, KF etc.
Standard: DIN SMS ISO IDF RJT ASME BPE 3A I-line



JZ1 series emulsifying homogenizing pump connection



Typical applications



Food & beverage

Juice, jam, ice cream, dairy products, food additives, tea drinks, chocolate, soymilk, essence.



Daily chemical

Liquid detergent, liquid soap, facial cleanser, emulsified silicone oil, fragrance compound, skin care product, cosmetics.



Bio-pharmaceutical

Injection, antibiotic, medicine emulsion, medicine emulsifiable paste, health care products, microcapsule emulsification, cell tissue smash etc.



Papermaking

Paper pulp, padding, dry strength agent, wet strength agent, sizing agent, retention and drainage aid, antifoaming agents, coating, water treatment chemicals etc.



Petrochemical industry

Lubricant, heavy oil emulsification, diesel oil emulsification, modified asphalt, catalyzer, wax emulsion etc. Which media need to be emulsified and homogenized.



Fine chemical engineering

Pigment, dyestuff, plastic additive, textile assistant, adhesive, resin emulsification, hot melt adhesive, sealant, glue, sizing agent, finishing agent, surfactant, dye leveler, carbon black dispersion, anti-slicking agent, textile finishing agent, brightener, leather auxiliaries, pigment paste etc. Which media need to be emulsified and homogenized.



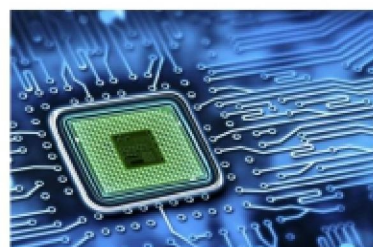
Coating & ink

Printing ink, oil paint, emulsion paint, coating, nano-paint, photocurable coating, coating adhesive, carbon black dispersion, glaze, bentonite etc.



Pesticide

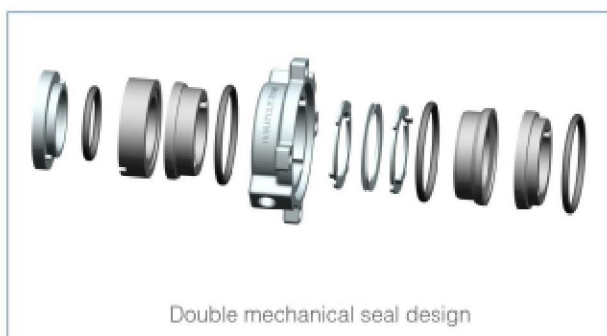
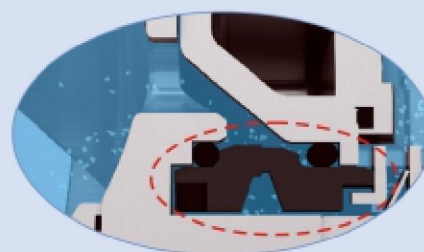
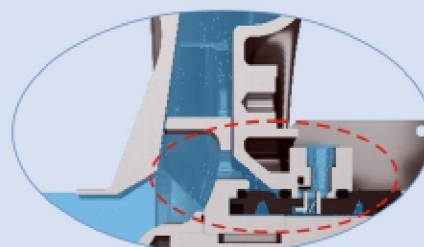
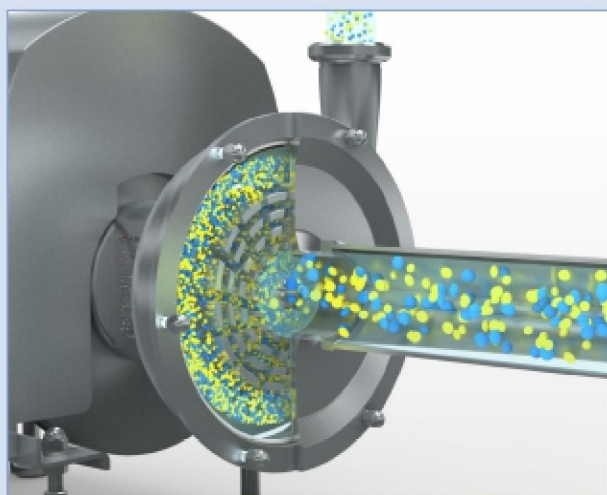
Insecticide, herbicide, pesticide missible oil, fertilizer, inert ingredient etc which media need to be emulsified and homogenized.



Semiconductor

Dispersion & depolymerization of nanometer materials etc.

JZ1 series emulsifying homogenizing pump mechanical seal design



Mechanical Seal Features

JZ1 series emulsifying homogenizing pump mechanical seal is researched and developed together with European Swedish famous company. The mechanical seal is designed with pressure balance and super long working life, can be disassembled and maintained easily without special tools. The sanitary purity is according to EU EHEDG, USA 3-A-02-11, FDA1772600 and so on. and has lots of configuration.

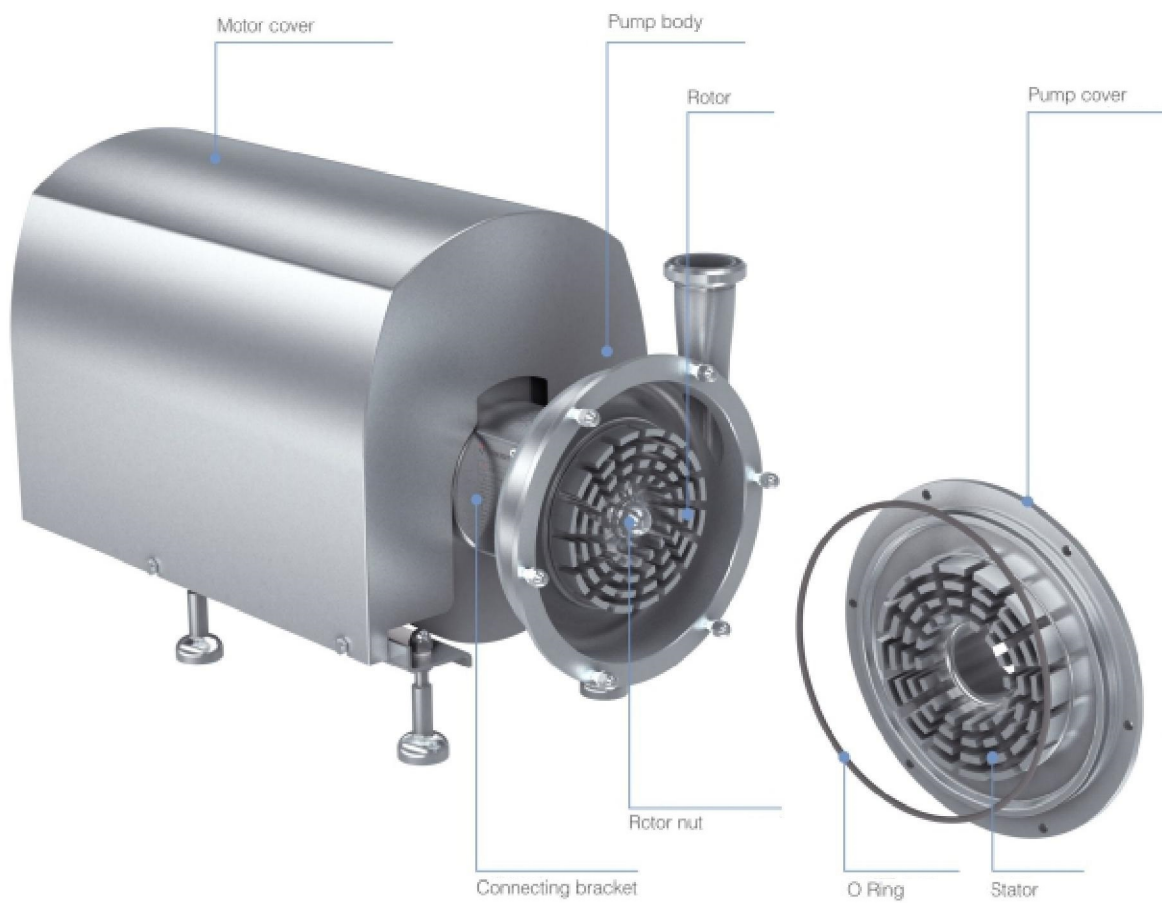
Mechanical Seal Configuration

1)SIC/C/EPDM	Standard
2)SIC/C/FKM	Optional
3)SIC/C/HNBR	
4)SIC/SIC/EPDM	
5)SIC/SIC/FKM	
6)SIC/SIC/HNBR	
7)TC/TC/EPDM	
8)TC/TC/FKM	
9)TC/TC/HNBR	

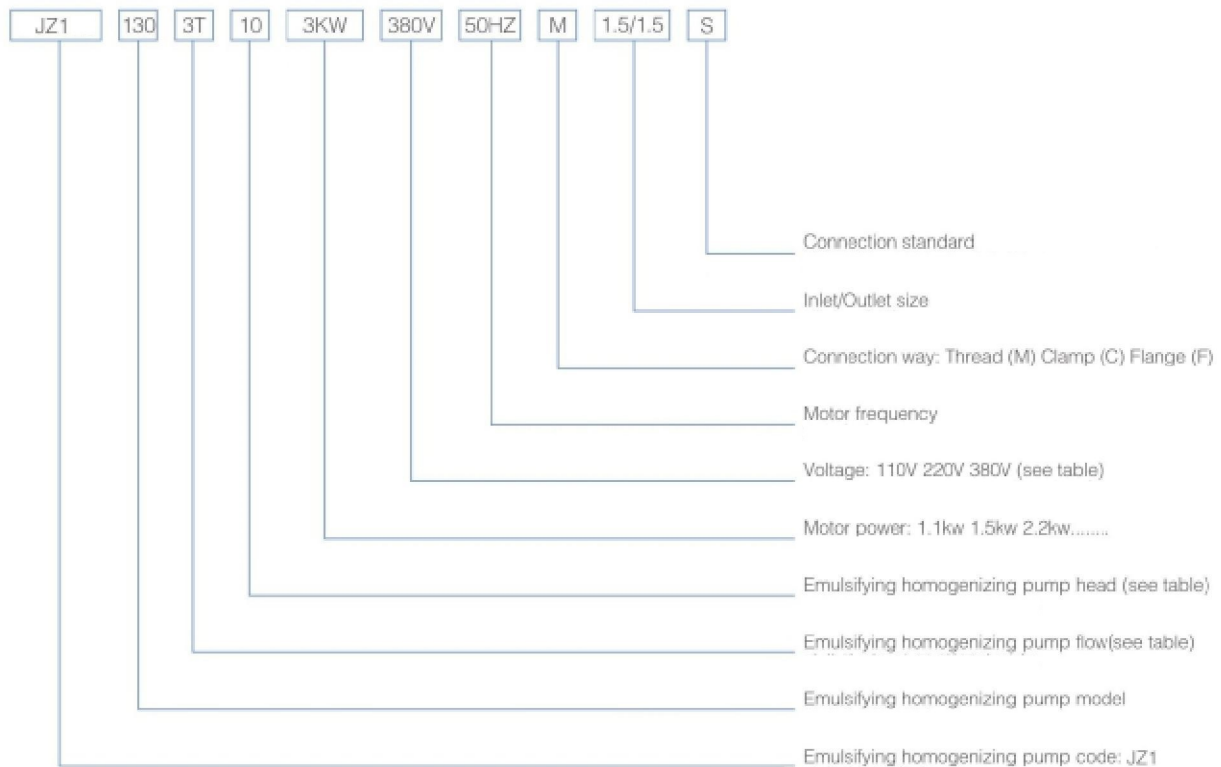
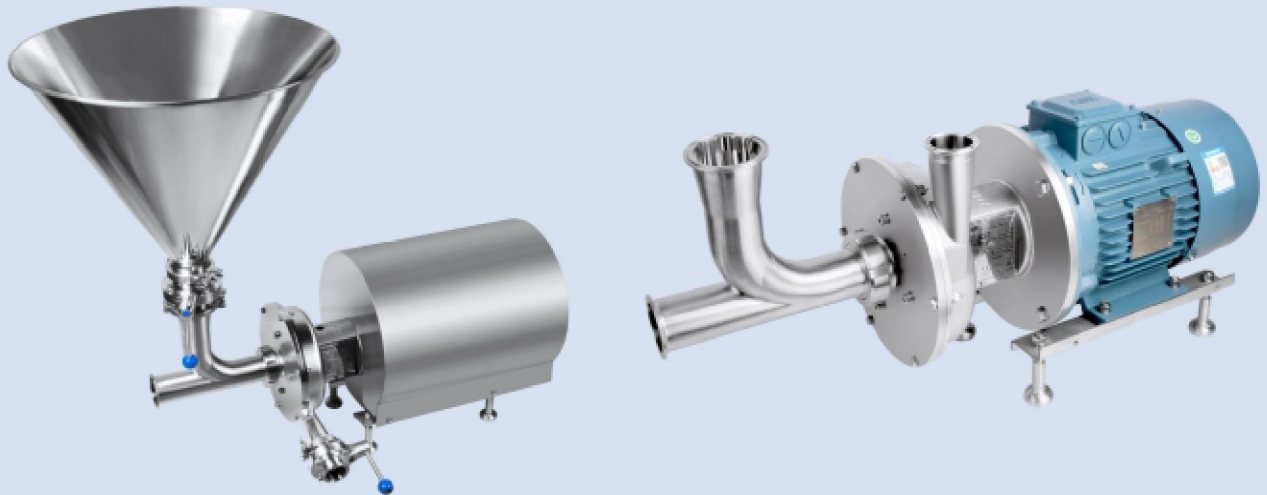
Note: Above configurations is suitable for single and double mechanical seal

JZ1 series single stage emulsifying homogenizing pump

Very simple maintenance,
no special tools required, no
professionals required



JZ1 Emulsifying homogenizing pump model instruction



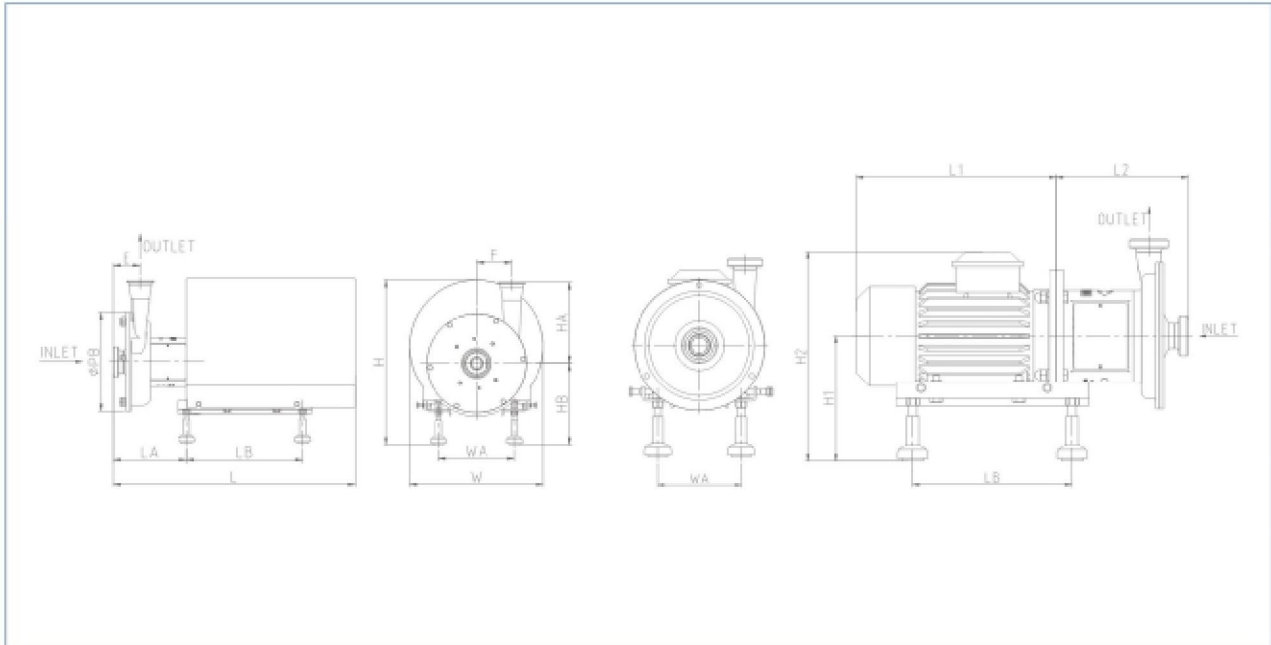
For example:
 JZ1-130-3T-10-3KW-380V-50HZ-M-1.5/1.5-S

Single stage emulsifying homogenizing pump selection table



Model	Power(kw)	Flow(m ³ /h)	Outlet pressure (bar)	Rotate speed (r/min)	Inlet/Outlet	Weight (kg)
JZ1-130	3.0	3.0	1.0	2900	1.5"/1.5"	52.0
	4.0		1.0	2900		58.0
	5.5		1.0	2900		74.0
JZ1-150	4.0	6.0	1.5	2900	2"/1.5"	66.0
	5.5		1.5	2900		82.0
	7.5		1.5	2900		93.0
JZ1-170	5.5	10.0	1.5	2900	2.5"/2"	91.0
	7.5		1.5	2900		102.0
	11.0		1.5	2900		144.0
JZ1-190	7.5	15.0	1.5	2900	2.5"/2"	107.0
	11.0		1.5	2900		149.0
	15.0		1.5	2900		164.0
JZ1-210	11.0	25.0	1.5	2900	3"/2.5"	166.6
	15.0		1.5	2900		181.6
	18.5		1.5	2900		211.6
JZ1-240	15.0	40.0	1.5	2900	3"/2.5"	167.0
	18.5		1.5	2900		182.0
	22.0		1.5	2900		212.0

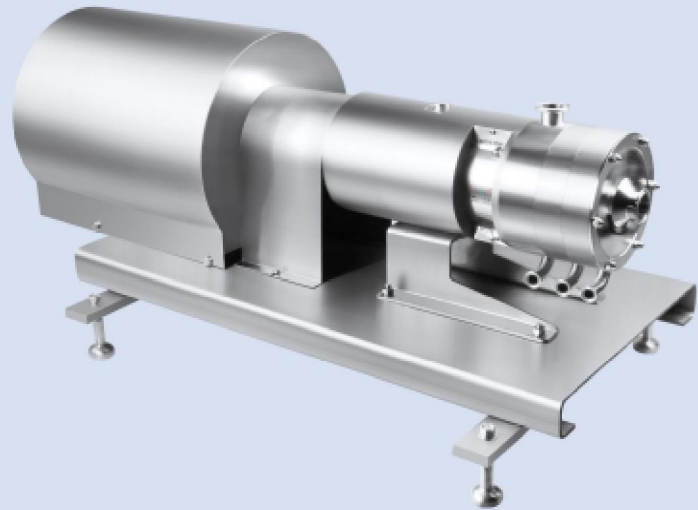
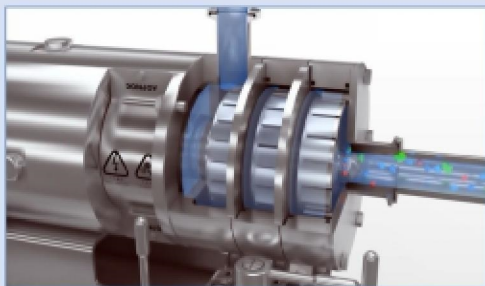
Single stage emulsifying homogenizing pump data sheet



Model	Power (kw)	Inlet	Outlet	PB	F	LB	H	HB	HC	W	WA	L1	H2	SMS				INCH				DIN			
														Thread				Clamp				Thread			
														E	LA	HA	L	E	LA	HA	L	E	LA	HA	L
JZ1-130	3.0KW	1.5"	1.5"	220	76.5	300	413	218	94.8	320	160	316	338.8	59	158	146	583	52	150	139	576	59	158	146	583
	4.0KW			220	76.5	300	421	210	94.8	340	190	351	350.8	59	165	146	584	52	157	139	577	59	165	146	584
	5.5KW			220	76.5	330	466	231	94.8	380	216	399	399.8	59	174	146	654	52	166	139	647	59	174	146	654
JZ1-150	4.0KW	2"	1.5"	266	98	300	421	210	94.8	340	190	351	350.8	66	164	160	584	59	156	153	577	67	164.5	160	585
	5.5-7.5KW			266	98	330	466	231	94.8	380	216	399	399.8	66	173	160	654	59	165	153	647	67	173.5	160	655
JZ1-170	5.5-7.5KW	2.5"	2"	282	100.5	330	466	231	94.8	380	216	399	399.8	77.5	210	200	689	66	199	193	677	76.5	209	201	688
	11KW			282	100.5	450	551	260	94.8	470	254	576.5	511.8	77.5	193	200	767	66	181	193	755	76.5	191.5	201	766
JZ1-190	7.5KW	2.5"	2"	328	127.5	330	466	231	94.8	380	216	399	399.8	72.5	207	210	686	61	196	203	674	71.5	206	210	685
	11-15KW			328	127.5	450	551	260	94.8	470	254	576.5	511.8	72.5	190	210	764	61	178	203	752	71.5	188.5	210	763
JZ1-210	11-15KW	3"	2.5"	360	141	450	551	260	94.8	470	254	576.5	512.8	74.5	227	235	801	63	215	223	789	73.5	225.5	235	800
	18.5KW			360	141	450	551	260	94.8	470	254	576.5	512.8	74.5	227	235	801	63	215	223	789	73.5	225.5	235	800
JZ1-240	15-18.5KW	3"	2.5"	360	141	450	551	260	94.8	470	254	576.5	512.8	74.5	227	235	801	63	215	223	789	73.5	225.5	235	800
	22KW			360	141	515	583	281	94.8	510	279	573	533.8	74.5	227	235	896	63	215	223	884	73.5	225.5	235	895

JZ3 series multi-stage emulsifying homogenizing pump

High-efficiency, dispersion, cut, refinement, smash, emulsification, mixing, homogenization, high purity solution

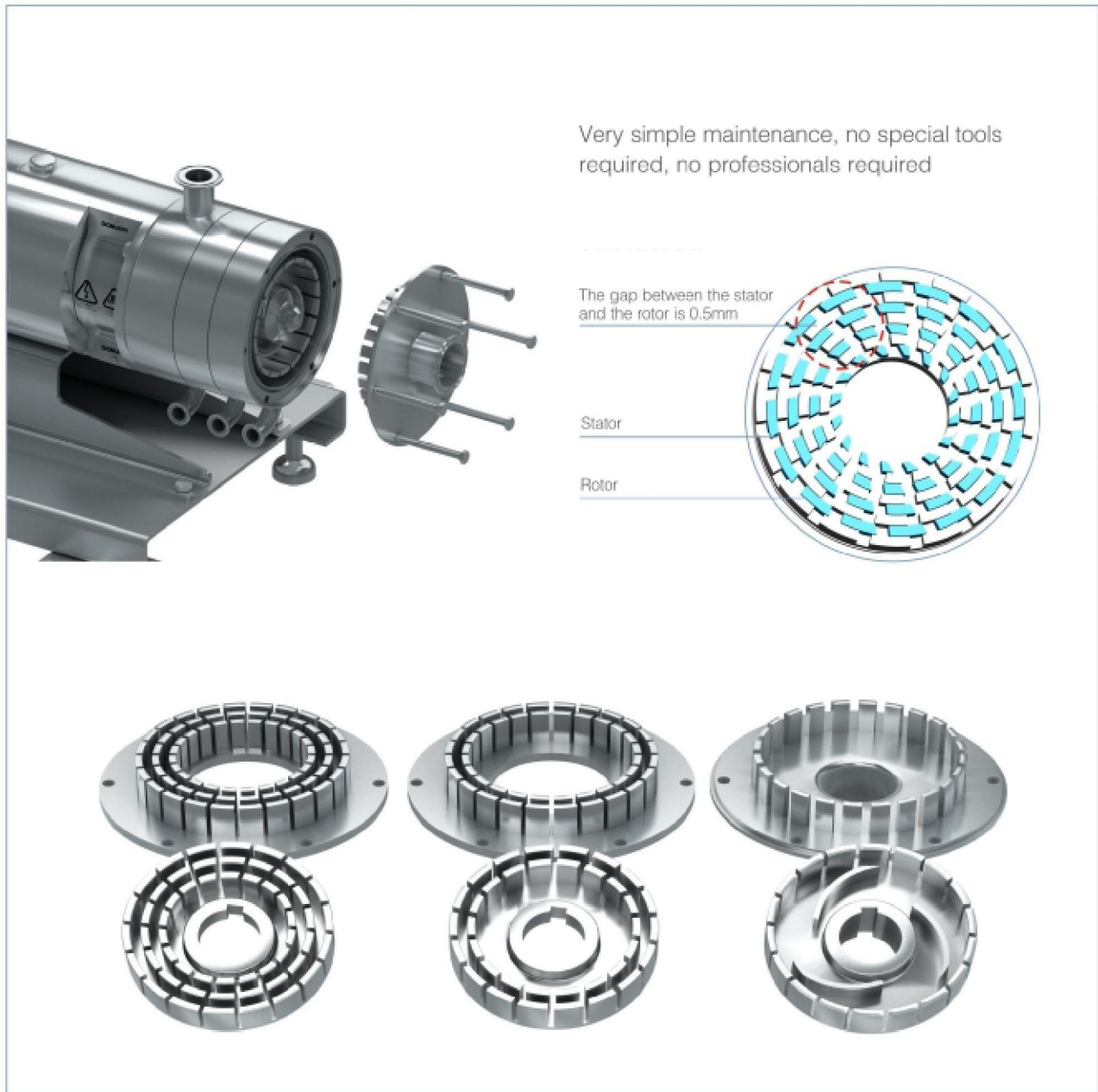


Jz3 series is online continuity production emulsification homogeneous pump, and is composed by stators and rotors, processed materials will be stepwise dispersed, sheared, refined, crushed, emulsified, mixed and homogenized through three grades twelve-tier stators and rotors, and then be dispersed, cut, refined, smashed, emulsified, mixed etc. step by step. Compared with traditional manufacturing technique, this pump is more easier, convenient and optimized, which has improved production efficiency and promoted media quality. It's mainly used in the industry of food, beverage, pharmacy, health protection, fine, chemistry, coating, pesticide, daily chemical, papermaking etc.

Technical Specifications

Max flow rate	50m ³ /h
Max power	90KW
Max temperature	-20°C to 140°C
Media refinement	≤ 100 GRIT (≈ 200 μm) ≤ 100目mesh (≈about 200 μm)
Material	304 /316L, 1.431/1.4404, ASME BPE 316L, 1.4435 NB2 Fe≤0.5%
Surface treatment	≤ Ra0.8 μm, ≤ Ra0.6 μm, ≤ Ra0.4 μm
Mechanical seal	Single and double mechanical seals
Mechanical seal combination	See configuration table
Inlet/outlet connection	Thread, clamp, flange, Aseptic flange
Certification	3-A-02-10(N.O.1579); MD/06/42-EC (N.O.70521616101-00); FDA 177.2600; USP CLASS-II; EG/VO1935/2004;

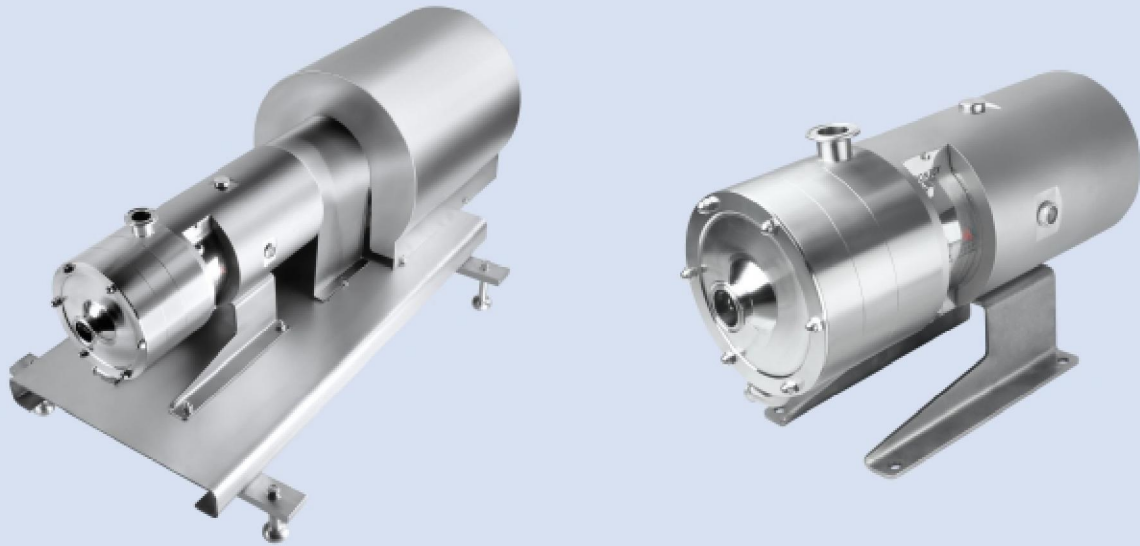
JZ3 series multi-stage emulsifying homogenizing pump



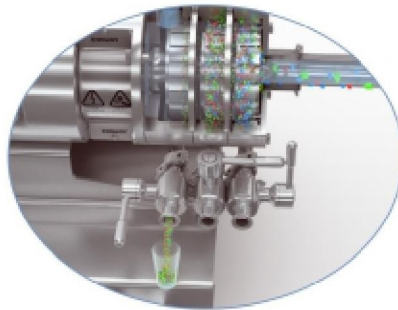
Technical Advantages

- Maintenance disassembly and installation can be completed without professional staff and special tools.
- Initial use of installation debugging, the motor will not be damaged even if after a short reverse rotation.
- The impeller and shaft are connected by the key groove.

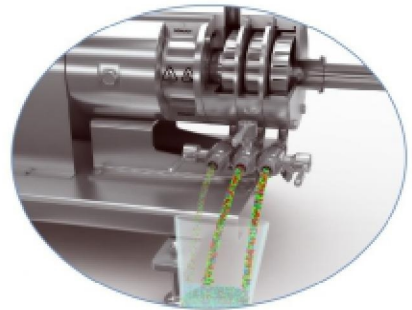
JZ3 series multistage emulsifying homogenizing pump working schematic diagram



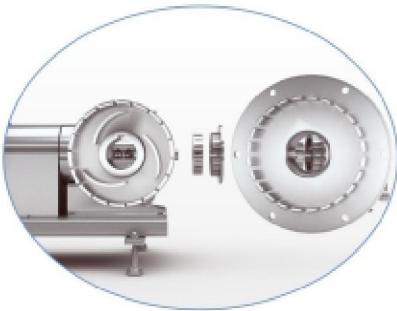
Bottom drain valve



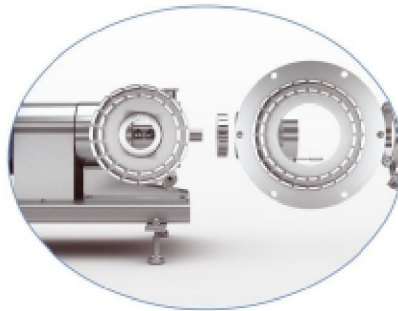
Single-stage discharge or sampling



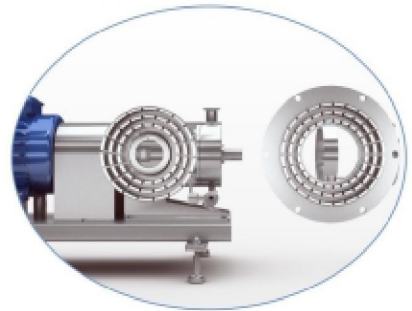
All discharge or sampling



First stage stators and rotors



Second stage stators and rotors



Thrid stage stators and rotors

Typical applications



Food & beverage

Juice, jam, ice cream, dairy products, food additives, tea drinks, chocolate, soymilk, essence.



Daily chemical

Liquid detergent, liquid soap, facial cleanser, emulsified silicone oil, fragrance compound, skin care product, cosmetics.



Bio-pharmaceutical

Injection, antibiotic, medicine emulsion, medicine emulsifiable paste, health care products, microcapsule emulsification, cell tissue smash etc.



Papermaking

Paper pulp, padding, dry strength agent, wet strength agent, sizing agent, retention and drainage aid, antifoaming agents, coating, water treatment chemicals etc.



Petrochemical industry

Lubricant, heavy oil emulsification, diesel oil emulsification, modified asphalt, catalyzer, wax emulsion etc. homogeneous and emulsified media required for various industrial petrochemical.



Fine chemical engineering

Pigment, dyestuff, plastic additive, textile assistant, adhesive, resin emulsification, hot melt adhesive, sensant, glue, sizing agent, finishing agent, surfactant, dye leveler, carbon black dispersion, anti-sticking agent, textile finishing agent, brightener, leather auxiliaries, pigment paste, and emulsifying, homogenizing and mixing materials for various chemical industries.



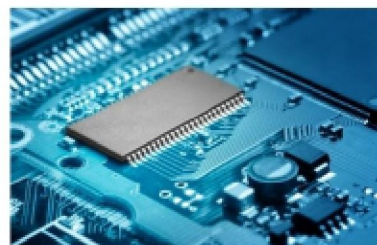
Coating & ink

Printing ink, oil paint, emulsion paint, coating, nanopaint, photocurable coating, coating adhesive, carbon black dispersion, glaze, bentonite etc.



Pesticide

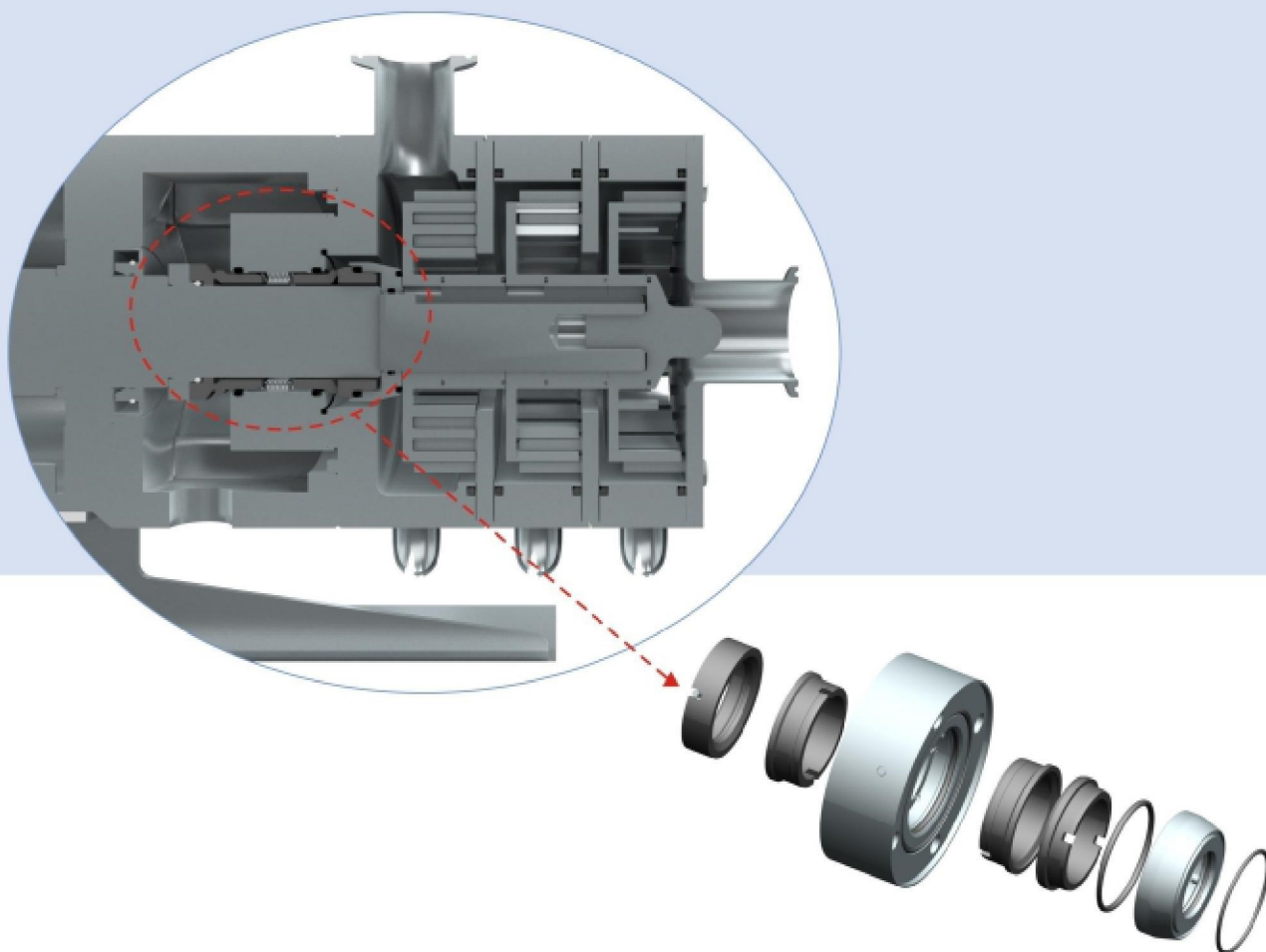
Agricultural medicine: medium for emulsification and homogenization of various pesticides such as insecticide squeezing, herbicide, pesticide emulsifiable concentrate, fertilizer and pesticide auxiliaries.



Semiconductor

Dispersion & depolymerization of nanometer materials etc.

JZ3 Series multistage emulsifying homogenizing pump mechanical seal design



Mechanical Seal System

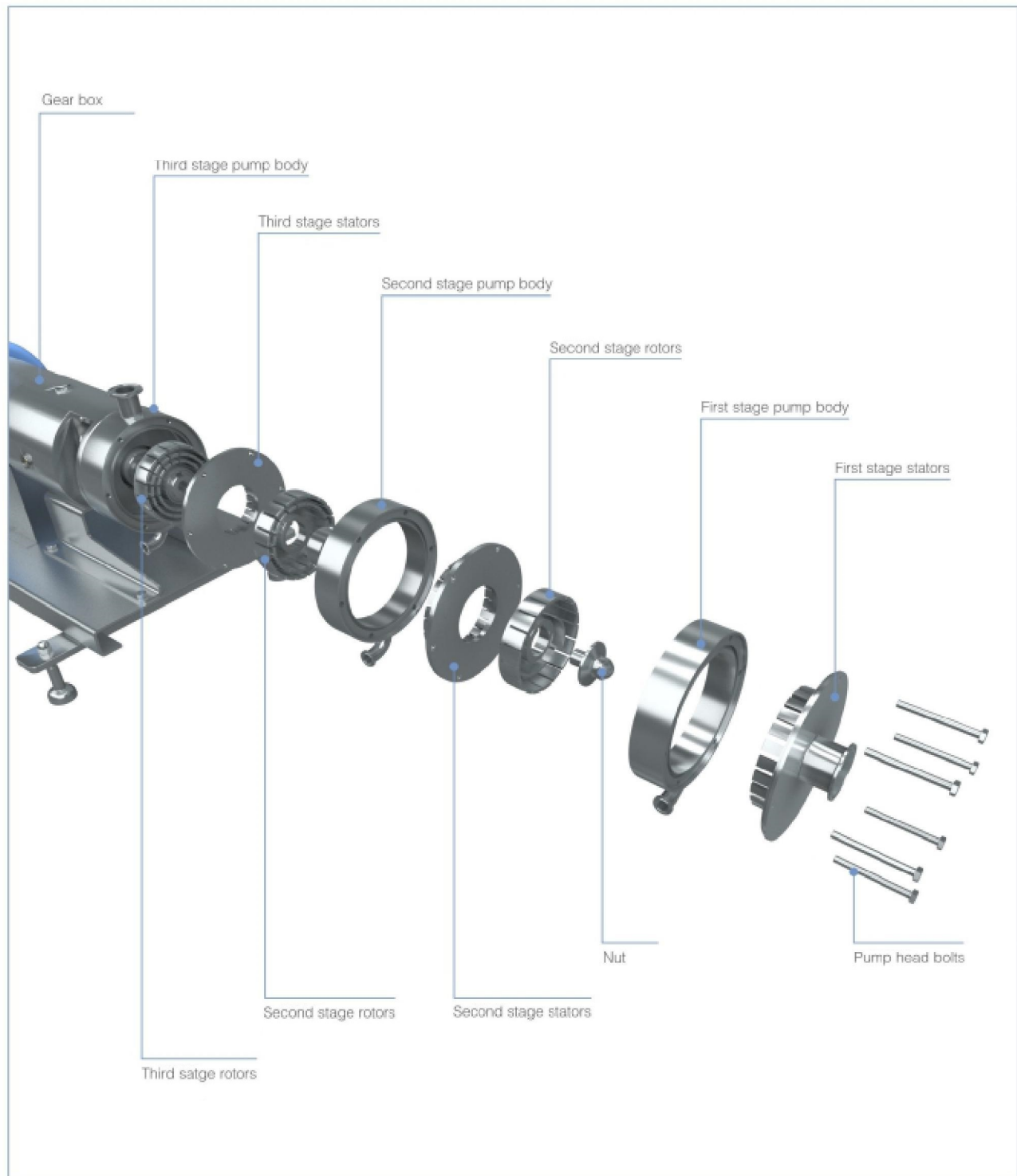
JZ3 series multi-stage homogenizing pump mechanical seal is researched and developed together with European Swedish famous company. The mechanical seal is designed with pressure balance and super long working life, can be disassembled and maintained easily without special tools. The sanitary purity is according to EU EHEDG, USA 3-A-02-11, FDA1772600 and so on. and has lots of configuration.

Mechanical Seal Configuration

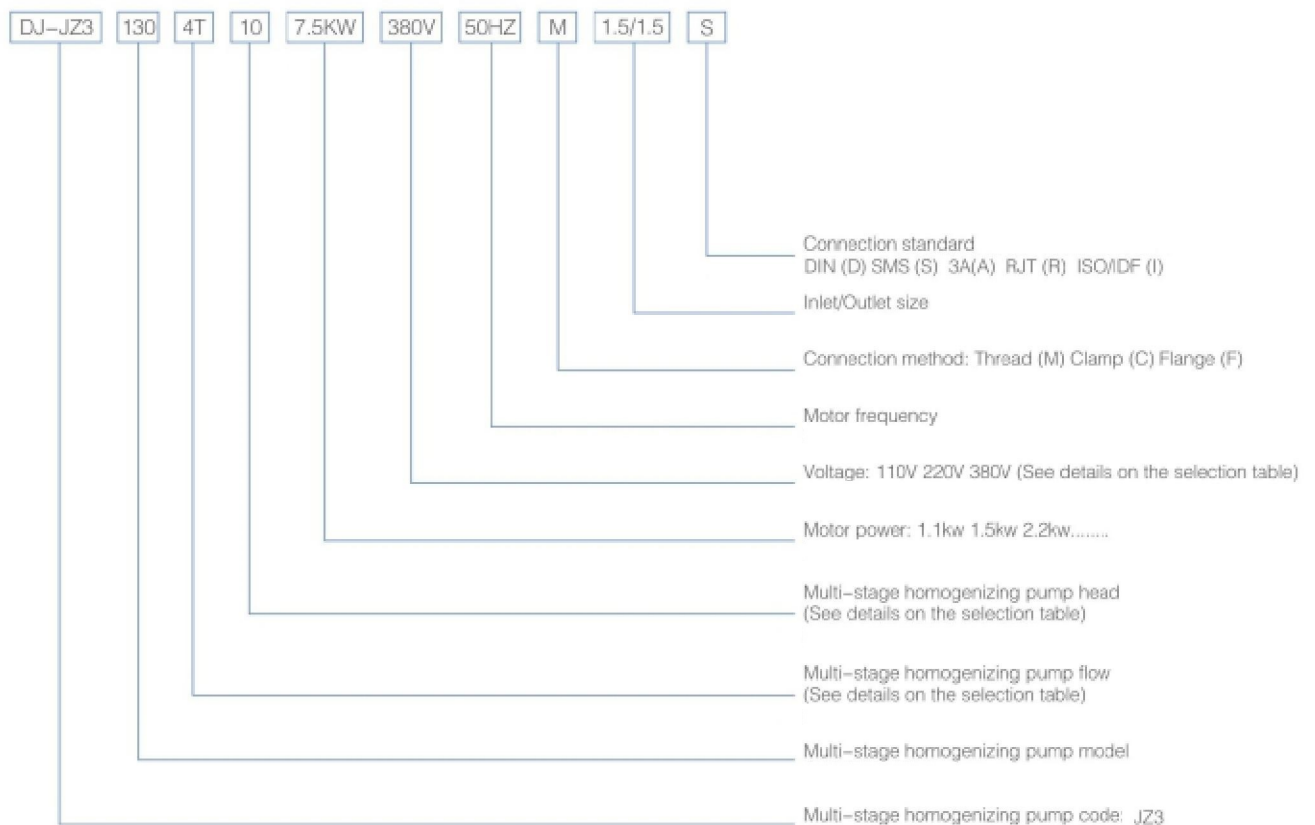
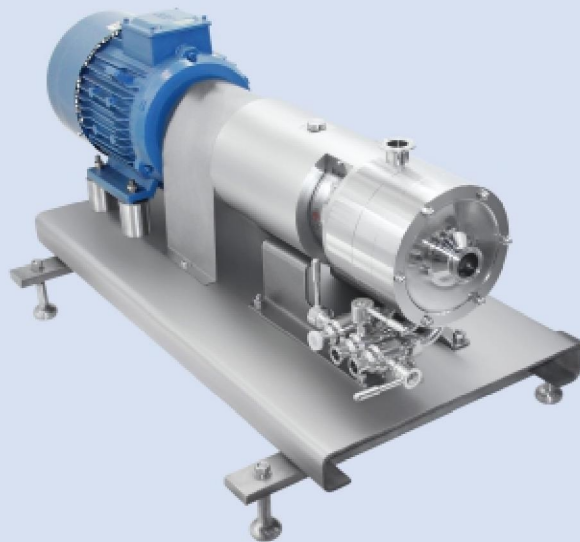
1)SIC/C/EPDM	Standard
2)SIC/C/FKM	Optional
3)SIC/C/HNBR	
4)SIC/SIC/EPDM	
5)SIC/SIC/FKM	
6)SIC/SIC/HNBR	
7)TC/TC/EPDM	
8)TC/TC/FKM	
9)TC/TC/HNBR	

Note: The above configuration is suitable for double mechanical seal.

Multistage homogenizing pump spare parts component

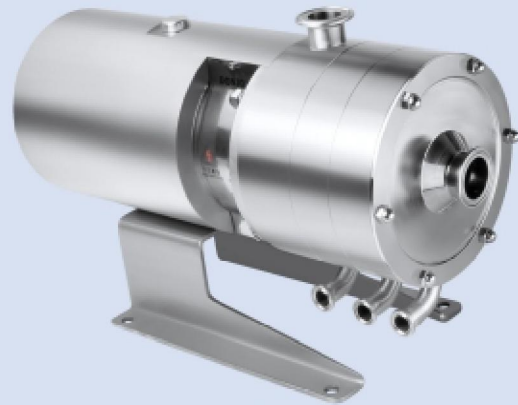
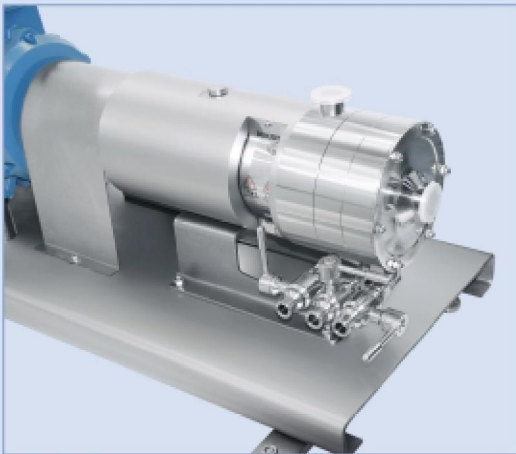


JZ3 series multi stage emulsifying homogenizing pump model instruction



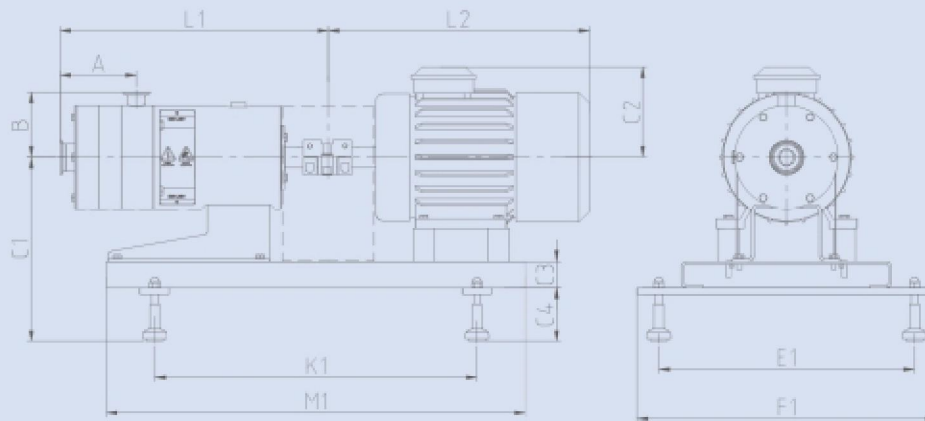
For example:
 JZ3-130-4T-10-7.5KW-380V-50HZ-M-1.5"/1.5"-S

JZ3 series multi stage emulsifying homogenizing pump selection table



Model	Power(kw)	Flow(m ³ /h)	Outlet pressure (bar)	Rotate speed (r/min)	Inlet	Outlet	Weight (kg)
JZ3-130	7.5	4.0	1.0	2900	1.5"-DN40	1.5"-1.1/4"	139.5
	11		2.0				183.5
JZ3-150	11	6.0	2.0	2900	2"-DN50	1.5"-DN40	189.8
	15		2.0				202.8
JZ3-170	15	12.0	2.0	2900	2"-2.5"	2"-DN50	237.2
	18.5		4.0				245.2
JZ3-190	22	20.0	2.0	2900	3"-DN65	2"-2.5"	298.9
	30		5.0				346.9
JZ3-210	45	30.0	2.0	2900	3"-DN80	2.5"-DN65	433
	55		5.0				494
JZ3-240	75	50.0	2.0	2900	4"-DN100	3"-DN80	806
	90		5.0				848

JZ3 series multi stage emulsifying homogenizing pump installation size data sheet



Model	Power(kw)	Inlet	Outlet	C1	C3	C4	E1	F1	K1	M1	L1	L2	C2	A (*)	B (*)
JZ3-130	7.5KW	1.5"-DN40	1.5"-1.1/4"	342	50	99	475	555	600	780	577	531	169	144	124
	11KW			342	50	99	475	555	600	780	577	597	253	144	124
JZ3-150	11KW	2"-DN50	1.5"-DN40	334	50	99	475	555	600	780	540	597	253	177	139
	15KW			334	50	99	475	555	600	780	540	597	253	177	139
JZ3-170	15KW	2"-2.5"	2"- DN50	377	50	99	545	625	920	1100	590	597	253	226	155
	18.5KW			377	50	99	545	625	920	1100	590	597	253	226	155
JZ3-190	22KW	3"-DN65	2"-2.5"	396	50	99	545	625	920	1100	647	693	254	283	169
	30KW			396	50	99	545	625	920	1100	647	738	273	283	169
JZ3-210	45KW	3"-DN80	2.5"-DN65	415	50	99	545	625	920	1100	700	834	314	323	184
	55KW			415	50	99	545	625	920	1100	700	892	335	323	184
JZ3-240	75KW	4"-DN100	3"-DN80	440	50	99	695	775	1420	1600	790	992	495	413	210
	90KW			440	50	99	695	775	1420	1600	790	1062	495	413	210

Note: The dimensions with (*)A and (*)B are based on the size of the clamp connection. Flange size will be different if use other connection, please contact us for details.

1/105-107 STANLEY RD, INGLEBURN, 2565

PHONE: +61 2 9618 1455

WEBSITE: WWW.SEPAK.COM.AU

EMAIL: SALES@SEPAK.COM.AU